

REPLACEMENT AIRPORT TRAFFIC CONTROL TOWER AND AIRFIELD LIGHTING VAULT ENVIRONMENTAL ASSESSMENT



OCTOBER 2026

Prepared for Mercer County
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This Environmental Assessment becomes a Federal document when evaluated, signed, and dated by the Responsible FAA Official.

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Date

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I Introduction | Purpose and Need

I-1 Introduction

Trenton-Mercer Airport (TTN) is a public commercial airport owned and operated by Mercer County, situated four miles northwest of Trenton, Ewing Township, New Jersey (Figure I-1). The Airport proposes to replace the existing airport traffic control tower (ATCT) because the current ATCT has exceeded its design useful life.¹ In addition, the Airport is seeking to replace the existing airfield lighting vault (AFLV), as the current AFLV has exceeded its design useful life, was found to have critical safety issues and needs urgent replacement. This proposal requires FAA approval of modification of the TTN Airport Layout Plan (ALP). Mercer County also intends to request federal financial assistance to support the replacement ATCT. Accordingly, the proposal is subject to review under the National Environmental Policy Act (NEPA).

This Environmental Assessment (EA) has been prepared to comply with the provisions of NEPA through FAA Order 1050.1G, FAA National Environmental Policy Act Implementing Procedures (FAA 2025) and USDOT Order 5610.1D, DOT's Procedures for Considering Environmental Impacts, and other applicable federal, state, county and local environmental laws and ordinances as appropriate.

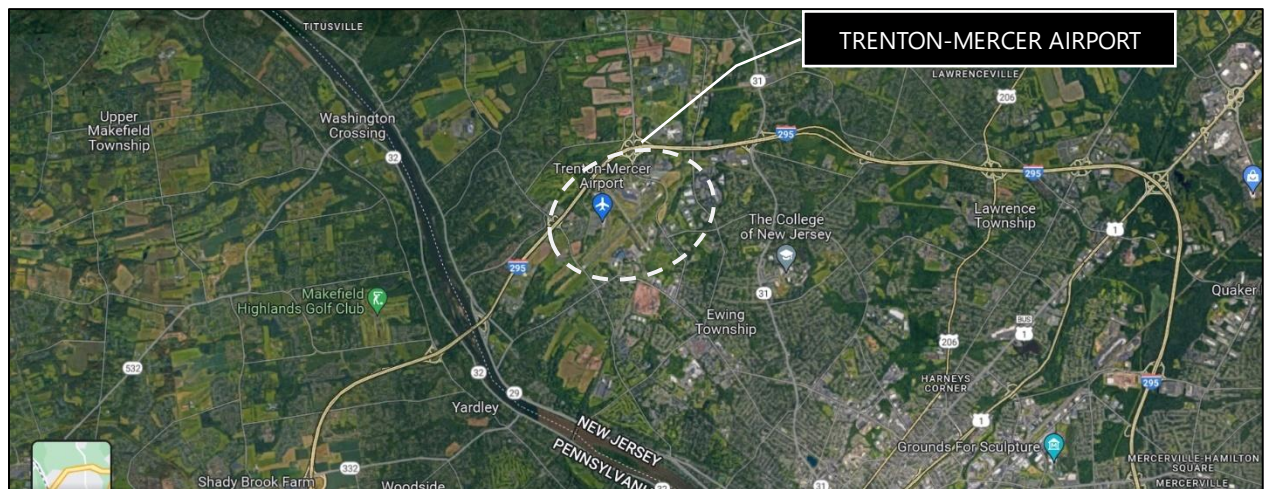


Figure I-1 Location Map

Source: Google Maps

¹ Table 3-7 Minimum Useful Life, FAA Order 5100.38D, Change 1, *Airport Improvement Program Handbook*, Federal Aviation Administration, February 2019.

I-1.1 Trenton-Mercer Airport

In the National Plan of Integrated Airport Systems (NPIAS), TTN is classified as a non-hub primary airport. It is one of 396 primary airports in the U.S., and is one of three primary airports in New Jersey.^{3, 4}

TTN caters to general aviation activities and scheduled commercial flights. Per the 2021 FAA Terminal Area Forecast (TAF),⁵ general aviation operations represented the majority of TTN's aircraft operations in 2021 (91 percent), with the air taxi/commuter operations representing approximately 5 percent of the total operations, air carrier operations representing approximately 3 percent, and military operations representing the remaining 1 percent. Frontier Airlines provides year-round service to eight destinations, with principal routes serving the NJ-FL market. The airport also houses corporate hangars for three major Fortune 500 companies: Pfizer Inc., Merck & Co., Inc., and Johnson & Johnson Services, Inc. Fixed base operators (FBO), which primarily cater to the corporate and general aviation sectors, include Signature Flight Support and FlightServ.

TTN (Figure I-2) has two runways: 1) primary Runway 6-24 aligned in a northeast to southwest direction, 6,006 ft long by 150 ft wide, and 2) crosswind Runway 16-34 aligned in a north to south direction, 4,800 ft long by 150 ft wide. As shown in Figure I-2, the passenger terminal building, an aircraft rescue and firefighting (ARFF) building, ATCT, and AFLV are all currently located in the western quadrant of the airport. Other critical facilities include Taxiways A-F, aircraft parking aprons, private and corporate hangars, t-hangars for smaller private aircraft, aircraft fueling facilities, a number of electronic and visual guidance and navigation systems, three published helipads, and other facilities associated with an operating commercial service airport.

I-1.2 TTN Airport Traffic Control Tower

Within the National Airspace System, control of the immediate airport environment often falls to ATCTs. Air traffic controllers are responsible for the separation and efficient movement of aircraft and vehicles operating on the taxiways and runways of the airport itself, and aircraft in the air near the airport, generally within 5-10 nautical miles, depending on airport procedures. The TTN ATCT falls under the Federal Contract Tower (FCT) Program. The FCT Program is a cost-sharing program between FAA and the Airport Sponsor.⁶ The FAA roles are to: i) provide air traffic controllers through a service provider, and ii) maintain all FAA-owned equipment installed in the tower.

³ A commercial service airport, also referred to as a primary airport, is defined within NPIAS as a "publicly owned airport with at least 2,500 annual enplanements and scheduled air carrier service." There are four classifications of a commercial service airport based on percentages of total annual U.S. commercial enplanements: Large Hub, Medium Hub, Small Hub, and Nonhub. A nonhub airport receives less than 0.05 percent but more than 10,000 of the annual U.S. commercial enplanements (NPIAS I).

⁴ The other two primary airports in NJ are Newark Liberty International Airport, a large hub primary airport, and Atlantic City International Airport, a small hub primary airport.

⁵ Air carrier operations represent either takeoffs or landings of commercial aircraft with seating capacity of more than 60 seats. Commuter operations include takeoffs and landings by aircraft with 60 or fewer seats that transport regional passengers on scheduled commercial flights. Air taxi operations include takeoffs and landings by aircraft with 60 or fewer seats conducted on non-scheduled or for-hire flights. The FAA TAF includes commuter/air taxi operations as one category.

⁶ The Airport Sponsor Mercer County, New Jersey, the owner-manager of TTN.

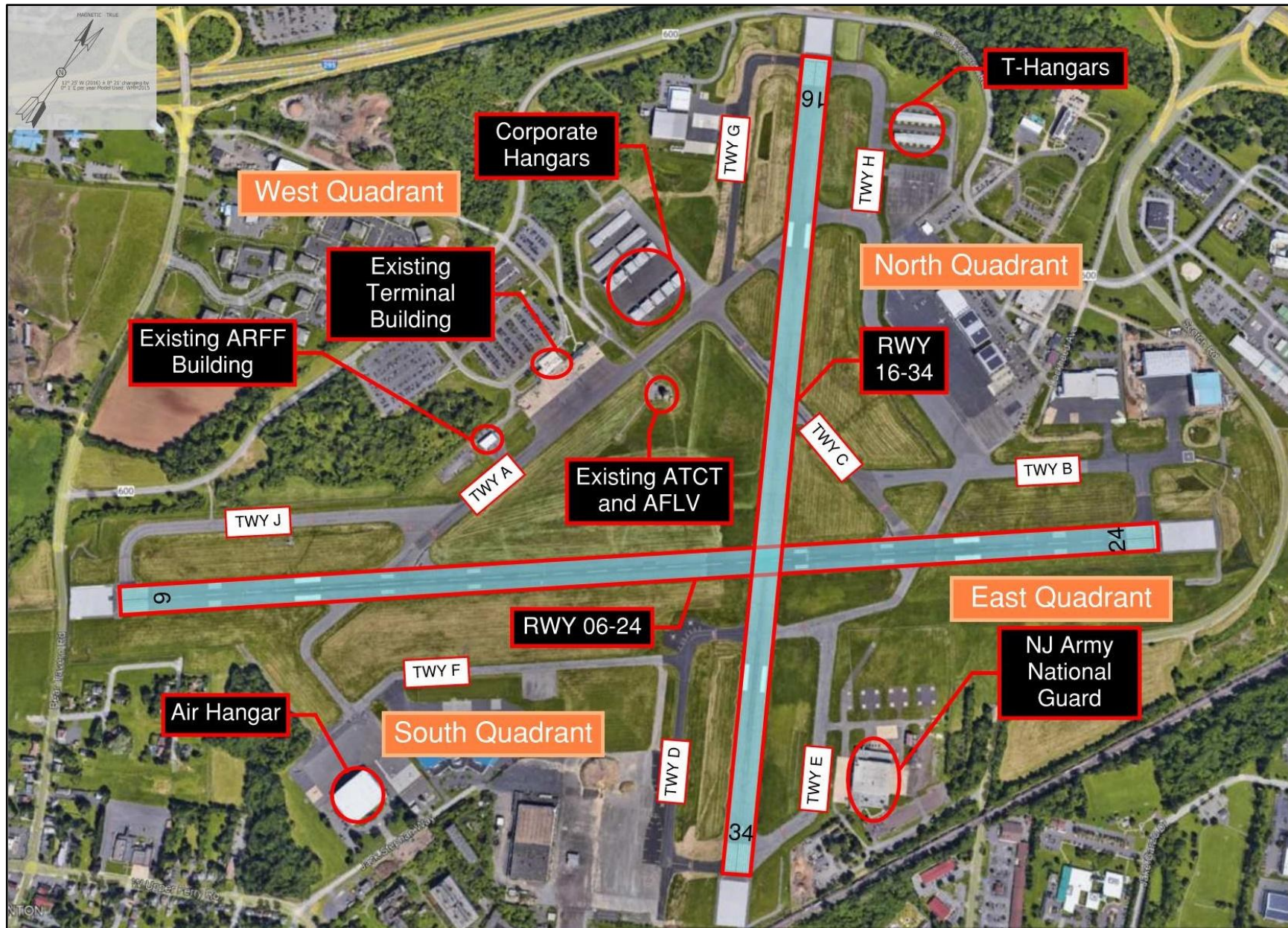


Figure I-2 Trenton-Mercer Airport

The Airport Sponsor roles are to: i) provide and maintain an ATCT; ii) provide/maintain/replace all non-FAA-owned tower equipment required by the Minimum Equipment and Facilities List (MEL); and iii) provide/maintain all utilities and services to the ATCT (heating, cooling, ventilating, electrical, water, gas, and sewer). The FCT Program does not provide federal funding for the provision or ongoing maintenance of the ATCT itself – only the staffing of the ATCT. Control of the FCT Program falls to the FAA Air Traffic Organization (ATO) Mission Support services unit, one of eight service units within ATO.

The TTN ATCT is the only contract tower in New Jersey. The tower is operated by Midwest Air Traffic Control Services and is staffed from 6:00 AM to 10:00 PM daily. The TTN air traffic controllers facilitate and enhance safety at the airport. Not only do they manage and sequence incoming flights in all weather conditions, but they also control ground movements of aircraft and vehicles along the airport's runways and taxiways, decreasing the chances of a runway incursion.⁷ They play a crucial role in emergency situations, where they are able to clear the immediate airspace and vector a pilot in distress directly to the airport.

I-1.3 TTN Airfield Lighting Vault

TTN has an existing on-site AFLV serving the airfield lighting and visual approach aids for Runways 6-24 and 16-34. This includes existing runway edge lights, taxiway edge lights, guidance signs, Precision Approach Path Indicators (PAPI), and Runway End Indicator Lights (REIL). High intensity runway edge lights (HIRLs) are provided on both Runway 6-24 and 16-34, and all lighted taxiways are equipped with medium intensity taxiway edge lights (MITLs). The current AFLV is located in the western quadrant of the Airport, adjacent to the existing ATCT.

I-2 Project Description

I-2.1 Airport's Proposed Action

The Proposed Action includes two development projects identified in TTN's 2018 Airport Master Plan Update (AMPU).⁸ This includes a new (replacement) ATCT to replace the existing ATCT which has exceeded its design useful life, and a new (replacement) AFLV to replace the existing AFLV which has also exceeded its design useful life and critical safety issues, as discussed in more detail in Section I-4. Figure I-3 identifies both projects included under the Proposed Action.

Airport Traffic Control Tower

Mercer County (TTN's Airport Sponsor) is proposing a new replacement ATCT. The location, height, size, orientation, visibility, and other key elements of the proposed ATCT were considered in a tower siting study completed in March 2022 (Siting Study)⁹ in close conjunction between the airport staff and FAA.

⁷ ICAO defines a runway incursion as "[a]ny occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft" (ICAO, *Manual on the Prevention of Runway Incursions*, 2007).

⁸ Master Plan Update. Trenton-Mercer Airport / Airport Master Plan Update, Urban Engineers and McFarland Johnson, June 2018. <https://www.ttnterminal.com/airport-master-plan>

⁹ Trenton-Mercer Airport / Airport Traffic Control Tower Siting Final Report, DY Consultants, March 30, 2022. This siting study is discussed extensively in Chapter 2 Alternatives Considered.

The proposed site of the future replacement ATCT is in the East quadrant on a portion of the former Army National Guard hangar complex. Access to the replacement tower would be from Scotch Road-Upper Ferry Road (Figure I-3). Key dimensions of the proposed new replacement ATCT were developed based on guidance provided in FAA Order 6480.4C, *Airport Traffic Control Tower Siting Process*, and are listed in Table I-1.

Table I-1 Key Dimensions of Proposed New Replacement ATCT

Existing Ground Elevation (ft AMSL) ¹	180
Cab Layout	
Size (sf)	440
Controller Positions	5 ²
Cab Floor	
Height (ft AGL) ¹	82
Elevation (ft AMSL)	262
Top of Tower	
Height (ft AGL)	117
Elevation (ft AMSL)	297

Notes1. Key: **AMSL** Above mean sea level **AGL** Above ground level

2. Three positions to match existing staff, with planning for two future positions. There is no change in the functional/operational aspects of the airport due to the replacement tower.

Source: Trenton-Mercer Airport / Airport Traffic Control Tower Siting
Final Report, DY Consultants, March 30, 2022.

In addition, a funding plan is in place for this portion of the Proposed Action. Mercer County has committed to funding the design, construction, and construction management/inspection of this portion of the Proposed Action. Mercer County will also be submitting an application for Federal funding administered by the FAA through the Infrastructure, Investment, and Jobs Act (IIJA) (Public Law 117-58). Federal funding through the Airport Improvement Program (AIP), and state funding to match the share component to the AIP funding, may also be sought.

Airfield Lighting Vault

TTN's Airport Sponsor is also proposing a new replacement AFLV. The proposed new replacement AFLV would be located within the East quadrant of the Airport, in the same geographic area as the proposed ATCT (Figure I-3). As such, similar to the proposed ATCT, access would be provided from Scotch Road-Upper Ferry Road. The proposed new replacement AFLV building would be sized to accommodate current and future demands.

(VHF) Transceiver; Walkie Talkies (VHF handheld transceivers); Antennas with Lightning Protection; Voice Recorder; Automated Surface Observation System (ASOS); Surface Weather System (SWS) - Secondary Wind and Temperature and Altimeter Setting Sensors, Tower, and Displays; GPS Clocks; Computed Based Instruction (CBI); Uninterruptible Power Supply (MUPS); and Remote Transmit/Receive (RTR) tower, antennas and transmitters; among others.

The specific elements associated with this portion of the Proposed Action include:

- New replacement AFLV;
- New or relocated electrical equipment¹²;
- Site improvements at new replacement AFLV, including pavement around the new building;
- Demolition and removal of existing AFLV, and restoration of existing site to grassland.

Regarding the funding plan for this portion of the Proposed Action, Mercer County has earmarked funds for the design, construction, and construction management/inspection of the new replacement AFLV.

I-2.2 Federal Actions

The federal actions associated with the new replacement ATCT are unconditional ALP approval to depict the proposed action, relocation of FAA owned equipment and systems associated with the proposed action, and a potential request for financial assistance via the IIJA or AIP.

In October 2021, a description of the proposed new replacement ATCT was submitted to the FAA Harrisburg Airports District Office (ADO) for a determination of federal actions. After reviewing the material submitted, FAA determined in March 2022 that it has ALP approval authority over the proposed new replacement ATCT project and that it is subject to review under NEPA .

In addition, as the new replacement AFLV is proposed to be located in the same geographic area as the new replacement ATCT, and there would be a communication line running between the AFLV and the ATCT, these projects are assessed under the same environmental review.

I-3 Purpose of Proposed Action

The purpose of the Proposed Action is to replace the existing ATCT, which was constructed in 1961 and is well past its design useful life, and the existing AFLV, which is past its design useful life and has critical safety issues.

Airport Traffic Control Tower

The location, existing terrain, and limited cab floor height of the existing ATCT present operational issues including not permitting air traffic controllers clear and unobstructed views of certain key aircraft movement areas, namely a portion of Taxiway J at the Runway 6 end. Other significant challenges presented by the current facility include the facility being out of compliance with the Americans with Disabilities Act (ADA) and the presence of asbestos and lead-based paint, two materials proven to be hazardous to human health.

¹² Electrical equipment in the new replacement AFLV would include Constant Current Regulators (CCRs); transformers; primary and secondary electrical distribution panels; automatic transfer switches; safety switches; FAA monitoring equipment; connector cabinets; junction boxes; wire troughs; and Airport Lighting Control and Monitoring System (ALCMS) cabinets. Installation at the new location would require new cable and conduit duct banks. Other potential electrical work could include the replacement of the existing main junction electrical manhole and connector and replacement of cable for existing lines into the new building.

Airfield Lighting Vault

The existing AFLV was installed several decades ago, and the 2018 APMU documented that the AFLV has exceeded its useful life and is in need of replacement. Per an October 2015 inspection, the existing AFLV was found to have some electrical code inconsistencies and unsafe conditions, including a lack of system redundancy which could lead to a catastrophic failure of the entire airfield lighting system. The full inspection report is presented in Appendix B.

I-4 Need for Proposed Action

Airport Traffic Control Tower

- **The existing ATCT is well past its design useful life and is in a general state of disrepair.**

Built in 1961, the existing tower is approximately 64 years old and presents a variety of inefficiencies, hazards, and safety concerns (Figure I-4). Although TTN staff maintain the building, information gleaned from numerous conversations with the TTN airport manager and assistant airport manager indicated chronic problems including roof leaks; single-pane windows that are aged and poorly-fitting; and an aged heating system that is expensive to operate/maintain and prone to failure in extended freezing spells (Figure I-5 through Figure I-7). Maintenance of the tower is an ongoing concern and expense for TTN airport management.

Useful life is the estimated period for which a physical asset is expected to be functional and sustain core operations. According to FAA Order 5100.38D, Change 1, *Airport Improvement Program Handbook*, the specified useful life of a facility or piece of equipment to be rehabilitated, reconstructed, or replaced must be met in order to be eligible for FAA funding. The tower is well past its useful life of 40 years,¹³ and has limited functionality.

¹³ The tower is aged past its useful life by over 50 percent per Table 3-7, Order 5100.38D, Change 1, *Airport Improvement Program Handbook*, Federal Aviation Administration, February 2019. The FAA has also published draft FAA Order 5100.38E, *AIP Handbook, Preamble*, which is intended to supersede FAA Order 5100.38D and similarly establishes a 40-year useful life for the ATCT.



Figure I-4 Exterior Views of the Aging Existing ATCT

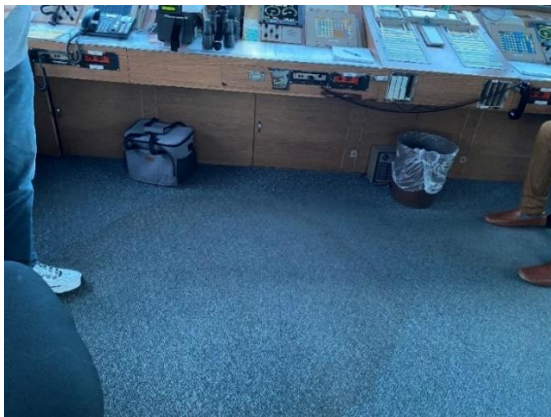


Figure I-5 Damage Within Existing ATCT Due to Leaking Roof

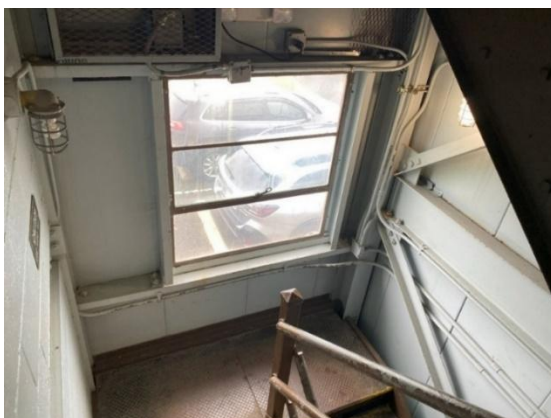


Figure I-6 Energy-Inefficient Single-Pane Window with Minimal Exterior Wall Insulation



Figure I-7 Antiquated Boiler with Suspected Asbestos in Foil Duct Insulation

- The existing ATCT is designed and positioned such that it does not permit air traffic controllers to view all operating areas of the airport and requires employees to cross a movement area to access the ATCT.

According to FAA Order 6480.7D, *Airport Traffic Control Tower and Terminal Radar Approach Control Facility Design Guidelines*, the Control Cab, also simply addressed as the "cab," is the primary operating area of the control tower. It is the tower area used for the functional control of aircraft by radio communications and visual observation. The order states that "the cab shall be placed at the desired elevation above ground level (AGL) and physically oriented relative to the primary runways to provide the best unobstructed view of the airport aircraft primary movement areas (taxiways and runways)" (Guidelines).

FAA Order 6480.4C, *Airport Traffic Control Tower Siting Process*, includes a number of orientation, siting, and visibility requirements in regard to new towers. Per FAA Order 6480.4C, among other requirements, visibility from the ATCT cab must allow an unobstructed view of all controlled movement areas of an airport, including all runways, any other landing areas, and air traffic in the vicinity of the airport. In addition, the ATCT height and distance from critical airport locations must support requirements for viewing objects on the airport movement areas, taxiways, and critical non-movement areas from the ATCT cab. The existing ATCT breaches these requirements due to poor cab layout/orientation and insufficient height of the tower, as the line of sight to the southernmost section of Taxiway J is obstructed by existing trees for controllers. As discussed in the AMPU, any aircraft on the southernmost portion of Taxiway J are not visible from the existing tower.

In addition, according to FAA Order 6480.4C, access to the ATCT must avoid crossing areas of aircraft operations and should avoid roads or bridges subject to closures due to high traffic volumes. However, under existing conditions, ATCT employees must cross active Taxiway A to access their parking lot.

As such, the AMPU recommended that the ATCT should be moved to provide full visibility of the airfield and all approach areas and be accessible without crossing any active movement areas. Eliminating the existing operational constraints due to poor cab layout/orientation and insufficient

height of the tower would increase controller situational awareness, reduce the risk of errors, enhance safety, and increase the efficiency of controller performance (faster processing of traffic).

- **The existing ATCT contains lead-based paint and asbestos, two materials proven to be hazardous to human health.**

Although the primary needs of the Proposed Action are related to the previously discussed aging of the building and operational constraints, the Proposed Action also provides an opportunity to address additional environmental issues, including the presence of hazardous materials.

As discussed in the AMPU, the presence of asbestos was confirmed in certain spaces within the existing ATCT. In addition, field tests conducted in July 2023 for this EA discovered both lead-based paint and asbestos in the existing ATCT. The findings of the field test and hazardous materials assessment are discussed in detail in Chapter 3, Affected Environment.

Lead can be toxic to humans and animals, causing adverse health effects. Lead and lead compounds have been used in a wide variety of products, including paint, ceramics, pipes and plumbing materials, solders, gasoline, batteries, ammunition, and cosmetics. Much of lead exposure comes from human activities including exposure to legacy lead-based paint. Lead can affect almost every organ and system in a human body. Adults exposed to lead can suffer from:

- Cardiovascular effects, increased blood pressure and incidence of hypertension
- Decreased kidney function
- Reproductive problems (in both men and women) (Lead I)

Lead is a pollutant regulated by many laws administered by the U.S. Environmental Protection Agency (USEPA). The applicable laws here require the removal and proper disposal of lead-based paint or the remediation of lead-based paint when discovered (Lead II).

Asbestos is a mineral fiber that occurs in rock and soil. Because of its fiber strength and heat resistance, asbestos has been used in a variety of building construction materials for insulation and as a fire retardant. Asbestos has also been used in a wide range of manufactured goods, including building materials (roofing shingles, ceiling and floor tiles, paper products, and asbestos cement products). Asbestos fibers may be released into the air by the disturbance of asbestos-containing material during product use, demolition work, building or home maintenance, repair, and remodeling. In general, exposure occurs only when the asbestos-containing material is disturbed or damaged in some way to release particles and fibers into the air.

Exposure to asbestos increases the risk of developing lung disease. In general, the greater the exposure to asbestos, the greater the chance of developing harmful health effects. Disease symptoms may take many years to develop following exposure.

Per the USEPA, three of the major health effects associated with asbestos exposure are¹⁴:

- Lung cancer
- Mesothelioma, a rare form of cancer that is found in the thin lining of the lung, chest and the abdomen and heart
- Asbestosis, a serious progressive, long-term, non-cancer disease of the lungs (Asbestos I)
- **The existing ATCT does not comply with requirements of the Americans with Disabilities Act.**

The Proposed Action also provides an opportunity to comply with ADA.¹⁵ A qualified employee or applicant with a disability is an individual who, with or without reasonable accommodation, can perform the essential functions of the job in question. Reasonable accommodation may include making existing facilities used by employees readily accessible to and useable by people with disabilities.

The existing ATCT is deficient in several instances regarding ADA:

- It is not accessible to a disabled individual in a wheelchair, or any individual with mobility impairments, as it only has stairs for vertical circulation.
- The bathrooms are not designed to accommodate disabled individuals in a wheelchair or with mobility impairments.

Airfield Lighting Vault

- **The existing AFLV is aged beyond its design useful life and has critical safety issues.**

Per the AFLV as-built drawings, most of the vault's electrical equipment was installed in 1993. As such, in accordance with FAA Order 5100.38D, Change 1, *Airport Improvement Program Handbook*, the AFLV equipment is well past its useful life of 10 years.¹⁶

In addition, the existing AFLV was inspected in October 2015 and was found to have several safety issues, including a lack of system redundancy. Major deficiencies identified during the 2015 inspection included:

- Unsafe emergency egress – The main door is the only method of entrance and exit to the vault. The windows are either too small to be used for egress or are blocked, and do not meet the 2024 International Building Code (IBC)¹⁷ requirements to be considered emergency egresses. In addition, due to the layout of the building, occupants could be trapped inside in the event of a fire.

¹⁴ U.S. Environmental Protection Agency (EPA), Learn About Asbestos: Health Effects From Exposure to Asbestos, updated July 13, 2026. <https://www.epa.gov/asbestos/learn-about-asbestos>

¹⁵ 42 U.S.C. § 12101.

¹⁶ The AFLV equipment is aged past its useful life by over 50 percent per Table 3-7, Order 5100.38D, Change 1, *Airport Improvement Program Handbook*, Federal Aviation Administration, February 2019.

¹⁷ International Code Council (ICC), 2024 International Building Code (IBC), ICC Digital Codes, 2024. <https://codes.iccsafe.org/content/IBC2024V2.0>.

- Poor equipment installation – The wire way, which carries all the cabling to the airfield, is mounted to a piece of non-fire rated plywood and access to the wire way is impeded within the vault. In addition, there are wires hanging from the ceiling which appeared to be abandoned but were never removed.
- Inadequate/inconsistent equipment labeling – Inconsistent and inadequate equipment labeling was observed during the inspection. For instance, some breakers on the main panelboard were labeled while other labels were missing altogether.
- Substandard equipment spacing – The National Electric Code¹⁸ has requirements for the spacing of electrical equipment to prevent personnel from being surrounded by live equipment. However, the vault equipment layout does not comply with these requirements. In addition, the current equipment orientation does not lend itself to system redundancy. As such, if a regulator fails, a spare could not be easily placed on-line to get the circuit operational.
- Airfield infrastructure – The airfield lighting cables leaving the vault building do not appear to be labeled. In addition, the light base is not sufficient for the number of cables, and the insufficient sizing can cause maintenance and troubleshooting issues and can delay service restoration.

The identified deficiencies and safety concerns apply to TTN personnel and contractors who enter the vault as well as the safety of the air traffic at TTN should a failure occur within the vault.

¹⁸ National Fire Protection Association (NFPA), NFPA 70, *National Electrical Code (NEC)*, 2026. <https://www.nfpa.org/codes-and-standards/nfpa-70-standard-development/70>

II Alternatives Considered

As discussed in Chapter 1, Purpose and Need, the purpose of the Proposed Action is to replace the existing ATCT, which was constructed in 1961 and is well past its design useful life, and the existing AFLV, which has also aged past its design useful life and has critical safety issues. NEPA, as amended¹⁹, requires that technically and economically feasible alternatives, which meet the purpose and need of the Proposed Action, be identified and evaluated. This chapter details the alternatives considered and the evaluation process to identify the alternatives selected for detailed analysis, in accordance with NEPA and FAA Order 1050.1G, Section 6-2.1(d).

This chapter presents a comparative screening analysis of the No Action alternative, the Proposed Action, and other reasonable alternatives for the ATCT and AFLV projects. An extensive ATCT Siting Study for a replacement ATCT at TTN was completed in March 2022 (Siting Study) and is presented in Appendix A.²⁰ The Siting Study considered nine candidate sites, including the Proposed Action, which were evaluated based on the guidance provided in FAA Order 6480.4C, *Airport Traffic Control Tower Siting Process*. Rehabilitation of the existing ATCT was not included in the Siting Study.

As such, the ATCT alternatives to be considered include each of the candidate sites analyzed as part of the Siting Study, as well as an alternative considering the rehabilitation of the existing ATCT. AFLV alternatives to be considered include a rehabilitation alternative, and replacement alternatives within each quadrant of the airport. Each of the alternatives were evaluated in accordance with the criteria described below.

II-1 Screening and Evaluation Criteria

This section outlines the screening process used to identify the alternatives selected for detailed analysis in Chapter 4, Environmental Consequences. The evaluation criteria were designed to assess the ability of each alternative to meet the Proposed Action's purpose and need, as defined in Chapter 1, and its technical and economic feasibility.

II-1.1 Airport Traffic Control Tower

The screening process for the new replacement ATCT is outlined in **Table II-1**, and additional details on each of the screening criteria are provided below.

¹⁹ As amended through Public Law 118-5 - Fiscal Responsibility Act of 2023 (FRA), Enacted June 3, 2023.

<https://www.congress.gov/118/plaws/publ5/PLAW-118publ5.pdf>

²⁰ *Trenton-Mercer Airport/Airport Traffic Control Tower Siting Final Report*, DY Consultants, March 30, 2022. The full report is contained in Appendix A.

Table II-1 ATCT Evaluation Criteria

Step 1: Purpose and Need	
Purpose and Need	• Would the alternative provide for a new or updated ATCT on airport property? • Would air traffic controllers be able to view all operating areas of the airport? • Would the site be accessible without crossing aircraft movement areas?
Step 2: Technically and Economically Feasible	
Navigable Airspace ²²	• Under this alternative, would the ATCT height required to meet visibility performance requirements be below the maximum No Effect Top of Tower height, which is the maximum height that the new ATCT could be without impacting the Airport's navigable airspace and published instrument flight procedures?
Site Access	• Would air traffic controllers be able to access the ATCT without utilizing roads that typically experience high traffic volumes?
ATCT Orientation	• Does the ATCT cab orientation under this alternative align with the guidance provided in FAA Order 6480.4C? Regarding ATCT orientation, FAA Order 6480.C notes that the preferred ATCT orientation is facing "north or alternatively east, or west, or finally south." FAA Order 6480.C also notes that a southern orientation should be avoided in areas where snow accumulates on the ground, which is the condition at TTN.

The steps identified in the evaluation criteria are sequential. Therefore, an alternative must pass Step 1 of the screening process to be evaluated under Step 2. While Step 1 addresses the ability of the alternative to fulfill the purpose and need of the Proposed Action, Step 2 assesses the technical and economic feasibility of the alternative.

II-1.2 Airfield Lighting Vault

The screening process for the AFLV is outlined in Table II-2, and additional details on each of the screening criteria are provided below. Similar to the ATCT screening criteria, the evaluation criteria for the AFLV are sequential, as in they follow a two-step process.

Table II-2 AFLV Evaluation Criteria

Step 1: Purpose and Need	
Purpose and Need	• Would the alternative provide for a new or updated AFLV that addresses the safety concerns of the existing AFLV and is compliant with current standards?

²² Per FAA Order JO 7400.2, *Procedures for Handling Airspace Matters*, navigable airspace is defined as the "airspace at or above the minimum flight altitudes prescribed by the Code of Federal Regulations, including airspace needed for safe takeoff and landing."

Step 2: Technically and Economically Feasible

Site Availability	Is the site located on airport property and available to accommodate the AFLV?
Site Access	- Would the AFLV be safely accessible to maintenance staff without crossing aircraft movement areas? - Would the AFLV be accessible to maintenance staff without utilizing roads that typically experience high traffic volumes?
Airport Operations	- Would this alternative avoid adverse impacts on airport operations during both operational and construction periods? - Would the AFLV be located outside of the runway protection areas, including runway safety area (RSA), runway object free area (ROFA), and runway visibility zone (RVZ),²³ as outlined in FAA Advisory Circular (AC) 150/5300-13B, <i>Airport Design</i>? Per FAA AC 150/5300-13B, each of these surfaces should remain clear of obstructions to enhance safety and maintain a clear line-of-sight (LoS) for pilots.

II-1.3 Evaluation Scoring System

A scoring system of good, fair, and poor is used to evaluate the alternatives against the Step 2 evaluation criteria described in Table II-1 and Table II-2. The scoring system, and the point value assigned to each rating, is detailed below in Table II-3. The goal of the evaluation scoring is to determine which alternative(s) will be carried forward to the evaluation of environmental consequences in Chapter 4. For an alternative to screen through, it would need to pass Step 1, fulfill the purpose and need, and have a positive score for the Step 2 evaluation criteria in order to proceed to the evaluation of Environmental Consequences in Chapter 4.

Table II-3 Evaluation Scoring System

Score	Description	Point Value
Good (+)	Alternative greatly satisfies the screening criteria	+ 1
Fair (o)	Alternative moderately satisfies the screening criteria	0
Poor (-)	Alternative poorly or does not satisfy the screening criteria	- 1

²³ Per FAA AC 150/5300-13B, *Airport Design*, the runway safety area (RSA) is a defined surface surrounding the runway that enhances the safety of aircraft that undershoot, overrun or veer off the runway. The runway object free area (ROFA) is an area surrounding the runway that is provided to enhance the safety of aircraft operations by remaining clear of objects, and the runway visibility zone (RVZ) is an area that should remain clear to maintain a clear line-of-sight for pilots and to avoid conflict with aircraft operating on an intersecting runway.

II-2 ATCT Alternatives

II-2.1 ATCT Alternative 1 – No Action

A No Action Alternative will be assessed in Chapter 4 Environmental Consequences, as required by FAA Order 1050.1G. It is defined as follows and depicted in Figure II-1:

The existing ATCT will be maintained at its present location in its present facility. Basic maintenance of the structure will continue. No major capital improvements, e.g., new boiler, replacement windows, ADA upgrades, lead-based paint removal/asbestos abatement, and so forth, will be made to the physical structure. In parallel, FAA will maintain its communications and navigation equipment in the existing ATCT to continue essential air traffic control functions and levels of service at TTN.



Figure II-1 No-Build Alternative

II-2.2 ATCT Alternative 2 - Existing ATCT Rehabilitation

Under the existing ATCT rehabilitation alternative, the ATCT would remain at its existing location in the west quadrant of the Airport (refer to Figure II-1) and would undergo rehabilitation.

This alternative would require major structural improvements to the existing ATCT including, but not limited to, a new heating system, new roof, and window replacements throughout the tower. Additional upgrades would, to the greatest extent possible, include the removal of asbestos and lead-based paint and upgrading the ATCT to be ADA compliant. The current access to the existing ATCT would remain under this alternative. In addition, rehabilitating the existing ATCT at its current location would require increasing the cab height to allow air traffic controllers to have a clear view of all operating areas, including the southernmost portion of Taxiway J which is not visible from the existing tower.

II-2.3 ATCT Alternative 3 - Siting Study Sites

The Siting Study considered the construction of a new replacement ATCT at nine candidate sites. Preliminary site identification based on the guidance provided in FAA Order 6480.4C, *Airport Traffic Control Tower Siting Process* was conducted in March 2022. As a result, nine candidate sites were identified. These sites are described below and shown in Figure II-2.

II-2.3.1 ATCT Alternative 3-1: Site 1

As shown in Figure II-2, Site 1 is located in the West quadrant of the Airport, to the West of Runway 16 end. The site is located on undeveloped land behind the Merck hangar and is accessible via Sam Weinroth Road. Based on preliminary analyses detailed in the Siting Study, the maximum No Effect Top of Tower height²⁴ for Site 1 is 154 ft AGL, resulting in a maximum allowable Controller Eye Level height of 124 ft AGL. At Site 1, the controller cab would be oriented to the East.

II-2.3.2 ATCT Alternative 3-2: Site 2

Site 2 is located in the North quadrant of the Airport, to the Northwest of Runway 24 end. The site is located on undeveloped land behind the East Hangar. Site 2 is accessible via Sam Weinroth Road, and the area surrounding Site 2 typically experiences high traffic volumes related to Signature Flight Support FBO activities. The No Effect Top of Tower Height at Site 2 was identified as 128 ft AGL, with a maximum allowable Controller Eye Level height of 98 ft AGL. At Site 2, the controller cab would be oriented to the Southwest.

II-2.3.3 ATCT Alternative 3-3: Site 3 (Proposed Action)

Site 3 is located in the East quadrant of the Airport, to the Northeast of Runway 34 end. The site is located approximately 200 ft North-Northwest of the existing Air National Guard complex and is accessible via Upper Ferry Road using the existing access to the complex. Site 3 provides an unobstructed view of the entire airfield and requires a 117 ft AGL Top of Tower height, with an 87 ft AGL Controller Eye Level height, to ensure that minimum visibility performance requirements are met. At the required height, the tower would not exceed the No Effect Top of Tower Height. At Site 3, the controller cab would be oriented to the Northwest.

II-2.3.4 ATCT Alternative 3-4: Site 4

As shown in Figure II-2, Site 4 is located in the East quadrant of the Airport, to the Northeast of Runway 34 end. The site is located approximately 600 ft North of the existing Air National Guard complex and is accessible via Upper Ferry Road using the existing access to the complex. A new replacement ATCT at Site 4 would require a 117 ft AGL Top of Tower height, with an 87 ft AGL Controller Eye Level height, which would not exceed the No Effect Top of Tower Height. At Site 4, the controller cab would be oriented to the West.

²⁴No Effect Top of Tower height refers to the maximum height that the new replacement ATCT could be without adversely impacting flight procedures.



Figure II-2 Airport Sites Considered for Replacement ATCT

Source: Figure C-1, Trenton-Mercer Airport/Airport Traffic Control Tower Siting Final Report, DY Consultants, March 30, 2022

II-2.3.5 ATCT Alternative 3-5: Site 5

Site 5 is located in the South quadrant of the Airport, to the West of Runway 34 end. The site is located between the Pfizer corporate hangar and a vacant Mercer County hangar and is accessible via the existing road access to those hangars. However, Site 5 is also located within an area that is currently under a long-term lease. Site 5 would require a new replacement ATCT with a 135 ft AGL Top of Tower height, with a Controller Eye Level height of 105 AGL, which would not exceed the No Effect Top of Tower Height. The ATCT at this height would provide a clear view of the airfield with minor LoS obstructions to non-key non-movement areas. The controller cab at Site 5 would be oriented to the North.

II-2.3.6 ATCT Alternative 3-6: Site 6

Site 6 is located in the South quadrant of the Airport, to the Southeast of Runway 6 end. The site is located in an undeveloped area approximately 600 ft West of the East hangar. The site is accessible via Jack Stephens Way and is located close to surrounding residential areas. The area surrounding Site

6 also experiences high traffic volumes related to FlightServ FBO activities. The No Effect Top of Tower Height at Site 6 was identified as 129 ft AGL, with a maximum allowable Controller Eye Level height of 99 ft AGL. The controller cab at Site 6 would be oriented to the North.

II-2.3.7 ATCT Alternative 3-7: Site 7

Site 7 is located in the West quadrant of the Airport, to the Northeast of Runway 6 end. The site is located in an undeveloped area adjacent to the intersection of Taxiways A, B, and J and is accessible via Sam Weinroth Road. The No Effect Top of Tower Height at Site 7 was identified as 134 ft AGL, with a maximum allowable Controller Eye Level height of 104 ft AGL. The controller cab at Site 7 would be oriented to the East.

II-2.3.8 ATCT Alternative 3-8: Site 8

Site 8 is located in the West quadrant of the Airport, to the Southwest of Runway 16 end. The site is located on undeveloped land North of the corporate aviation hangars and can be accessed via Sam Weinroth Road. The No Effect Top of Tower Height at Site 8 was identified as 183 ft AGL, with a maximum allowable Controller Eye Level height of 153 ft AGL. The controller cab at Site 8 would be oriented to the East.

II-2.3.9 ATCT Alternative 3-4: Site 9

As shown in Figure II-2, Site 9 is located in the North quadrant of the Airport, to the Southeast of Runway 16 end. The site is located between the western Signature Flight Support hangar and Mercer County Community College Aviation School and is accessible via Sam Weinroth Road. The No Effect Top of Tower Height at Site 9 was identified as 128 ft AGL, with a maximum allowable Controller Eye Level height of 98 ft AGL. The controller cab at Site 9 would be oriented to the South.

II-3 AFLV Alternatives

II-3.1 AFLV Alternative 1 – No Action

A No Action Alternative will be assessed in Chapter 4 Environmental Consequences, as required by FAA Order 1050.1G. It is defined as follows and depicted in Figure II-1:

The existing AFLV will be maintained at its present location in its present facility. Basic maintenance of the structure will continue. No major capital improvements will be made to the AFLV. In parallel, the existing AFLV will continue to provide service to the airfield lighting at TTN.

II-3.2 AFLV Alternative 2 – AFLV Rehabilitation

Under the AFLV rehabilitation alternative, the AFLV would remain at its existing location in the West quadrant of the Airport (refer to Figure II-1) and would undergo rehabilitation.

This alternative would require major structural improvements to the existing AFLV including, but not limited to, upgrading emergency egress, addressing the equipment installation and spacing issues, and upgrading equipment to provide system redundancy in case of failure to the greatest extent possible.

Current access to the existing AFLV would remain under this alternative. As such, personnel accessing the AFLV would still be required to cross active Taxiway A to access the site.

II-3.3 AFLV Alternative 3 – AFLV Replacement

The proposed new replacement AFLV is intended to address the above conditions and concerns. Descriptions of the alternate locations and potential constraints for siting the AFLV in each of the airport quadrants are included below.

II-3.3.1 AFLV Alternative 3-1: North Quadrant

The North quadrant of the Airport is predominantly occupied with general aviation (GA) hangars and aprons, with limited space available for the AFLV relocation. As such, there is roadway access in the North quadrant associated with the existing development.

II-3.3.2 AFLV Alternative 3-2: South Quadrant

The South quadrant is occupied by existing hangars, and most of the undeveloped areas are either under lease, reserved for future GA development per the approved ALP, or located near residential areas. Therefore, the south quadrant has limited space available for the AFLV relocation. The South quadrant is accessible via the roadway system serving the existing development.

II-3.3.3 AFLV Alternative 3-3: West Quadrant

A new replacement AFLV in the west quadrant would be located in proximity to the existing AFLV. In addition, similar to the existing conditions, maintenance staff would be required to cross an active movement area (namely Taxiway A) to access a new AFLV in the west quadrant.

II-3.3.4 AFLV Alternative 3-4: East Quadrant (Proposed Action)

In the east quadrant of the Airport, there is space available to accommodate a new replacement AFLV to the north of the existing Army National Guard complex. Access to a new AFLV in the eastern quadrant would be provided via the existing access to the complex.

II-4 ATCT Alternatives Comparison

II-4.1 ATCT Alternative Screening – Step 1

Step 1 of the alternative screening addresses the ability of the alternative to fulfill the purpose and need of the Proposed Action, as discussed in Section II-1. Table II-4 shows the results of Step 1 of the ATCT alternatives screening process. As shown in Table II-4, ATCT Alternatives 2 and 3-5 did not meet the purpose and need of the Proposed Action and will therefore not be carried forward into Step 2 of the screening process. In addition, per FAA Order 1050.1G, although the ATCT Alternative 1 – No-Action does not meet the purpose and need, it will be carried forward to Chapter 4, Environmental Consequences. As such, the remaining eight Alternatives (ATCT Alternatives 3-1, 3-2, 3-3, 3-4, 3-6, 3-7, 3-8, and 3-9) will continue to Step 2 screening.

Table II-4 Alternative Screening Matrix – Step 1: Purpose and Need

ATCT Alternative	Screening Criteria	Evaluation	Continue to Step 2 Screening?
ATCT Alternative 1 – No-Action		Alternative 1 would not provide a new or updated ATCT on airport property. The existing ATCT would remain at its current location in its present facility. As such, air traffic controllers would still be unable to view all operating areas. Namely, as discussed in Chapter 1, Purpose and Need, the LoS to the southernmost section of Taxiway J is obstructed. Similarly, existing access to the ATCT would remain and employees would still be required to cross an active Taxiway A to access their parking lot. However, per FAA Order 1050.1G, the No-Action alternative is carried forward for analysis of environmental consequences.	N/A
ATCT Alternative 2 – ATCT Rehabilitation	Would the alternative provide for a new or updated ATCT on airport property? Would air traffic controllers be able to view all operating areas of the airport? Would the site be accessible without crossing aircraft movement areas?	Alternative 2 would provide an updated ATCT on airport property. Through increasing the cab height, air traffic controllers would be able to view all operating areas of the airport under this alternative. However, as the ATCT would remain at its current location under this alternative, ATCT employees would still be required to cross an active Taxiway A to access their parking lot. It should also be noted that to maintain Air Traffic Control (ATC) service while major rehabilitation work is being conducted, either a temporary ATCT would be required on-airport property or TTN would be without ATC services for a certain period.²⁵ Therefore, as the site would not be accessible without crossing an aircraft movement area, this alternative does not pass the Step 1 screening criteria.	No
ATCT Alternative 3-1: Siting Study Site 1		Alternative 3-1 would provide a new ATCT on airport property. Under this alternative, controllers would be able to view all operating areas of the airport, and the site would be accessible without crossing aircraft movement areas.	Yes
ATCT Alternative 3-2: Siting Study Site 2		Alternative 3-2 would provide a new ATCT on airport property. Under this alternative, controllers would be able to view all operating areas of the airport, and the site would be accessible without crossing aircraft movement areas.	Yes

²⁵ To provide a temporary ATCT on-airport property, an independent siting process would be required to determine a suitable location and tower height. Alternatively, having a period when the Airport is non-towered is not a viable condition for TTN from a safety of operations perspective.

ATCT Alternative	Screening Criteria	Evaluation	Continue to Step 2 Screening?
ATCT Alternative 3-3: Siting Study Site 3 (Proposed Action)		Alternative 3-3 would provide a new ATCT on airport property. Under this alternative, controllers would be able to view all operating areas of the airport, and the site would be accessible without crossing aircraft movement areas.	Yes
ATCT Alternative 3-4: Siting Study Site 4		Alternative 3-4 would provide a new ATCT on airport property. Under this alternative, controllers would be able to view all operating areas of the airport, and the site would be accessible without crossing aircraft movement areas.	Yes
ATCT Alternative 3-5: Siting Study Site 5	Would the alternative provide for a new or updated ATCT on airport property?	Under Alternative 3-5, the proposed site is currently under a long-term lease and is not available for development. Therefore, a new replacement ATCT could not be accommodated under this alternative.	No
ATCT Alternative 3-6: Siting Study Site 6	Would air traffic controllers be able to view all operating areas of the airport? Would the site be accessible without crossing aircraft movement areas?	Alternative 3-6 would provide a new ATCT on airport property. Under this alternative, controllers would be able to view all operating areas of the airport, and the site would be accessible without crossing aircraft movement areas.	Yes
ATCT Alternative 3-7: Siting Study Site 7		Alternative 3-7 would provide a new ATCT on airport property. Under this alternative, controllers would be able to view all operating areas of the airport, and the site would be accessible without crossing aircraft movement areas.	Yes
ATCT Alternative 3-8: Siting Study Site 8		Alternative 3-8 would provide a new ATCT on airport property. Under this alternative, controllers would be able to view all operating areas of the airport, and the site would be accessible without crossing aircraft movement areas.	Yes
ATCT Alternative 3-9: Siting Study Site 9		Alternative 3-9 would provide a new ATCT on airport property. Under this alternative, controllers would be able to view all operating areas of the airport, and the site would be accessible without crossing aircraft movement areas.	Yes

II-4.2 ATCT Alternative Screening – Step 2

In the second step of the screening process, the ATCT alternatives were measured against a series of criteria related to technical and economic feasibility. As outlined in Table II-1, these criteria included navigable airspace, site access, and ATCT orientation. Table II-5 shows the results of the Step 2 screening process for the ATCT alternatives. Each criterion was scored with a "+," "o," or "-," to allow for a relative comparison between the alternatives, consistent with the scoring system identified in Table II-2. The Proposed Action is selected based on the highest score.

As shown in Table II-5, after evaluating each of the screening criteria, ATCT Alternative 3-2 received the lowest total score (-2), ATCT Alternative 3-9 received a total score of -1, and ATCT Alternatives 3-1, 3-4, 3-6, 3-7, and 3-8 received a total score of 0. In addition, ATCT Alternative 3-3 received the only positive total score (3).

ATCT Alternative 3-3 received the highest and only positive score under Step 2 of the alternative screening evaluation. As such, ATCT Alternative 3-3 not only fulfills the purpose and need of the Proposed Action, but it is also technically and economically feasible. As shown in Table II-5, each of the remaining alternatives that were evaluated received a poor score in at least one of the categories evaluated for technical and economic feasibility under Step 2 of the screening process, and none of them received a net positive score.

Therefore, ATCT Alternative 3-3: Siting Study Site 3 (the Proposed Action), which received the only positive score under Step 2 of the screening evaluation, will be brought forward, along with ATCT Alternative 1: No-Action Alternative, for assessment in Chapter 4 Environmental Consequences.

Table II-5 Alternative Screening Matrix – Step 2: Technically and Economically Feasible

ATCT Alternative	Navigable Airspace	Site Access	ATCT Cab Orientation ¹	Total Score
ATCT Alternative 3-1: Siting Study Site 1	(-) Poor At the maximum allowable Controller Eye Level height (124 ft AGL), LoS to Taxiway A would be obstructed by the corporate aviation hangar. Therefore, the tower height required to clear obstructions would exceed the maximum No Effect Height.	(+) Good The site would avoid crossing highly trafficked roads.	(o) Fair Cab orientation: East Per FAA Order 6480.4C, eastern is the second preference for ATCT orientation.	0
ATCT Alternative 3-2: Siting Study Site 2	(-) Poor At the maximum allowable Controller Eye Level height (98 ft AGL), Site 2 was found to provide unobstructed views of airborne traffic patterns and all movement areas except a portion of Taxiway H blocked by the Signature Flight Support hangar. Therefore, although the tower height required to clear obstructions would not exceed the maximum No Effect Height, all movement areas would not be visible from the cab and mitigation (controller movement within the cab) would be required to meet visibility requirements.	(o) Fair The roads surrounding this site experience high traffic volumes related to Signature FBO activities.	(-) Poor Cab orientation: Southwest Per FAA Order 6480.4C, southern ATCT orientation is the least preferred.	-2
ATCT Alternative 3-3: Siting Study Site 3 (Proposed Action)	(+) Good Site 3 would provide unobstructed views of the entire airfield at Controller Eye Level height of 87 ft AGL. The tower height, inclusive of the beacon atop the tower, required to clear obstructions would not exceed the maximum No Effect Height.	(+) Good The site would avoid crossing critical areas and highly trafficked roads.	(+) Good Cab orientation: Northwest Per FAA Order 6480.4C, northern is the most preferred ATCT orientation.	3
ATCT Alternative 3-4: Siting Study Site 4	(-) Poor The Controller Eye Level height at Site 4 would be 87 ft AGL. Although the tower height required to clear obstructions would not exceed the maximum No Effect Height, Site 4 is located close to Runway 06-24, which would create LoS (look down) issues impacting existing airport operations.	(+) Good The site would avoid crossing critical areas and highly trafficked roads.	(o) Fair Cab orientation: West Per FAA Order 6480.4C, western is the third preference for ATCT orientation.	0

ATCT Alternative	Navigable Airspace	Site Access	ATCT Cab Orientation ¹	Total Score
ATCT Alternative 3-6: Siting Study Site 6	(-) Poor At the maximum allowable Controller Eye Level height (99 ft AGL), there would be LoS obstructions to runway ends and runway holding points. Therefore, the tower height required to clear obstructions would exceed the maximum No Effect Height.	(o) Fair The roads surrounding this site experience high traffic volumes related to FlightServ FBO activities.	(+) Good Cab orientation: North Per FAA Order 6480.4C, northern is the most preferred ATCT orientation.	0
ATCT Alternative 3-7: Siting Study Site 7	(-) Poor At the maximum allowable Controller Eye Level height (104 ft AGL), there would not be clear views of all runway ends from the cab. Therefore, the tower height required to clear obstructions would exceed the maximum No Effect Height.	(+) Good The site would avoid crossing critical areas and highly trafficked roads.	(o) Fair Cab orientation: East Per FAA Order 6480.4C, eastern is the second preference for ATCT orientation.	0
ATCT Alternative 3-8: Siting Study Site 8	(-) Poor At the maximum allowable Controller Eye Level height (153 ft AGL), Site 8 results in a major LoS obstruction to the intersection of Taxiways A and B, a critical intersection that controllers need to monitor closely. Therefore, the tower height required to clear obstructions would exceed the maximum No Effect Height.	(+) Good The site would avoid crossing critical areas and highly trafficked roads	(o) Fair Cab orientation: East Per FAA Order 6480.4C, eastern is the second preference for ATCT orientation.	0
ATCT Alternative 3-9: Siting Study Site 9	(-) Poor At the maximum allowable Controller Eye Level height (98 ft AGL), LoS obstruction issues were identified to Taxiway B and the Runway 24 entrance taxiways. Therefore, the tower height required to clear obstructions would exceed the maximum No Effect Height.	(+) Good The site would avoid crossing critical areas and highly trafficked roads.	(-) Poor Cab orientation: South Per FAA Order 6480.4C, southern ATCT orientation is the least preferred.	-1

Notes:

¹ Per guidance provided in FAA Order 6480.4C, *Airport Traffic Control Tower Siting Process*.

II-5 AFLV Alternatives Comparison

II-5.1 AFLV Alternative Screening – Step 1

As previously discussed, Step 1 of the alternative screening addresses the ability of the alternative to fulfill the purpose and need of the Proposed Action, as discussed in Section II-1. Table II-6 shows the results of Step 1 of the AFLV alternatives screening process. Per FAA Order 1050.1G, although AFLV Alternative 1 – No Action does not meet the purpose and need, it will be carried forward to Chapter 4, Environmental Consequences. In addition, as shown in Table II-6, the remaining five AFLV alternatives (AFLV Alternatives 2, 3-1, 3-2, 3-3, and 3-4) will continue to Step 2 screening.

Table II-6 AFLV Alternative Screening Matrix – Step 1: Purpose and Need

AFLV Alternative	Screening Criteria	Evaluation	Continue to Step 2 Screening?
AFLV Alternative 1 – No-Action		Alternative 1 would not provide a new or updated AFLV on airport property. The existing AFLV would remain at its current location in its present facility. However, per FAA Order 1050.1G, the No-Action alternative is carried forward for analysis of environmental consequences.	N/A
AFLV Alternative 2 – AFLV Rehabilitation	Would the alternative provide for a new or updated AFLV that addresses the safety concerns of the existing AFLV and is compliant with current standards?	Alternative 2 would provide an updated AFLV on airport property that addresses the existing safety concerns and is compliant with standards.	Yes
AFLV Alternative 3-1 – North Quadrant		Alternative 3-1 would provide a new AFLV on airport property that addresses the existing safety concerns and is compliant with standards.	Yes
AFLV Alternative 3-2 – South Quadrant		Alternative 3-2 would provide a new AFLV on airport property that addresses the existing safety concerns and is compliant with standards.	Yes
AFLV Alternative 3-3 – West Quadrant		Alternative 3-3 would provide a new AFLV on airport property that addresses the existing safety concerns and is compliant with standards.	Yes

AFLV Alternative	Screening Criteria	Evaluation	Continue to Step 2 Screening?
AFLV Alternative 3.4 – East Quadrant (Proposed Action)		Alternative 3-4 would provide a new AFLV on airport property that addresses the existing safety concerns and is compliant with standards.	Yes

II-5.2 AFLV Alternative Screening – Step 2

In the second step of the screening process, the AFLV alternatives were measured against a series of criteria related to technical and economic feasibility. As outlined in Table II-2, these criteria included site availability, site access, and airport operations. Table II-7 shows the results of the Step 2 screening process for the AFLV alternatives. Each criterion was scored with a "+," "o," or "-," to allow for a relative comparison between the alternatives, consistent with the scoring system identified in Table II-3. The Proposed Action is selected based on the highest score.

As shown in Table II-7, after evaluating each of the screening criteria, AFLV Alternatives 2, 3-1, and 3-2 received the lowest total scores (-1), and AFLV Alternative 3-3 received a total score of 0. In addition, AFLV Alternative 3-4 received the only positive total score (3).

AFLV Alternative 3-4, which received the only positive score under Step 2 of the alternative screening evaluation both fulfills the purpose and need of the Proposed Action and is technically and economically feasible. Therefore, AFLV Alternative 3-4: East Quadrant (the Proposed Action) will be brought forward, along with AFLV Alternative 1: No-Action Alternative, for assessment in Chapter 4 Environmental Consequences.

Table II-7 Alternative Screening Matrix – Step 2: Technically and Economically Feasible

Alternative	Site Availability	Site Access	Airport Operations	Total Score
AFLV Alternative 2: AFLV Rehabilitation	(+) Good The AFLV would be located at the existing location.	(-) Poor Similar to existing conditions, maintenance staff would be required to cross an active movement area to access the site.	(-) Poor Operations would be disrupted while improvements are made to the existing AFLV. In addition, similar to existing conditions, the AFLV would continue to be located within the RVZ.	-1
AFLV Alternative 3-1: North Quadrant	(-) Poor The north quadrant is predominately occupied with existing hangars and aprons, with limited space available to accommodate the AFLV.	(-) Poor The north quadrant typically experiences high traffic volumes related to Signature Aviation FBO activities, which may impair access to the AFLV.	(+) Good As new infrastructure would be required to locate the AFLV in the north quadrant, disruptions to operations are not anticipated. In addition, the AFLV would be located outside of the RSA, ROFA, and RVZ.	-1
AFLV Alternative 3-2: South Quadrant	(-) Poor There is limited space for the AFLV in the south quadrant. This quadrant is occupied by existing hangars, and most of the undeveloped areas are under lease, reserved for future GA development on the approved ALP, or close to residential areas.	(-) Poor The south quadrant typically experiences high traffic volumes related to FlightServ FBO activities, which may impair access to the AFLV.	(+) Good Disruptions to operations are not anticipated as new infrastructure would be required to locate the AFLV in the south quadrant. In addition, the AFLV would be located outside of the RSA, ROFA, and RVZ.	-1
AFLV Alternative 3-3: West Quadrant	(+) Good The AFLV would be located adjacent to the existing AFLV.	(-) Poor Similar to existing conditions, maintenance staff would be required to cross an active movement area to access the site.	(o) Fair As the existing utility service feeding the AFLV may require modifications to accommodate the installation of new/updated equipment, there may be minor disruptions to service during the transition period. In addition, the AFLV would be located adjacent to the existing AFLV, which may be located within the RVZ.	0
AFLV Alternative 3-4: East Quadrant (Proposed Action)	(+) Good The AFLV would be located in an area with available space for development.	(+) Good Accessible via the existing access to the Air National Guard Complex and would not require crossing any movement areas.	(+) Good Disruptions to operations are not anticipated as new infrastructure would be required to locate the AFLV in the east quadrant. In addition, the AFLV would be located outside of the RSA, ROFA, and RVZ.	3

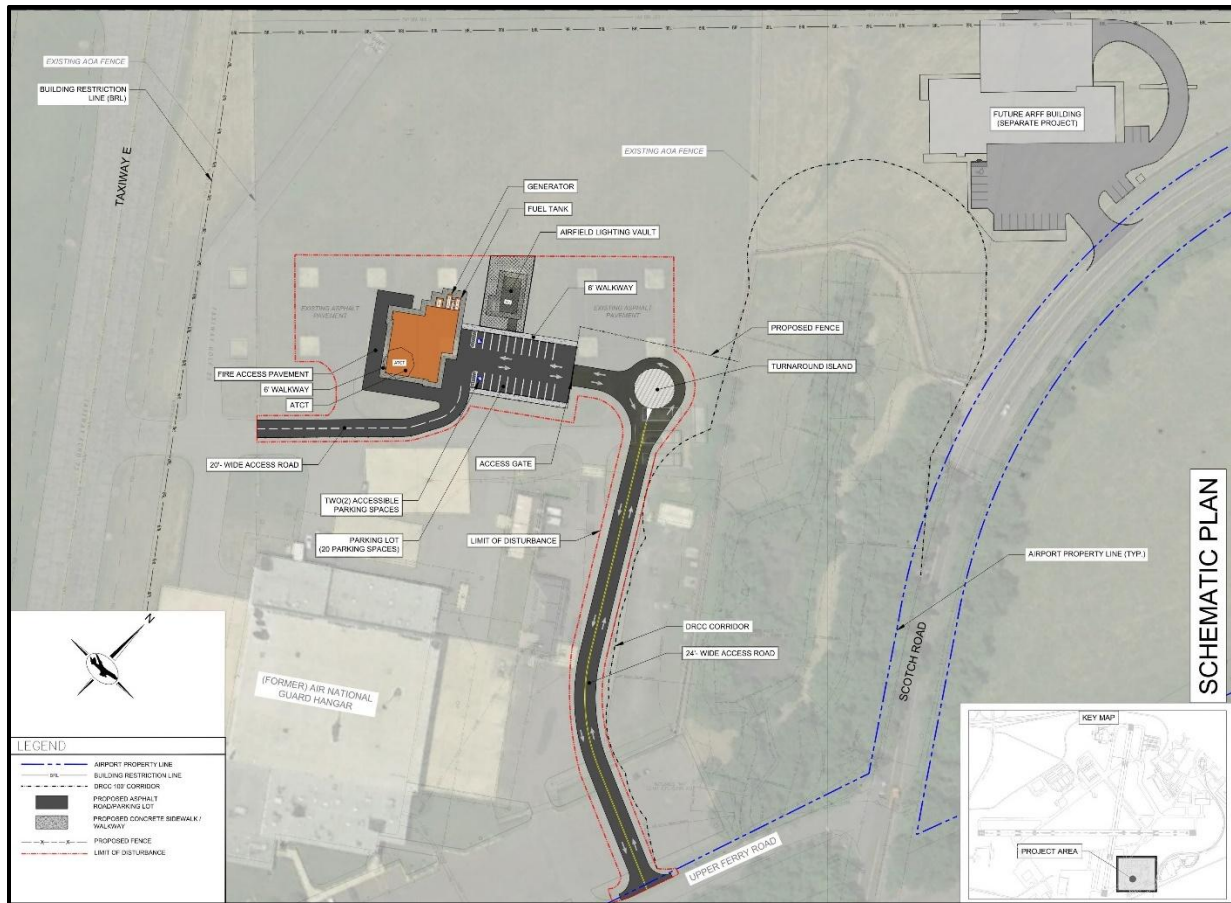


Figure II-3 Schematic Site Plan of Proposed Action

III Affected Environment

The affected environment chapter describes the existing environmental conditions within the study area associated with the Proposed Action. The study area identified for evaluation is generally defined by the limit of disturbance boundary shown on Figure III-3, and in some cases, resources are evaluated either within a 50' or one-mile boundary of the limit of disturbance, or within the overall TTN airport property. The existing conditions data for the proposed new replacement ATCT and AFLV project were collected through various means, including field visits and investigations, reviews of published information, agency coordination, and discussions with TTN staff. The following resources are not expected to be affected by the Proposed Action due to their absence within the study area and its surroundings, and therefore no further analysis was conducted.

- Coastal Resources
- Department of Transportation Act Section 303 (referred to as "Section 4(f)")
- Farmlands

The data presented in this chapter serves as a basis for the assessment of environmental consequences associated with the Proposed Action presented in Chapter 4, Environmental Consequences.

III-1 Aviation Emissions and Air Quality

III-1.1 Air Quality and Regulatory Framework

Air quality is regulated at the federal level by the Clean Air Act (CAA), which is administered by USEPA in coordination with state and local governments. Under the authority granted by the CAA, USEPA has established National Ambient Air Quality Standards (NAAQS) for six contaminants referred to as criteria pollutants: Carbon Monoxide (CO), Nitrogen Dioxide (NO₂), Ozone (O₃), Particulate Matter (PM), Sulfur Dioxide (SO₂), and Lead (Pb).

Air quality regions that meet the NAAQS for a criteria pollutant are designated as being in attainment, while those that do not meet the NAAQS for one or more criteria pollutant are designated by the USEPA as nonattainment areas. Nonattainment designations under the CAA for O₃ are categorized into levels of severity—marginal, moderate, serious, severe, or extreme—based on the level of concentrations above the standard. In addition, a former nonattainment area is also defined as a maintenance area. The CAA specifies future dates for achieving compliance with the NAAQS for nonattainment areas; these states must produce a State Implementation Plan (SIP) that defines mitigation strategies and timelines for attaining the NAAQS. The CAA also requires federal agencies to ensure that actions proposed to occur in a designated nonattainment or maintenance area conform to the appropriate SIP, also known as General Conformity. Under the General Conformity regulations, compliance is presumed if a proposed action would not cause emissions that exceed *de minimis* levels defined for the criteria pollutants. If the proposed action's emissions exceed the *de minimis* levels, a conformity determination would be required.

Air quality in the TTN area is designated by USEPA as in attainment for all criteria pollutants except the 2008 and 2015 eight-hour ozone standard and the 2006 PM_{2.5} standard based on recent air monitoring data collected by the state agency. USEPA classifies the areas into categories based on the severity of non-

attainment based on air quality. Specifically, the TTN area is designated as a marginal and moderate non-attainment area for the 2008 and 2015 eight-hour ozone standard, respectively, and maintenance area for the 2006 PM_{2.5} standard. As the area is designated as non-attainment with the current USEPA air quality standards, the Proposed Action was analyzed for General Conformity Applicability to ensure the net change in air emissions is below applicable air quality standards.

III-1.2 Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions are gases that trap heat in the atmosphere.²⁶ GHGs include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone (O₃), and fluorinated gases.²⁷

There are no formal standards for GHG emissions. Therefore, where a proposed action or alternative(s) would result in changes to GHG emissions, the effects are evaluated either qualitatively or quantitatively, as appropriate. Quantitative analyses are conducted using the methodology and assumptions provided in the FAA Emissions and Air Quality Handbook, Version 4²⁸, which is the latest guidance released by FAA for assessing GHG emissions for Federal Actions.

The Delaware Valley Regional Planning Commission (DVRPC) prepares a regional energy use and GHG emissions inventory. The latest inventory, *Energy Use and Greenhouse Gas Emissions Inventory for Greater Philadelphia* (November 2018), provides an overview of energy use and GHG emissions in Greater Philadelphia, including Mercer County.²⁹ According to the inventory, Mercer County produced approximately 5 million metric tons (MMT) of CO₂ equivalent (CO₂e) emissions in 2015.

III-2 Biological Resources

Biological resources refer to the distinct types of flora (plants) and fauna (fish, birds, reptiles, amphibians, mammals, etc.), including state and federally listed threatened and endangered species, in a particular area. It also encompasses the habitats supporting the various flora and fauna, including rivers, lakes, wetlands, forests, and other ecological communities.

III-2.1 Ecological Communities

The New Jersey Division of Fish and Wildlife's (NJDFW) Endangered and Nongame Species Program (ENSP) has developed mapping to identify critical rare species habitats based on land use classifications, documented rare species locations, and habitat models linked to each of the rare, threatened, or endangered species. Based on the status of the species present, the habitat patches are ranked as follows (New Jersey Department of Environmental Protection (NJDEP) 2017):

- Rank 5: Presence of one or more federally-listed threatened or endangered species.
- Rank 4: Presence of one or more state-listed endangered species.
- Rank 3: Presence of one or more state-listed threatened species.
- Rank 2: Presence of one or more non-listed state priority species.

²⁶ U.S. Environmental Protection Agency, Overview of Greenhouse Gases, <https://www.epa.gov/ghgemissions/overview-greenhouse-gases> (accessed August 1, 2023).

²⁷ U.S. Environmental Protection Agency, Basics of Climate Change, <https://www.epa.gov/climatechange-science/basics-climate-change> (accessed August 1, 2023).

²⁸ https://www.faa.gov/regulations_policies/policy_guidance/envir_policy/airquality_handbook

²⁹ <https://www.dvrpc.org/reports/18018.pdf>

- Rank 1: Habitat patches with minimum habitat-specific suitability size requirement for threatened or endangered or priority species, but do not intersect with any confirmed occurrence.

Per the NJDEP Landscape Project, the overall TTN property has been determined to contain Rank 1 and 2 habitats, with only Rank 1 habitats occurring within the study area (see Figure III-1). A habitat assessment was conducted by Davey Resource Group (DRG), Inc. on June 1, 2023, which evaluated existing conditions and vegetative communities in, and within a 50-foot buffer around, the proposed limit of disturbance. Most of the study area consists of mowed/maintained grasslands adjacent to paved taxiways, runways, and the former Army National Guard Aviation facility. Secondary growth, deciduous upland wooded habitat occurs in the southern portion of the study area, including within a narrow corridor between Upper Ferry Road and an existing railroad. The land surrounding the TTN consists of mixed deciduous and oak-pine forests interspersed with residential, professional, and commercial development and agricultural lands. For additional information regarding these communities, please refer to the Biological Resources Technical Memorandum included in Appendix F.

No wetlands or waterbodies occur within the study area. The West Branch Shabakunk Creek and associated fringe wetlands occur within a small secondary growth, deciduous, wooded habitat, adjacent east of the study area limits. Wetlands are discussed in further detail in Section III-13 and are depicted in Figure III-7.

The New Jersey Natural Heritage Program (NHP) Database and Landscape Project have records of potential vernal pool habitat in the immediate vicinity of the project site; however, no vernal habitat was observed within or immediately adjacent to the study area during the field investigation (See Appendix F). There are no other habitats located on the TTN that are designated as “critical habitat” for any state or federally listed species. Further information regarding state and federally regulated waterways, floodplains, and wetlands is presented in Section III-13.

III-2.2 Federally Protected Species

The U.S. Fish and Wildlife Service (USFWS) protects federally listed endangered and threatened wildlife and plant species and their habitat under the Endangered Species Act (ESA) of 1973 (USFWS 1973). The USFWS’s Information, Planning, and Consultation (IPaC) System identifies federally listed threatened and endangered species, critical habitats, migratory birds, and other natural resources that are known or expected to be on or in the vicinity of a study area, and thus potentially impacted by a project.

A USFWS IPAC Official Species List (dated August 20, 2026) (provided in Appendix F) did not identify critical habitats within the study area; however, the list identified the following species that should be considered in an effects analysis for the Proposed Action:

- Indiana bat (*Myotis sodalis*, Federally listed Endangered)
- Northern long-eared bat (*Myotis septentrionalis*, Federally listed Endangered)
- Tricolored bat (*Perimyotis subflavus*, Proposed Federally Endangered)
- Monarch butterfly (*Danaus plexippus*, Proposed Federally Threatened)

The USFWS New Jersey Field Office’s publication entitled *New Jersey Municipalities with Hibernation or Maternity Occurrence of Indiana Bat or Northern Long-Eared Bat (NLEB)*³⁰ (USFWS 2023a) identifies

³⁰ Last revised February 14, 2023

Ewing Township as maternity habitat for NLEB; no known hibernacula or maternity roosts for Indiana bats occur within the township. NLEB, Indiana bats, and tricolored bats are known to roost in trees during the summer months, and occupy a variety of forested and wooded habitats.

Summer acoustic studies were completed in 2015 and 2021 by ICF, Inc. (formerly Eco-Tech Consultants, Inc.) in support of TTN's separate and independent Runway Protection Zone (RPZ) Obstruction Removal Project. The acoustic studies were performed to determine the presence or probable absence of Federally listed, proposed listed, and at-risk bat species. These studies encompassed various forested habitat at the TTN Airport property. The level of effort for the survey was based on the maximum area of tree clearing that could be expected as a result of the RPZ Obstruction Removal Project. Although the area of tree clearing proposed as part of the RPZ Obstruction Removal Project was significantly reduced to only include critical obstructions generally located at the departure and approach ends of each runway (approximately 31 acres collectively), the initial studies assumed up to 130 acres of tree removal. ICF conducted an automated and qualitative analysis of acoustic data that was collected from four survey sites during the summers of 2015 and 2021. The survey sites nearest to the study area occurred approximately 1,978 feet to the south (Site 4) and 2,150 feet to the northeast (Site 3).

During the initial 2015 acoustic study, one tricolored bat was detected in the forest habitat within Site 4. In 2021, tricolored bat was only detected within the moderate to high quality forest habitat located in the northern portion of TTN (Site 2), well beyond the study area limits. As further detailed in ICF's final report provided to the USFWS NJFO, dated September 28, 2021, the habitat at Sites 3 and 4 were considered to be low to moderate suitability to support *Myotis* bat species. During the 2021 survey, three bat species were detected at Sites 3 and 4, including eastern red bat (*Lasiurus borealis*), silver-haired bat (*Lasionycteris noctivagans*), and big brown bat (*Eptesicus fuscus*). Based on the acoustic data collected during the time of the survey for the RPZ Obstruction Removal Project, the habitat at Site 2, located to the north of Sam Weinroth Road along Ewing Creek, likely supported the presence of *Myotis* bat species and tricolored bat. In a concurrence letter dated November 16, 2021, the USFWS NJFO found that the proposed tree removal was not expected to adversely affect federally listed bat species potentially present due to the implementation of seasonal tree clearing timing restrictions (April 1 to September 30), the limited acreage of tree removal proposed at the site located in the northern section of TTN (Site 2), and the use of other avoidance, minimization, and mitigation measures proposed by TTN.

Based on ICF's Bat Acoustic Survey Report, it was determined that the overall area was unlikely to support Indiana bats and that any potential impacts to NLEB resulting from the RPZ Obstruction Removal Project would be negligible to both the local and overall bat population (refer to Appendix F). The USFWS NJFO concurred with these findings but recommended that a time-of-year restriction on tree-clearing activities for any trees greater than or equal to 5" diameter at breast height from April 1 through September 30 be implemented to prevent incidental "death or injury to other at-risk bat species and/or their pups" (letters dated October 8, 2015 and November 16, 2021. Refer to Appendix F, *Biological Resources*). As a special condition of the Flood Hazard Area Individual Permit, Flood Hazard Area Verification, and Freshwater Wetlands General Permit #9, issued on May 15, 2024 for the TTN RPZ Obstruction Removal Project (File No. 1100-24-0001.1, Activity No. LUP240001), NJDEP further required that an April 1 to September 30 seasonal timing restriction be implemented on the clearing

of woody vegetation to prevent adverse impacts to Indiana bat, NLEB, tricolored bat, and nesting migratory birds protected under the Federal Migratory Bird Treaty Act.

An additional presence/absence acoustic bat survey was performed in July 2025 in support of the TTN RPZ Obstruction Removal Project. This effort was completed by ICF and DRG in accordance with the 2024 USFWS Range-wide Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines and involved the placement of five acoustic detectors within the proposed obstruction removal areas. The acoustic detector locations were generally consistent with the 2021 survey locations, with a fifth location (D2) occurring within the Mountain View Golf Course Property, north of I-295. The two detector locations nearest to the study area include D4 (approximately 1,850 feet to the northeast) and D5 (approximately 2,180 feet to the south-southwest). Eight of the 11 bat species with the potential to occur within the RPZ Obstruction Removal Project boundary were detected during the survey and manual vetting of the acoustic detector data confirmed the presence of one northern long-eared bat pass and one tricolored bat pass; the former pass occurred at the D3 survey location (to the northwest of the existing airport terminal) whereas the latter pass occurred at the D5 detector location. In a concurrence letter dated February 11, 2026, the USFWS NJFO concurred with the survey results demonstrating the presence of these species.

Due to the nature of the ATCT and AFLV projects and the limited disturbance to wooded habitat, no impacts to these species are anticipated. For further information regarding the potential presence of summer roosting bat species within the study area, including previously performed acoustic studies, please refer to Appendix F.

In addition, based on the existing, heavily maintained conditions within the study area, significant monarch butterfly populations would not be expected to be present. The monarch butterfly is currently proposed for federal listing as a threatened species (USFWS 2024³¹) and is not protected by the take prohibitions under Section 9 of the ESA until the rule to list is finalized.

³¹ US Fish and Wildlife Service (USFWS). 2024. Endangered and Threatened Wildlife and Plants; Threatened Species Status with Section 4(d) Rule for Monarch Butterfly and Designation of Critical Habitat. A Proposed Rule by the Fish and Wildlife Service on 12/12/2024. 50 CFR 17. Docket No. FWS-R3-ES-2024-0137; FXES1111090FEDR-256-FF09E21000.
<https://www.federalregister.gov/documents/2024/12/12/2024-28855/endangered-and-threatened-wildlife-and-plants-threatened-species-status-with-section-4d-rule-for>



Figure III-1 NJDEP Landscape Project Map

III-2.3 State Protected Species

The New Jersey Endangered and Nongame Species Conservation Act of 1973 (NJS 23:2A-1 to 23:2A-1:16) includes the listing of state endangered animal species (N.J.A.C. 7:25-4:13) and a nongame species list, including threatened species (N.J.A.C. 7:25 4.179[a]) (NJDEP 1973; NJDEP 2012). As part of this Act, all New Jersey animals appearing on the federal list are also included on this state list.

Endangered plants in New Jersey have been identified in accordance with the Endangered Plant Species List Act (N.J.S.A. 13:1B-15.151 et seq.) (NJDEP 1990).

Database searches of the NJ NHP and Landscape Project (Version 3.4) were conducted to ascertain whether state or federally-listed threatened or endangered species, critical habitat, or rare natural communities have been recorded on site, in the immediate vicinity (within 0.25 mile), or within one mile of the project site as per the Endangered and Nongame Species Conservation Act (N.J.S.A. 23:2A-1 et seq.) and the ESA of 1973 (16 U.S.C. § 1531 et seq.), respectively. This study area includes the limit of disturbance boundary, as well as immediate adjacent areas (50 feet) that contain environmentally sensitive areas (Refer to Figure III-1). The 50-foot buffer was selected because any wetlands or streams occurring within or immediately adjacent to the study area would have at most, a 50-foot transition area and riparian zone in accordance with NJ *Freshwater Wetlands Protection Act* (FWPA) Rules (N.J.A.C. 7:7A et seq.). Additional information is provided in the Wetland Investigation Technical Memorandum provided in Appendix G.

As stated in a letter dated September 11, 2026 (NHP File #26-4007437-38182), the NJ NHP does not have any records of rare plants, threatened, or endangered wildlife species or wildlife habitat, or Natural Heritage Priority Sites within the Study Area; however, the NJ NHP does have foraging records of Great Blue Heron (*Ardea herodias*), a State-listed species of special concern. The NJ Landscape Project maps habitat for this species as occurring within and along the West Branch Shabakunk Creek immediately adjacent to the existing Army National Guard Aviation facility. New Jersey Species of Special Concern are identified by the State as species that warrant special attention because of evidence of population decline or inherent vulnerability to environmental deterioration or habitat modification that would result in the species becoming threatened. Since the subject parcels are not subject to these jurisdictions, no further analysis of NJ Special Concern Species is required. Refer to **Table III-1** for a list of species identified by the NHP on, immediately adjacent to, and within one mile of the project site, and Appendix F for a copy of the NHP letter response for the Proposed Action.

Table III-1 Threatened and Endangered Species On, In the Immediate Vicinity Of, and Within One Mile of TTN

Common Name	Scientific Name	State/Federal Status	Record Type	Record Location	Record Source
Eastern Meadowlark	<i>Sturnella magna</i>	Threatened/ Not Listed	Breeding Sighting	Within 1-Mile ⁵	NJDEP NHP ²
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	Threatened (Breeding)/ Not Listed	Breeding Sighting	Within 1-Mile ⁵	NJDEP NHP ²
Great Blue Heron	<i>Ardea herodias</i>	Special Concern (Breeding)/ Not Listed	Foraging	Vicinity	NJDEP NHP ²
Indiana Bat	<i>Myotis sodalis</i>	Endangered/ Endangered	Potential	On Project Site ³	USFWS IPaC ⁴

Common Name	Scientific Name	State/Federal Status	Record Type	Record Location	Record Source
Northern Long-Eared Bat	Myotis septentrionalis	Endangered/ Endangered	Potential	On Project Site ³	USFWS IpaC ⁴
Wood Thrush	Hylocichla mustelina	Special Concern (Breeding)/ Not Listed	Breeding Sighting	Vicinity	NJDEP NHP ²
Big Brown Bat	Eptesicus fuscus	Special Concern/Not Listed	Active Sighting	Season Within 1-Mile*	NJDEP NHP ²
Eastern Red Bat	Lasiurus borealis	Special Concern/Not Listed	Active Sighting	Season Within 1-Mile*	NJDEP NHP ²
Little Brown Myotis	Myotis lucifugus	Endangered/Not Listed	Active Sighting	Season Within 1-Mile*	NJDEP NHP ²

Source: NJDEP and USFWS

Notes:¹ Federally protected under the Bald and Golden Eagle Protection Act

² NJDEP Natural Heritage Program Letter, dated September 11, 2026 (NHP File #26-4007437-38182)

³ Species may be present in the area of a Proposed Action.

⁴ USFWS Official Species List, dated August 20, 2026 (Project Code: 2026-0135610).

⁵ Species was observed during the June 1, 2023 field investigation

In addition to the above, three State listed grassland bird species were identified within and adjacent to the study area during the June 1, 2023 field investigation, including:

- American Kestrel (*Falco sparverius*, State listed Threatened)
- Grasshopper Sparrow (*Ammodramus savannarum*, State listed Threatened [breeding])
- Eastern Meadowlark (*Sturnella magna*, State listed Threatened)

An American Kestrel was observed flying over the infield immediately north of the existing ATCT and AFLV, where it appeared to be foraging. Several Eastern Meadowlarks were observed perching on the Airport Operations Area fencing to the north and northeast of the former Army National Guard hangar, as well as foraging within the adjacent infields. This species, as well as Grasshopper Sparrow, was heard vocalizing in the infield between Taxiway F and Runway 6-24. The grass in this infield area, which is maintained at taller heights than in the surrounding infields due to existing underground utilities, may provide potentially suitable breeding habitat for these species. All three of the above-described species are known to utilize airfields for nesting and foraging. No other State or federally listed wildlife or plant species were observed during the field investigation.

III-3 Coastal Resources

Coastal resources are absent from the airport and in the surrounding area; therefore, no additional evaluation is provided herein.

III-4 Section 4(f) Resources

Section 4(f) of the Department of Transportation Act of 1966 protects publicly owned parks, recreation areas, wildlife and waterfowl refuges, and historic sites of national, state, or local significance from development unless there are no feasible alternatives. Based on a review of the NJDEP GeoWeb database, most publicly owned parks in the vicinity of the study area are located east of the Airport and are owned by the Ewing Township; these include two unnamed Green Acres-encumbered parcels (Block 368, Lot 5, Block 368.02, Lot 7.01), located approximately 250 feet to the northeast (east of the railroad), as well as John Watson Park (Block 367, Lot 1), located approximately 1,000 feet to the east. The County-owned Mountain View Golf Course is located approximately 5,400 feet northwest of the study area. Other nearby parks and recreational areas located within one mile of the study area include the Veterans Memorial Park, Rambling Creek Park, and Fisher Middle School located to the east of the Airport. These parks and recreational areas all serve the surrounding residential areas.

There are no wildlife or waterfowl refuges in the immediate vicinity of the Airport. The nearest refuge is the Charles H. Rogers Wildlife Refuge located approximately 14 miles to the northeast. In addition, impacts on historic sites of national, state, or local significance on or near the Airport are considered under Section 4(f). Historic resources identified within the Area of Potential Effects (APE)-Architecture include two historic districts and one historic property eligible for listing in the National Register of Historic Places (NRHP). These resources are discussed further in Section III-7.

III-5 Farmlands

The Farmland Protection Policy Act (FPPA), 7 CFR § 658 (1994), requires federal agencies to consider project alternatives that will minimize unnecessary and irreversible conversion of farmland to nonagricultural uses. For the purposes of the FPPA, farmland refers to soils classified as prime farmland, unique farmland, and land of statewide or local importance. According to the U.S. Natural Resource Conservation Service (NRCS) Web Soil Survey, accessed on July 26, 2023, approximately 91.5% of the study area is classified as prime farmland and 8.5% is classified as not prime farmland. Farmland soil classification within the study area is shown on Figure III-2. However, the FPPA does not apply to land identified as "urbanized area (UA) on Census Bureau maps." As the Airport property is designated as UA, it would not be subject to FPPA regulations. In addition, in New Jersey, local municipalities also have the authority to regulate certain activities in agriculture zones under the Municipalities Planning Code (P.L. 805, Act No. 247, as amended). However, there are no zoned agricultural areas within the study area and there are no actively farmed soils within the Airport property.

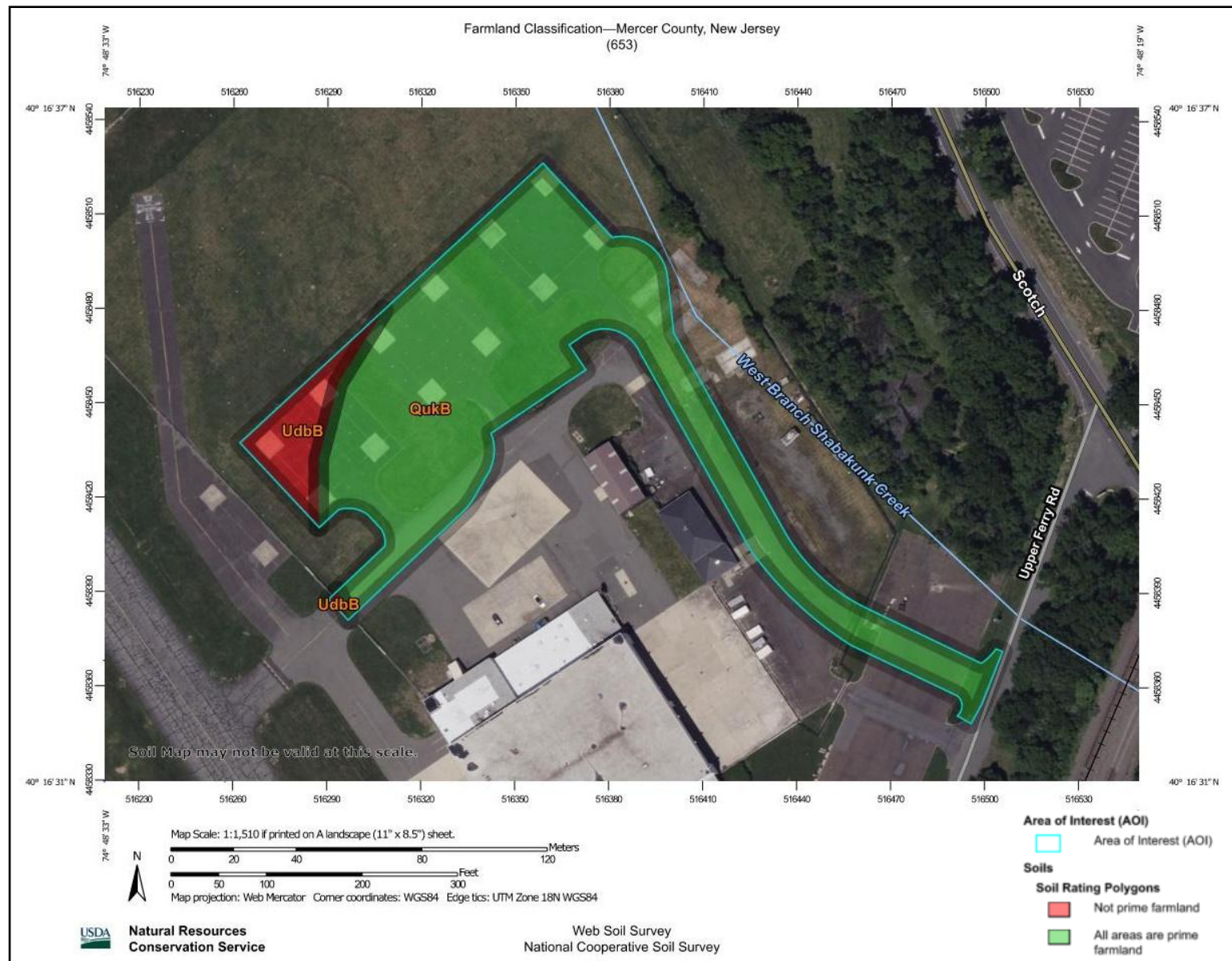


Figure III-2 Farmland Classification – Study Area

Source: USDA Natural Resources Conservation Service Web Soil Survey

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III-6 Hazardous Materials, Solid Waste, and Pollution Prevention

This section identifies existing contaminated sites on or within the immediate vicinity of both the existing and proposed new replacement ATCT and AFLV locations (refer to Figure II-1 and Figure II-3, respectively). Hazardous materials, solid waste, and pollution prevention are governed by many statutes, Executive Orders (EO), and FAA orders. In addition to federal statutes, NJDEP has established technical and administrative requirements to remediate a contaminated site and ensure that the remediation is protective of public health and the environment.

III-6.1 ATCT Pre-Demolition Assessment

A pre-demolition hazardous materials assessment was conducted at the existing ATCT by Environmental Connection, Inc. (EC) in July 2023. The goal of the assessment was to identify Asbestos Containing Materials (ACMs), Lead-Based Paint (LBP) and Universal Waste prior to demolition. The complete assessment is provided in Appendix E. During the assessment, EC collected approximately 97 samples of 44 suspected asbestos containing materials. The assessment identified that eight of the materials sampled contained asbestos in concentrations greater than 1% by weight and therefore meet the USEPA classification for asbestos containing materials. Four materials were inaccessible for sampling without damaging the building envelope or fire protection and mechanical systems and were therefore assumed to be asbestos containing. In addition, lead based paint was detected on various building components including exterior metal walls, door frames, and stair railings.

III-6.2 Phase I Environmental Site Assessment

A hazardous or contaminated environmental condition is the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing or past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. The above is investigated by a Phase I Environmental Site Assessment (ESA). A Phase I ESA was completed by Prestige Environmental, Inc. (Prestige) in August 2023. The assessment was conducted in general accordance with the American Society for Testing and Materials Standard ASTM: E-1527-21 to identify recognized environmental conditions (RECs), historical recognized environmental conditions (HRECs) and controlled recognized environmental conditions (CRECs) at the property. The Phase I ESA involved the review of historic aerial photographs, the Environmental Data Resources, Inc. (EDR) database, NJDEP GeoWeb and DataMiner websites, correspondence with Airport officials, and site reconnaissance. The complete Phase I ESA report is provided in Appendix E.

The study area is currently developed with helicopter landing pads, motor pool, concrete refueler truck parking pads, and access roads. The study area was formerly utilized as helicopter landing pads, aboveground and underground fuel storage, aircraft fueling station, refueling parking area, concrete wash pads and a motor pool. A former exterior hazardous waste/chemical storage shed was located at the northern most refueler truck parking pad within the study area and was removed in 2008. Based on a review of the EDR environmental database, the study area was identified in the databases listed in Table III-2. Review of data from the New Jersey GeoWeb, NJDEP DataMiner Website, and a completed questionnaire by Felipe S. Conteras, P.E., Vice President of Kleinfelder were also conducted to establish the current status of each site.

Table III-2 Study Area Environmental Status

Site	Database	ID	Status
Mercer Armory & OMS Mercer County Airport Scotch Road Ewing, NJ	NJ UST	Facility ID No.: 0000671	- No Further Action (NFA) - Unrestricted use, April 2001: five Underground Storage Tanks (UST) - Response Action Outcome (RAO)- Unrestricted use, August 2012: two 550-gallon waste oil USTs 10,000-gallon heating oil (No. 2) tank, in use 550-gallon flow-through process tank, status unknown - Two 10,000-gallon aviation fuel Aboveground Storage Tanks (AST), removed
West Trenton National Guard AASF/OMS Scotch Road, Ewing	NJ HIST LUST	Case ID No.: 91-04-09-1438 UST ID No.: 0006716	- One area of concern (AOC) with one media of concern - Site issued a NFA for AOC(s)
Naval & Marine Corps Res Center Mercer County Airport Ewing, NJ	NJ UST	Facility ID No.: 018708	- Three tanks removed April 1994 - NFA-Unrestricted Use, January 1998
USCG- Navy Marine Reserve Center Scotch Road, Mercer County Airport West Trenton, NJ	RCRA-VSQG	EPA ID No.: NJ4170022400	- Conditionally exempt, small quantity generator - Hazardous waste summary- nonhalogenated solvents - NAICS Code No. 485999, all other transit and ground passenger transportation
	US AIRS	ENV ID No.: 100544444 Facility Registry ID No.: 110006867462	
	NY MANIFEST	EPA ID No.: NJ41700224000	
Former Marine Corps Reserve Center West Trenton, NJ	PFAS ECHO	RCRA ID No.: NJ4170022400	- Active - No violations identified - Minor Emissions

Source: EDR Databases, New Jersey GeoWeb, NJDEP DataMiner Website and a completed questionnaire by Felipe S. Conteras, P.E., Vice President of Kleinfelder

Based on the site inspection conducted on July 12, 2023, and review of historical documentation, the Phase I ESA revealed the presence of nine RECs within and adjacent to the study area. RECs are defined as the presence, or likely presence, of any hazardous substances or petroleum products in, on, or at a property due to any release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. The identified RECs are described below and shown in Figure III-3.

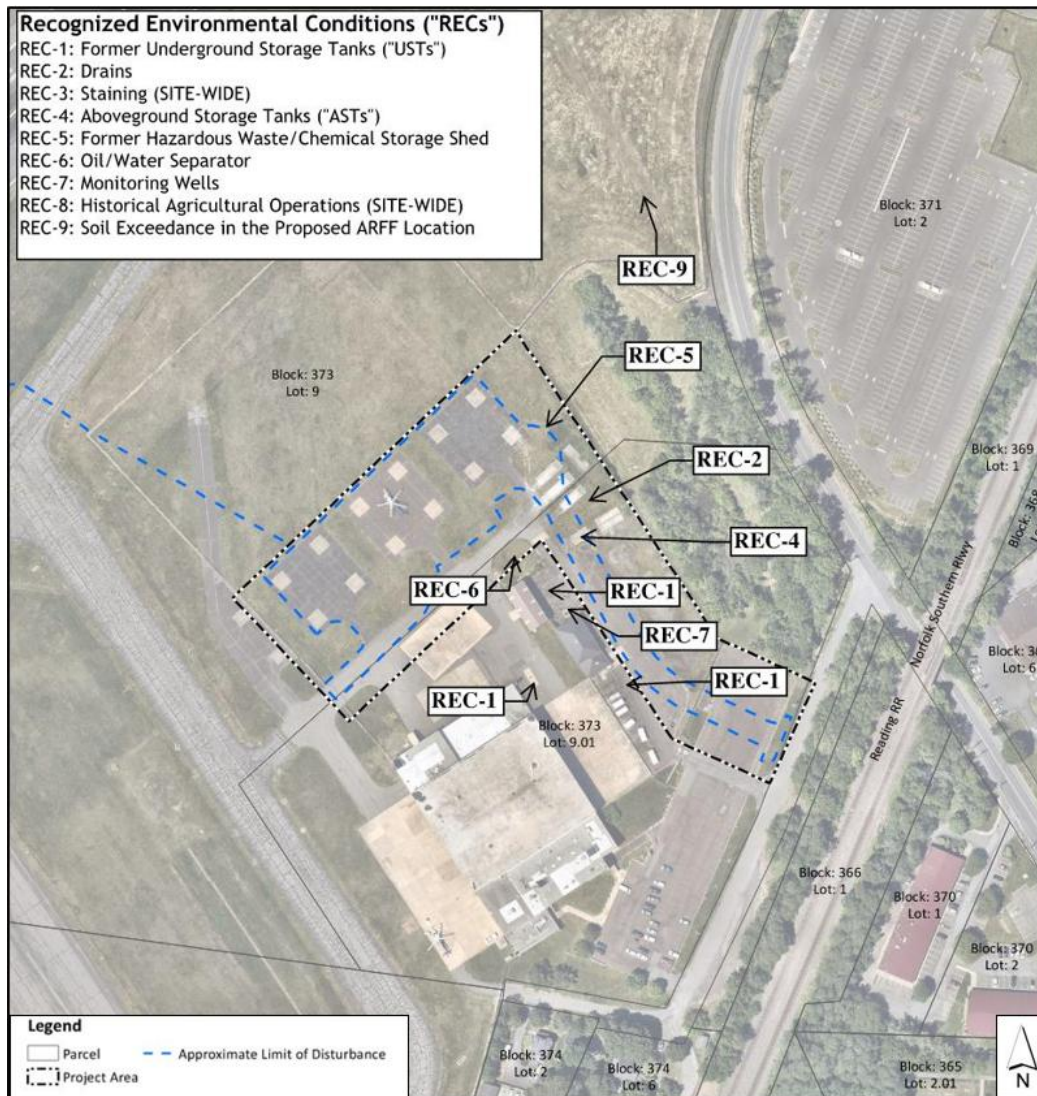


Figure III-3 Phase I ESA – REC Location Map

Source: Prestige Environmental, Inc.

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REC-1: Former Underground Storage Tank (UST):

The following two facilities were identified within Block 373, Lot: 9.01 – (1) Mercer Armory and OMS/West Trenton Army Aviation Support Facility (NJDEP Program Interest (PI) No. 000671) and (2) The Naval & Marine Corps Reserve Center (PI No. 018708 and Incident No. 94-04-20-0945). Eight USTs³² were identified at the site, and of those, seven have been removed and one UST is currently in use. In addition, a NFA³³ - Unrestricted use was issued in April 2001 for five of the USTs. Also, a RAO³⁴ - Unrestricted use was issued in August 2012 for two waste oil USTs. One 550-gallon flow-through process tank located to the south of the service building was noted, the status of which is unknown. Further research identified that three USTs were removed in April 1994, and an NFA-A (unrestricted use) was issued by NJDEP in January 1998. Based on the documented completion of the remedial action no further investigation is warranted.

REC-2: Drains:

During the July 2023 site reconnaissance, drains were observed at the four concrete refueler truck parking pads. It was noted that the water from the drains likely discharged to the adjacent West Shabakunk Creek via one of two outfalls. As this area is located outside of the study area, no further investigation is warranted.

REC-3: Staining:

Several staining locations were observed throughout the study area during the July 2023 site reconnaissance. While spills/staining from historic operations have the potential to impact subsurface conditions, no specific investigation to evaluate the impacts is warranted due to the ubiquity and diffuse nature of this REC. However, it is recommended that any potential subsurface impacts of this REC be taken into consideration while developing the Project Materials Management Plan (MMP)³⁵.

REC-4: Aboveground Storage Tanks (ASTs):

Two former 10,000-gallon aviation fuel ASTs were located on a concrete pad to the southeast of the truck fueling parking spots. During the July 2023 site reconnaissance, minor staining was observed. The concrete pads are located adjacent to the proposed access road and utility lines. As indicated in REC-3, it is recommended that any potential construction-related impacts of this REC be taken into consideration when developing the Project's MMP.

³² Per USEPA, an underground storage tank system is a tank and any underground piping connected to the tank that has at least 10 percent of its combined volume underground. Federal UST regulations apply only to UST systems storing either petroleum or certain hazardous substances. <https://www.epa.gov/ust/learn-about-underground-storage-tanks>

³³ A NFA letter is a final remediation document issued by NJDEP as a determination that there are no contaminants present, or that any discharged contaminants that were present have been remediated to applicable standards or regulations.

³⁴ A RAO renders the Licensed Site Remediation Professional's (LSRP) opinion that a site has been remediated in accordance with all applicable statutes, regulations, and guidance.

³⁵ A Materials Management Plan (MMP) is a guiding document that outlines how materials - such as soil or construction waste - will be handled, reused or disposed of responsibly during a project, ensuring regulatory compliance and protection of the environment.

REC-5: Former Hazardous Waste/Chemical Storage Shed:

A former exterior hazardous waste/chemical storage shed was located at the northernmost refueler truck parking pad within the proposed study area. It was noted to have been removed in 2008. No staining was observed in the vicinity. However, as indicated in REC-3, it is recommended that any potential construction-related impacts of this REC be taken into consideration when developing the Project's MMP.

REC-6: Oil/Water Separators:

A former oil water separator (OWS) located to the south of the service building was noted to have been connected to the concrete wash pad. The excess discharge was released into a storm sewer that discharges to the adjacent West Branch Shabakunk Creek. A sign labeled "Potential Spill Site Oil Water Separator 1" was observed to the north of the storage building. The OWS is located adjacent to the Maintenance Building and to the northeast of the aircraft wash pad. The sign indicated that OWS 1 consists of a 550-gallon UST which contains waste oil and JP-8 fuel from aircraft maintenance activity. It was also noted that surface spills would flow to the east towards the storm drain and into the storm sewer which discharges into a creek. Any underground spills would be secondarily contained or leak into the soil. A March 2015 Cathodic Protection Testing performed by ATS Environmental Services indicated that the OWS passed inspection. No further documentation related to this OWS was available. Considering that the REC is located outside of the limit of disturbance, no further investigation is warranted.

REC-7: Monitoring Wells:

During the July 2023 site reconnaissance, several monitoring wells were observed. Further research from the August 2012 Kleinfelder Site Investigation (SI) and RAO Report indicated that in August 2008, six monitoring wells, which were previously installed onsite to evaluate the tank closures, were abandoned as required by the April 2001 NFA Letter. The provenance of the wells could not be ascertained and no further information to document the installation or testing results of the wells was available. Closure of these wells in accordance with N.J.A.C 7:9D Well Construction and Maintenance; Sealing of Abandoned Wells is recommended. However, REC-7 is located outside of the limit of disturbance. Accordingly, the monitoring wells associated with REC-7 will not be addressed as part of the Proposed Project and no further action is required.

REC-8: Historical Agricultural Operations:

Historical aerial photographs indicate that the Airport property was initially utilized for agricultural purposes until the early 1940s. The Airport property was first developed with runways and taxiways in 1947, and the National Guard Buildings were first observed in 1948. The helicopter landing pads, runway, associated access roads, and parking lot located within the study area were first observed in 1984. While pesticide-related impacts from historic agricultural operations have the potential to impact subsurface conditions, no specific investigation to evaluate the impacts is warranted due to the ubiquity and diffuse nature of this REC. However, it is recommended that any potential subsurface impacts of this REC be taken into consideration while developing the Project's MMP.

REC-9: Soil Exceedances in East Area:

Urban Engineers (Urban) performed a Phase I and Phase II Environmental Site Assessment to the east of the study area in 2019 and 2020, respectively, outside of the limit of disturbance. Soil sampling and analysis performed in November 2020 identified exceedances of polycyclic aromatic hydrocarbons (PAHs) and arsenic. Urban determined that the PAHs exceedance was isolated to an area which was historically filled due to the road alignment of Scotch Road in the late 1950's. Also, elevated concentrations of arsenic were attributed to historic fill or slightly higher naturally occurring background concentrations. It was also recommended that a soil material handling plan be developed and included as part of the construction documents and specifications. However, the exceedances detected may be attributed to agricultural use and no specific investigation to evaluate the impacts is warranted due to the ubiquity and diffuse nature of this REC. It is recommended that any potential subsurface impacts of the REC be taken into consideration while developing the Project's MMP.

CRECs and HRECs

CRECs include the past release of any hazardous substance or petroleum product that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of engineering controls, institutional controls, or activity/use limitations. This Phase I ESA has revealed no evidence of CRECs for the study area.

HRECs include the past release of any hazardous substance or petroleum product that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meets the unrestricted use criteria established by a regulatory authority without subjecting the property to any controls or use limitations. The NJDEP GeoWeb search identified a Deed Notice for soil and Classification Exception Area (CEA) for groundwater (PI No. 006048) to the south of the study area. It is for the Naval Air Warfare Center located at 1440 Parkway Avenue (Block: 374, Lot: 4.02), Ewing, NJ. As the Deed Notice and CEA are located well outside of the study area, no further investigation is warranted.

III-7 Historic, Architectural, Archeological and Cultural Resources

According to Protection of Historic Properties, 36 CFR Part 800, a historic property is "any prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the NRHP." Section 106 of The National Historic Preservation Act (NHPA) requires that federal agencies, such as the FAA, consider the effects of their actions on historic properties via consultation with the State Historic Preservation Office (SHPO).

III-7.1 Phase IA Historical and Archaeological and Intensive-Level Architectural Survey

A Phase IA Historical and Archaeological Survey and Intensive-Level Historic Architectural Survey for the Proposed Action was conducted by Richard Grubb & Associates (RGA). The full Phase IA report is provided in Appendix C. The APE for archaeology encompasses the limit of disturbance and a 50-foot buffer. The APE for architecture includes the area in which the project may directly or indirectly cause changes in the character or use of historic properties. To account for potential visual or contextual effects, the APE-Architecture extends beyond the actual construction limits to include those properties that may be impacted by visual changes, patterns of use, or may experience a change in historic character associated with the proposed project.

Background research indicated that no registered archaeological sites are situated within or adjacent to the APE-Archaeology and five archaeological sites are located within 1 mile. Nearly all the APE-Archaeology exhibited disturbance apart from grassy areas surrounding three helicopter pads near the National Guard facility. Undisturbed grassy areas within 500 feet of the former alignment of the West Branch Shabakunk Creek have an assessed high sensitivity for pre-Contact period Native American archaeological resources. The remainder of the APE-Archaeology has an assessed low pre-Contact and historic archaeological sensitivity. A Phase IB archaeological survey was recommended only in areas of assessed high archaeological potential, as shown in Figure III-4. No further archaeological survey is recommended elsewhere.

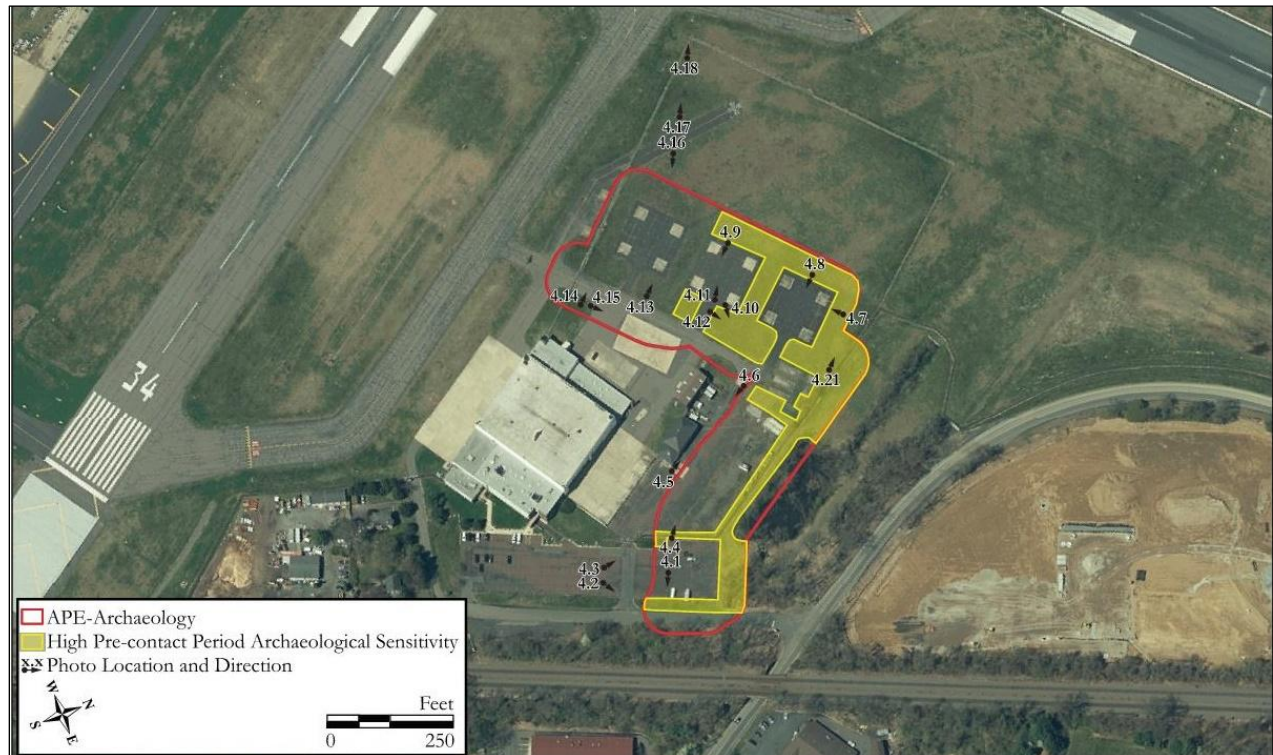


Figure III-4 Areas of Assessed Archaeological Sensitivity

Source: RGA

The Intensive-level historic architectural survey concluded that there are two historic districts and one historic property eligible for listing in the NRHP located within the APE-Architecture: the Aeronautical Turbine Laboratory Complex Historic District (SHPO Opinion: 3/28/1996), the Delaware and Bound Brook (Reading) Railroad Historic District (D&BBRRHD) (SHPO Opinion: 9/9/2005), and the First Presbyterian Church and Cemetery of Ewing (COE: 9/9/2008). In addition, 21 resources of more than 50 years of age were surveyed at the intensive level. As a result of the survey, RGA agreed with the 2008 Certificate of Eligibility for the First Presbyterian Church and Cemetery of Ewing and determined that the historic property does retain sufficient historic integrity to qualify for listing in the NRHP.

Upon fieldwork, it was discovered that the Aeronautical Turbine Laboratory Complex Historic District was in the process of being demolished, resulting in the complete loss of its historic integrity. As such, it was recommended no longer eligible for listing in the NRHP. As currently designed, the proposed project will have no adverse effect on historic properties. No further historic architectural survey is recommended.

III-7.2 Phase IB Archaeological Survey

Following the completion of the Phase IA Historic and Archeological Survey, RGA completed a Phase IB Archaeological Survey. The Phase IB Archaeological Survey assessed a roughly 2.37-acre portion of the APE with a high sensitivity for pre-Contact period Native American archaeological resources based on proximity to wetlands and predictive modeling site settlement data (Figure III-4). The Phase IB archaeological survey comprising background research, pedestrian reconnaissance, excavation of 45 shovel test pits (STPs), and artifact analysis.

Testing was completed within the archaeologically sensitive portion of the APE, which consisted of undisturbed grassy areas within 500 feet of the former alignment of the West Branch Shabakunk Creek. Subsurface testing within the APE recovered 10 historic artifacts. These artifacts are ferrous metal hardware, wire nail fragments, brick fragments, vessel glass, and domestic ceramic. Diagnostic artifacts are either modern or possess wide date ranges from the early nineteenth century to the present day. No accompanying archaeological features, structural remains, or pre-Contact artifacts were identified. No pre-Contact period cultural features were encountered. The recovered artifacts do not represent evidence of any on-site occupation and do not represent an intact archaeological site. No further archaeological survey is recommended within the APE. Consultation with the New Jersey Historic Preservation Office (NJ HPO) was conducted (HPO project # 25-0600) and based on the above information, no further investigation was recommended. NJ HPO concurred with the assessment and recommendations of both surveys, including that the Aeronautical Turbine Laboratory Complex Historic District no longer retains sufficient integrity to be eligible for listing in the NJ and NRHP, and that the Proposed Project is unlikely to impact extant historic and archaeological resources and therefore result in no adverse effect on the Delaware and Bould Brook (Reading) Railroad Historic District and the First Presbyterian Church and Cemetery of Ewing. Correspondence with NJ HPO is included in Appendix H.

III-8 Land Use

Potential impacts to existing and future land use on the airport property and in the surrounding area should be considered early in the planning process. TTN is located in a developed area of Mercer County with a variety of land uses including residential, agriculture, industrial, and commercial uses. To the east of the Airport, land uses include commercial, industrial, residential, and transportation, including the CSX freight rail line which runs in a north-south direction. To the south and west of the Airport, there is generally a mix of residential, commercial, and agriculture uses. There are recreational and forested areas located to the west and northwest of the Airport. In addition, the Parkway Avenue Redevelopment Area (PARA) is located adjacent to the Airport. The Parkway Avenue Redevelopment Plan, dated January 8, 2013, seeks to enhance the commercial and residential markets in Ewing by focusing on creating multimodal facilities. The study area itself is zoned Industrial Park (IP-1). Figure III-5 depicts the zoning in the vicinity of the Airport.

Development within Ewing Township is guided by the existing Township Master Plan and the Town Zoning and Town Subdivision Codes. In addition, Ewing has established an airport hazard zone, which regulates development within the Airport runway subzones and runway end subzones as defined in Article IV § 215-38 of the Town Zoning Code. The Delaware Valley Regional Planning Commission also reviews aviation projects within the 12 counties from four states, including Mercer County. The Airport reviews developments in conjunction with Mercer County Planning and Ewing Township for compatibility with Airport function and use.

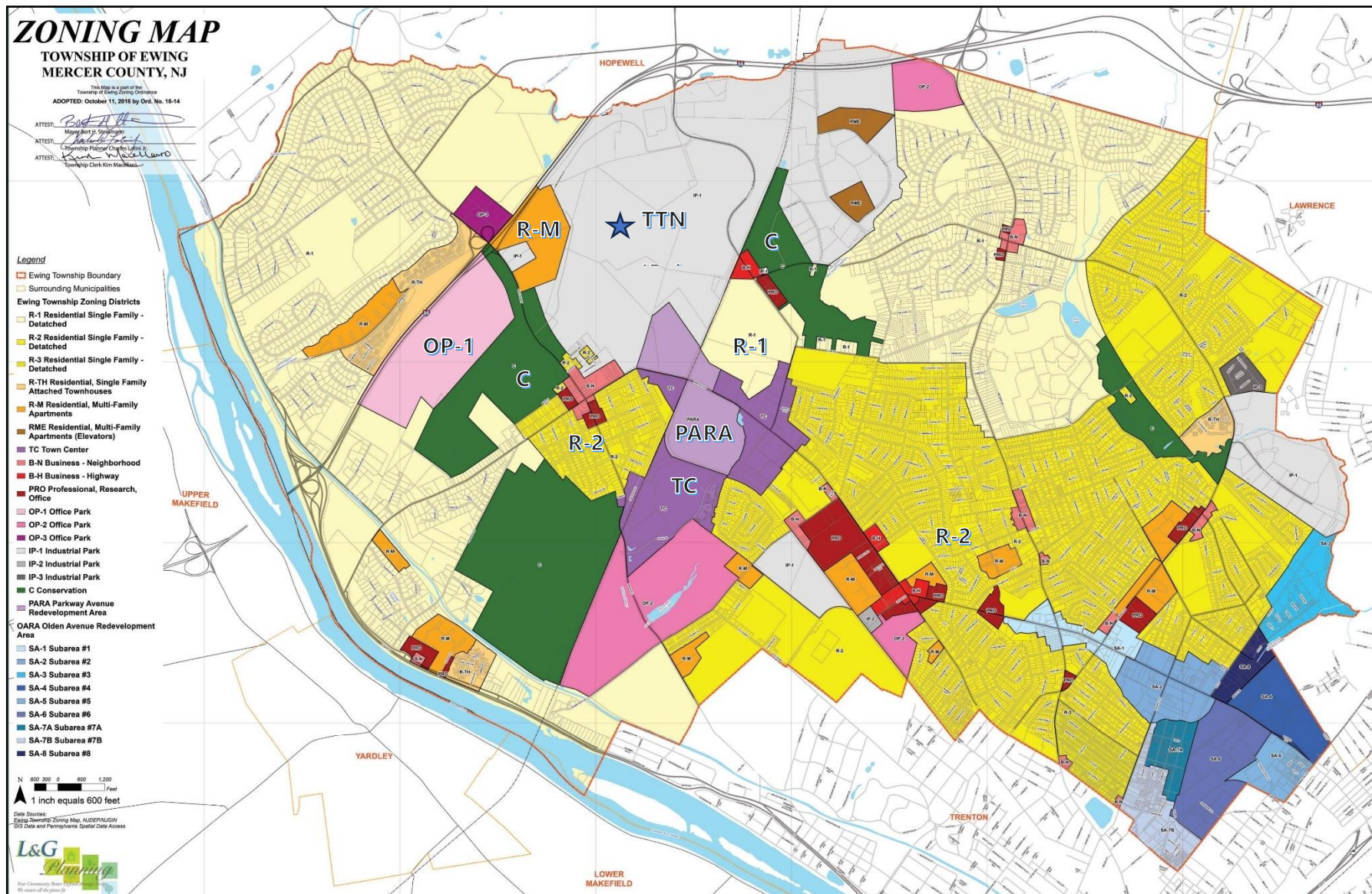


Figure III-5 Ewing Township Zoning Map
Source: Ewing Township

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III-9 Natural Resources and Energy Supply

EO 13834, *Efficient Federal Operations*, instructs federal agencies to meet energy and environmental performance statutory requirements in a manner that increases efficiency, optimizes performance, eliminates unnecessary use of resources, and protects the environment. Electricity and natural gas are currently provided to the existing ATCT and AFLV by Public Service Electric and Gas Co (PSE&G). The existing site is serviced by treated municipal water from Trenton Water Works. The proposed new replacement ATCT and AFLV would connect to existing water and PSE&G gas lines in the vicinity of the study area and would connect to the sanitary stub at the future ARFF building (separate project – refer to Figure I-3).

III-10 Noise and Noise Compatible Land Use

At airports, aircraft noise emissions can adversely impact land use compatibility between an airport and surrounding properties, particularly in the presence of noise-sensitive receptors (residences, places of worship, hospitals, schools, parks, etc.). Noise levels inherent to airports are generally compatible with most industrial, commercial, and agricultural land uses. 14 CFR Part 150, *Airport Noise Compatibility Planning* and the *Aviation Safety and Noise Abatement Act of 1979*, established a system under FAA to quantify noise and determine 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.

III-10.1 Aircraft Operational Noise

The Proposed Action will not alter or change aircraft operations at the airport, therefore no evaluation of aircraft related noise is required for this EA.

III-10.2 Construction Noise

Construction of the Proposed Action will be evaluated for the potential to temporarily increase nearby noise levels. An increase in noise levels from construction activities has the potential to adversely affect noise sensitive land uses such as residential and transient lodging around the study area. Noise sensitive receptors can be located indoors or outdoors and include but are not limited to schools, places of worship, libraries, health care facilities, historical facilities, and parks. The Town of Ewing's Noise Ordinance does not apply to aircraft noise via Chapter 240-3 and includes exemptions listed in the New Jersey Administrative Code (N.J.A.C.) 7:29-1.5. However, it does apply to construction and demolition activities during nighttime hours unless the activity can be shown to meet the criteria, or a waiver has been obtained to allow overnight activities.

Noise sensitive land uses and receptors were identified in the immediate vicinity of the study area, near the existing and future ATCT and AFLV areas, and include single- and multi-family residences, institutional facilities, recreational facilities, a cemetery, and two hotels. The nearest noise sensitive land use to proposed work near the existing ATCT and AFLV areas is the Greene 750 apartment complex, located directly west of the Airport. Residences in the complex are located 1,580 feet from the existing ATCT, AFLV, and parking areas and will have direct line of sight to construction activities. Noise sensitive land uses are also located east of the Airport, near the work area where the new replacement ATCT and AFLV will be constructed. The closest residential land use is located approximately 1,500 feet southeast of the work area and includes residences

within the Scotch Road apartment complex. In addition, Veterans Park is located within 1,200 feet northeast of the ATCT and AFLV work area.

III-11 Socioeconomics and Children's Environmental Health and Safety Risks

III-11.1 Socioeconomics

The most recent statistics from the U.S. Census Bureau's American Factfinder were used to examine the population profile and characteristics for the region. Per the American Factfinder American Community Survey data, the population in Ewing Township experienced a slight decline in recent years, with the population decreasing from approximately 37,270 in 2020 to 34,589 in 2022 (7.2 percent decrease). In addition, Hopewell Township, adjacent to Ewing Township, and Mercer County experienced slight decreases in population between 2020 and 2022 of approximately 1.2 percent and 1.7 percent, respectively.

Table III-3 below presents a brief compilation of demographic profiles for Ewing Township, Hopewell Township, Mercer County, and the TTN area (Census Tract 37.07). It should be noted that the airport property was located in Tract 37.05 until redistricting in 2020 and is now a part of Tract 37.07. As shown in the table, the characteristics included are population, racial/ethnic composition, median household income, and population in the labor force. In New Jersey, the most ethnically and racially diverse areas are located in the state's largest cities, especially in close proximity to the New York and Philadelphia metropolitan areas. As shown below in Table III-3, minority populations in the TTN area comprise a comparable percentage of the population to Mercer County, Hopewell Township, and Ewing Township.

Table III-3 Demographics

	Township of Ewing	Township of Hopewell	Mercer County	TTN Area (Census Tract 37.07)
Population	37,284	17,554	384,951	1,539
Minority Percentage ¹	36.7%	17.0%	37.9%	24.6%
Median Household Income	\$78,232	\$153,281	\$85,687	\$73,490
In Labor Force (above 16 years old)	16,939	8,391	181,448	661
Population Below Poverty Level	12.0%	2.5%	11.4%	4.3%

Source: 2021 5-year ACS Estimates

US Census Project Site Source: Population data from Data.census.gov, Census Tract 37.07 (2020), Mercer County, NJ

Note: ¹The data presented in the "Minority Percentage" row is a summation of the non-white racial makeup of the area to avoid duplication of the data.

III-11.2 Children's Health and Safety Risks

EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, defines the risks to children's safety that are attributable to products or substances that the child is likely to touch or ingest. There are no schools, daycares, parks, or children's health clinics located within the study area. The nearest school to the study area is the Lore Elementary School, located approximately two miles northwest of the Airport. In addition, the nearest hospital is the Capital Health Medical Center - Hopewell, located approximately two miles northeast of the Airport, and the nearest children's hospital is the Children's Specialized Hospital – Hamilton, located approximately 10 miles southeast of the Airport.

Children's population statistics show that Ewing Township's younger population is generally consistent with Mercer County and New Jersey, with a higher percentage of 15- to 19-year-old persons and smaller percentages of children under 14-years-old (see Table III-4).

Table III-4 Children's Population Statistics

	New Jersey	Mercer County	Township of Ewing
Total Population	9,234,024	384,951	37,284
Under 5 years	530,376 / 5.7%	21,331 / 5.5%	1,523 / 4.1%
5 to 9 years	557,847 / 6.0%	22,063 / 5.7%	1,279 / 3.4%
10 to 14 years	590,073 / 6.4%	24,453 / 6.4%	1,711 / 4.6%
15 to 19 years	584,965 / 6.3%	28,563 / 7.4%	4,727 / 12.7%

Source: 2021 5-year ACS Estimates

III-12 Visual Effects

Visual effects refer to the potential effects due to light emissions and potential effects to the visual resources and character of the existing environment. There are no special purpose laws, permits, or certificates for light emissions or their visual effects. However, visual effects have the potential to affect nearby residential areas or properties covered under Section 4(f) of the USDOT Act, the Land and Water Conservation Fund Act, and Section 106 of the National Historic Preservation Act.

III-12.1 Light Emissions

TTN is classified as a Part 139 Class I airport (scheduled Large Air Carrier Aircraft) and is required to follow the Airport Safety guidelines as stated in Certification of Airports, 14 CFR § 139. These guidelines include lighting and signage utilized both on the ground and in the air as well as other airport procedures. At TTN, much of the airfield is surrounded by aviation-related structures and facilities with some forested areas around the perimeter. As previously mentioned in Chapter 1, Purpose and Need, the Proposed Action includes the relocation of the (or provision of a new) airport beacon atop the new replacement ATCT.

III-12.2 Visual Resources and Character

TTN is in a moderately developed area consisting of a mix of residential, commercial, recreation, industrial, and agriculture land uses. There are no unique visual resources near the study area. The nearest visual resources, including historic and eligible historic sites, include:

- Aeronautical Turbine Laboratory Complex Historic District - located south of the Airport along Parkway Avenue
- Delaware & Bound Brook (Reading) Railroad Historic District - located along the railroad corridor, east of the Airport
- First Presbyterian Church and Cemetery of Ewing - located to the east of the Airport on Scotch Road

III-13 Water Resources

This section discusses water resources, and more detailed information regarding wetlands is provided in the Wetland Investigation Technical Memorandum provided in Appendix G.

III-13.1 Wetlands

III-13.1.1 Federal

The United States Army Corps of Engineers (USACE) regulates activities in wetlands covered under the Clean Water Act (CWA) (USEPA 1972). The National Wetland Inventory (NWI) (USFWS 2019) is typically used to determine the potential presence of federal wetlands prior to any site reconnaissance. NWI mapping indicates potential wetland areas identified by the USFWS using aerial photography. These maps do not have any regulatory consequence but rather indicate areas that may meet federal wetland criteria. The locations of NWI-mapped wetlands are depicted in Figure III-6. In addition, the USEPA and USACE published the *Updated Definition of "Waters of the United States"* in the Federal Register to finalize a revised definition of "waters of the United States" (WOTUS) under the CWA (USEPA 2025). The *Navigable Waters Protection Rule* regulates the nation's navigable waters and the core tributary systems that provide perennial or intermittent flow into them.

III-13.1.2 State

The USEPA authorized the State of New Jersey to administer the CWA Section 404 Permitting Program in delegable waters, as defined in N.J.A.C. 7:7A-1.3. In non-delegable waters, the USACE retains jurisdiction under federal law. The state also protects wetlands under its own Freshwater Wetlands Protection Act, N.J.S.A. 13:9B, which is implemented under the New Jersey Freshwater Wetlands Protection Act (NJFWPA) Rules at N.J.A.C. 7:7A. The NJDEP regulates activities in freshwater wetlands, wetland transition areas, and state open waters under the NJFWPA (N.J.S.A. 13:9B-1). Wetlands are classified according to their resource value as determined by the NJFWPA Rules (N.J.A.C. 7:7A-3.2). There are three different resource value classifications: exceptional, ordinary, and intermediate. The NJDEP Bureau of GIS developed a land use/land cover (LU/LC) baseline data set which serves as an inventory of the New Jersey's ecosystems (NJDEP BOG 2019). As mapping is based primarily on aerial interpretation, field investigations are still required. Resource value classifications and boundaries of delineated wetlands are subject to review and verification by the NJDEP. These are formally established when the NJDEP Division of Land Resource Protection (DLRP) issues a LOI for a site.

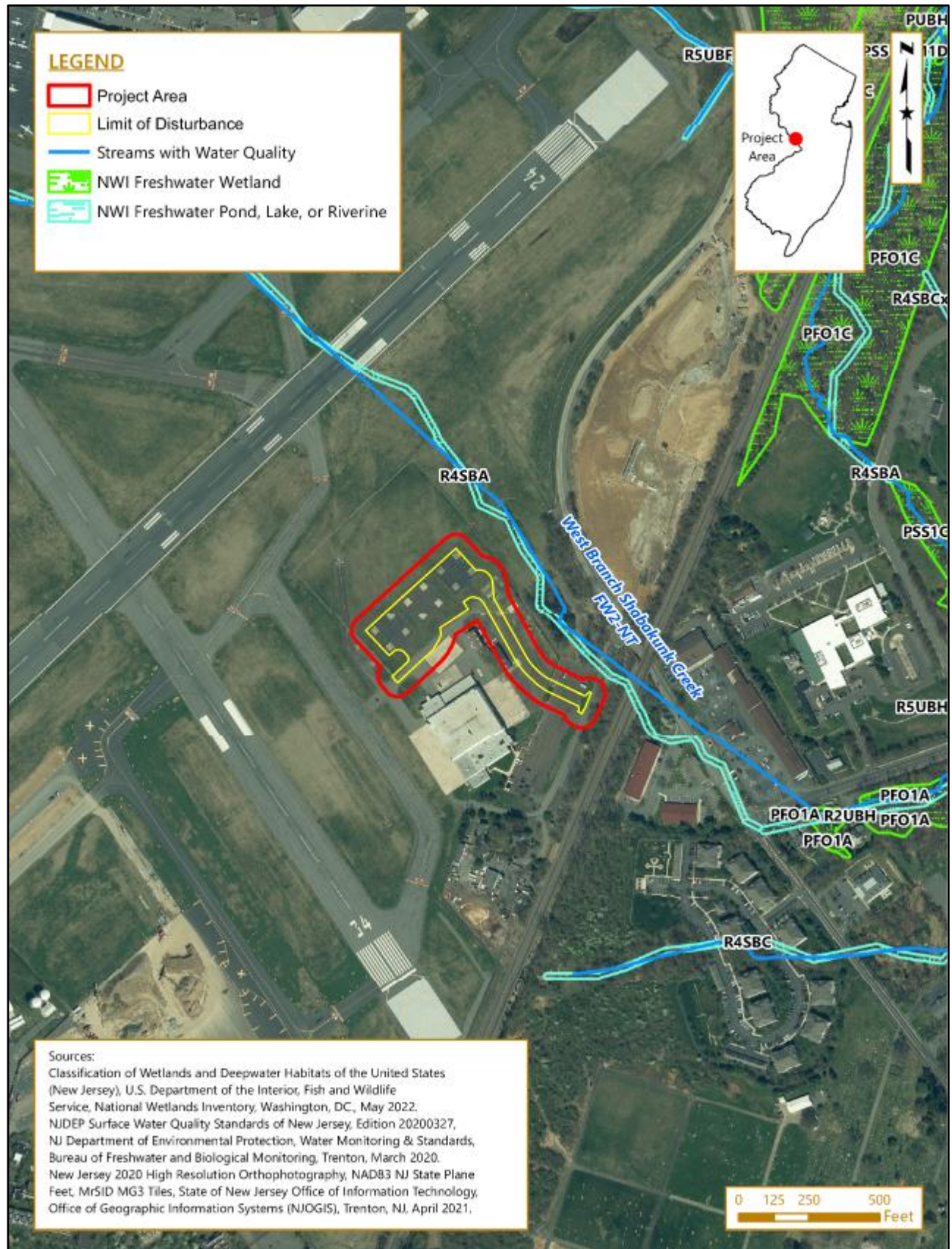


Figure III-6 USFS National Wetlands Inventory (NWI) Map

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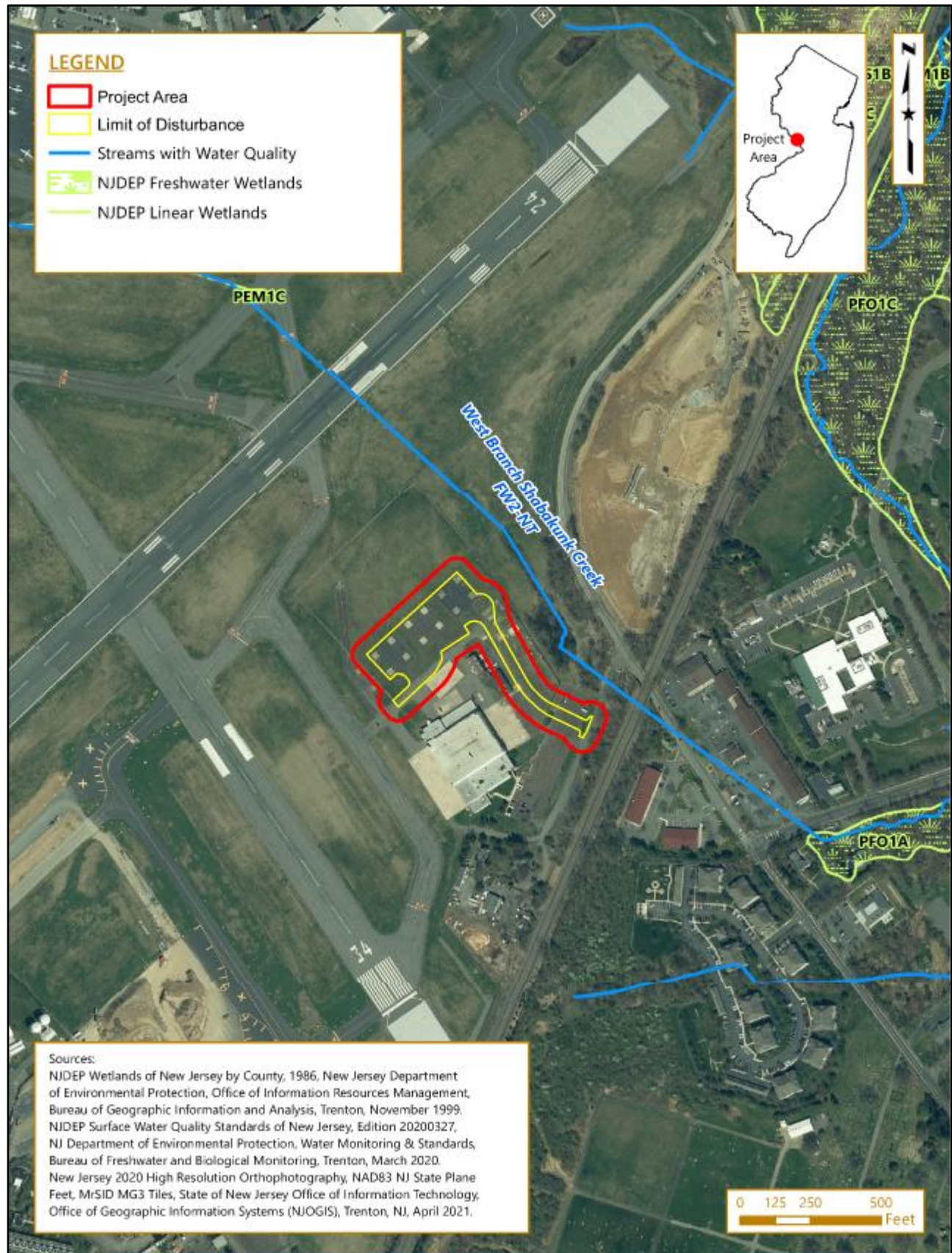


Figure III-7 NJDEP Wetlands and Streams Map

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NJDEP Wetlands Mapping (Figure III-7) does not indicate the presence of wetlands in the study area; however, West Shabakunk Creek is mapped as occurring east of the study area. A wetland investigation was completed for the study area on June 1, 2023 by a DRG Professional Wetland Scientist. Vegetation, soils, and hydrology were examined for evidence of wetland characteristics according to the methodology outlined in the 1989 *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* (FICWD 1989). No wetlands were identified as occurring within the study area, though wetlands associated with the West Branch Shabakunk Creek were observed east of/adjacent to the study area.

III-13.2 Floodplains

Floodplains are low-lying land areas typically associated with bodies of water that are likely to become inundated during a flooding event. The Federal Emergency Management Agency (FEMA) utilizes a 100-year storm recurrence interval for flood preparation. Flooding related to a 100-year storm statistically has a 1-percent chance of occurring during any given year. EO 11988, *Floodplain Management*, directs all federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid the direct and indirect support of floodplain development wherever there is a practicable alternative (FEMA 2015). No FEMA mapping exists for West Branch Shabakunk Creek, which occurs adjacent to the study area.

The State of New Jersey protects residents and property from flood events through its Flood Hazard Area Control Act (FHACA) at N.J.S.A. 58:16A-50. The Act is implemented under the FHACA Rules at N.J.A.C. 7:13, which tends to be more stringent than federal standards regarding development in flood hazard areas (FHA) and riparian zones adjacent to surface waters throughout the State. The NJDEP will issue an FHA Verification for an entire site or a portion of a site, which provides a formal determination of one or more of the following: the FHA design flood elevation, FHA limit, floodway limit, and riparian zone limit.

West Branch Shabakunk is immediately east of the project limits; therefore, its associated regulated FHA/Riparian Zone may overlap with the study area. No NJDEP FHA delineation exists for the unnamed tributary to the West Branch Shabakunk Creek. In support of the adjacent separate ARFF project, a request for a FHA Verification (NJDEP File No. 1102-12-0002.5 LUP 200001) was previously submitted to the NJDEP to verify the FHA limit, riparian zone limit, and FHA design flood elevation of the West Branch Shabakunk Creek based on Method 5 (Approximation Method) in accordance with N.J.A.C. 7:13-3.5 (See Appendix G). As the ARFF study area occurs immediately adjacent to the ATCT study area (refer to Figure III-8), the resources studied as part of the ARFF project may also apply to this ATCT study.

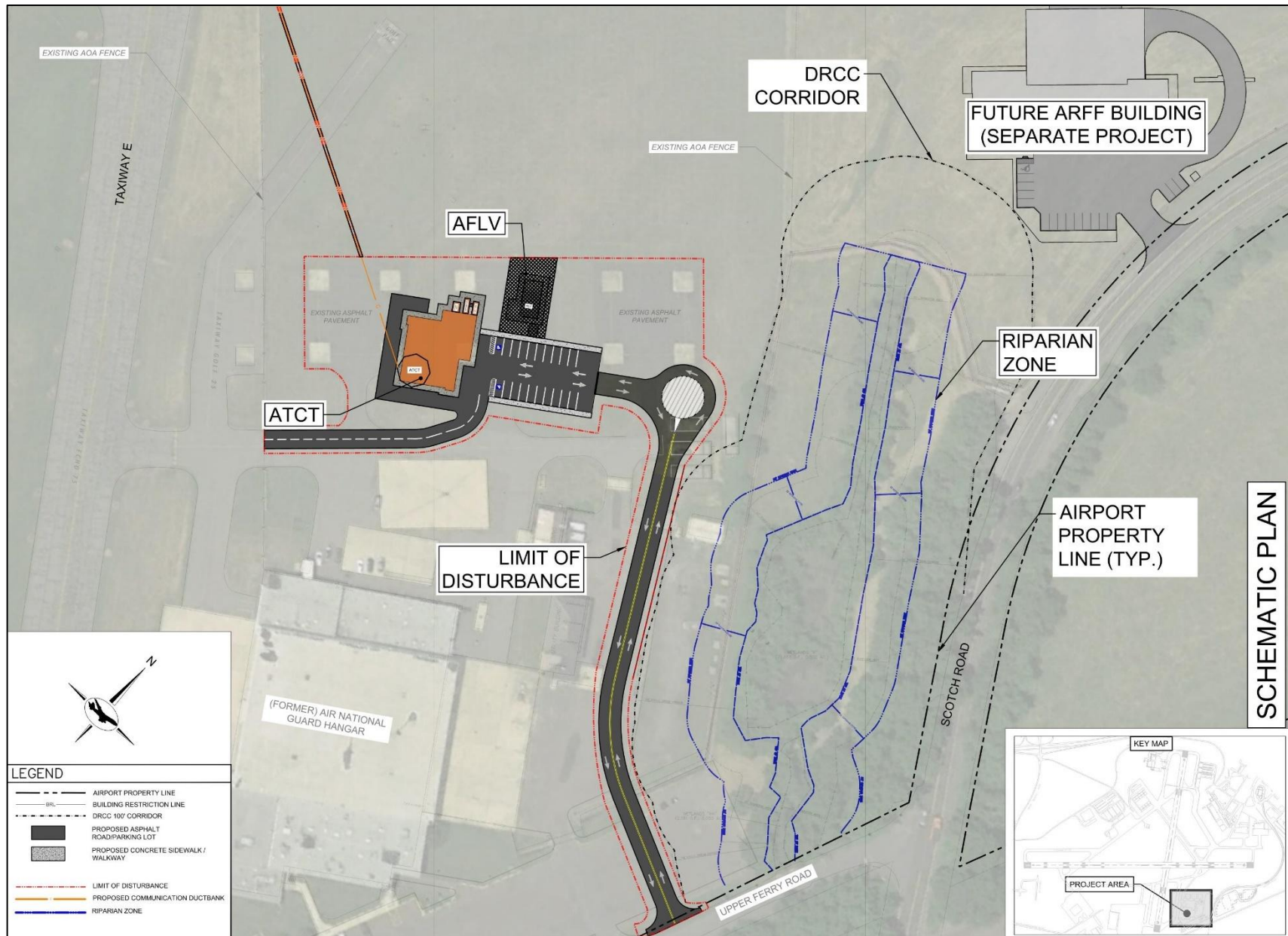


Figure III-8 Riparian Zones

Based on the FHA Verification, the limits of the FHA associated with the West Branch Shabakunk Creek do not overlap the subject study area; however, this FHA Verification will need to be reauthorized to comply with the revised NJDEP FHACA Rules, which became effective on July 17, 2023. The amended FHACA rules require the use of future projected precipitation when calculating flood elevations (NJDEP 2023b). Use of this new methodology may change the regulated FHA limits and flood hazard area design flood elevations. An application for a new FHA Verification is currently being prepared by an NJ-licensed Professional Engineer and will be completed in the Design Phase of the project. Based on previous submittals and the anticipated adjustments under the revised NJDEP FHACA Rules, it is expected that the Proposed Action will not impact the regulated FHA and riparian zone.

In addition, a riparian zone exists along each side of a regulated water and includes the water itself. The West Branch Shabakunk Creek and its associated tributaries are located within the eastern portion of the TTN property in the vicinity of the ATCT and AFLV study area. The creek flows in a southeasterly direction, eventually discharging to Assunpink Creek. According to the New Jersey *Surface Water Quality Standards* (SWQS) (N.J.A.C. 7:9B), West Branch Shabakunk Creek has received a surface water quality classification of Freshwater 2, Non-Trout and Category 2 (FW2-NT-C2).

The NJDEP NHP letter, dated April 28, 2025, has no documented habitat for any threatened or endangered plant or animal species that are critically dependent on the regulated water for survival on or within one mile downstream of the study area. The riparian zone for West Branch Shabakunk Creek and its tributaries is therefore anticipated to be 50 feet from the top-of-bank. This will be verified as part of the new FHA Verification. The regulated riparian zones are shown in Figure III-8, Riparian Zone.

III-13.3 Surface Waters

The TTN property is located in the Central Delaware Watershed Management Area (WMA 11) as defined by the NJDEP Division of Watershed Management (NJDWM 2021). The WMA is characterized by agriculture and urban land use, most notably in the State's capital city - Trenton. The area has been heavily impacted by suburban development as the population for WMA 11 has greatly increased during the past decade. TTN is situated in three subwatersheds. The eastern and southeastern portions of the Airport property, which includes the study area, are situated within the Assunpink Creek (below Shipetaukin Creek) Watershed. As shown in Figure III-7, all of the streams on and in the vicinity of the TTN property are classified by the NJDEP as Freshwater 2, Non-Trout and Category 2 (FW2-NT-C2).

Under Section 303(d) of the Federal CWA, each state is required to identify and make public information on impaired waterbodies (33 CFR 1313) (USEPA 2023). New Jersey is required to list impaired waterbodies as part of the water quality planning process pursuant to the Water Quality Planning Act (N.J.S.A. 58:11A-7). New Jersey uses chemical and biological stream monitoring to determine these impaired waters, and they cannot be removed from the list of impaired waterbodies until they achieve state water quality standards. The CWA requires that each impaired (non-attaining for pollutants) waterbody be given a priority ranking of high (H), medium (M), or low (L) with the goal of lowering the Total Maximum Daily Load (TMDL) of the particular pollutant

(USEPA 2023). The NJDEP's 2020 Final 303(d) List of Water Quality Limited Waters (USEPA 2020b) identifies portions of West Branch Shabakunk Creek as containing pollution impairment levels sufficient for listing on the 303(d) impaired waters list. Contaminants include arsenic, an unknown biological cause, both of which have a low priority ranking, and total phosphorus, which has a medium priority ranking.

III-13.3.1 Delaware and Raritan Canal Commission

The Delaware and Raritan Canal Commission (DRCC) was created pursuant to the Delaware and Raritan Canal State Park Law of 1974 (N.J.S.A. 13:13A-1 *et seq.*). The DRCC administers a land-use regulatory program in central New Jersey where new development could have drainage, visual, or other ecological impact on the Delaware and Raritan (D&R) Canal State Park. "Major Projects" are projects that result in the cumulative coverage of ¼-acre of land with impervious surface, or the disturbance of one acre or more of land. Major Projects must be reviewed and approved by the DRCC to ensure conformance with the objectives of the Master Plan and the specific standards of the DRCC Review Zone Regulations (N.J.A.C. 7:45).

The DRCC has jurisdiction over the entire State-owned D&R Canal and its Review Zone. The Review Zone, including Zones A and B and the Canal Park, lands within 1,000 feet of the canal, and watersheds of all streams that enter the Canal Park (refer to Figure III-9). The TTN property and the study area are situated within DRCC Review Zone B. The Proposed Action would automatically be considered a "Major Project," as defined at N.J.A.C. 7:45-1.3; therefore, approval from DRCC will be required, which would include review of stormwater runoff quantity and water quality impact (N.J.A.C. 7:45-8), as well as an evaluation of stream corridor impacts (N.J.A.C. 7:45-9).

The DRCC agreed to accept the NJ FHA in place of the 100-year floodplain for establishing the DRCC stream corridor limits (Appendix G). A request for an FHA Verification (NJDEP File No. 1102-12-0002.5 LUP 200001) was previously submitted to the NJDEP for the adjacent ARFF study area, located immediately adjacent to the ATCT study area, to verify the FHA limit; based on this FHA Verification, a small area of DRCC-regulated stream corridor overlaps the eastern limits of the existing access road. As described in Section III-13.2, the existing NJDEP FHA Verification will need to be reauthorized to comply with the revised NJDEP FHACA Rules, which became effective July 17, 2023 (NJDEP 2023a). Use of this new methodology may change the limits of the DRCC-regulated stream corridor since it is measured 100-feet from the FHA limit. Although the DRCC stream corridor is based on the FHA limits, as stated above, it is expected that the Proposed Action will not impact the regulated FHA. Correspondence with the DRCC regarding the use of the FHA is provided in Appendix G. Further details of prior DRCC coordination are provided in Chapter 4, Environmental Consequences.

III-13.4 Groundwater

The NJDEP protects the quality of the State's groundwaters and their designated uses under the *Ground Water Quality Standards* (GWQS) (N.J.A.C. 7:9C) rule. The GWQS are implemented primarily through the New Jersey Pollutant Discharge Elimination System (NJPDES) discharge to ground water permit program and the Site Remediation Program (SRP) (NJDEP 2023c). Federal groundwater protection is provided under the Safe Drinking Water Act (SDWA), amended in 1996. The USEPA Sole Source Aquifer (SSA) program was established under the SDWA. Per the USEPA, a SSA is defined as one that supplies at least 50 percent of the drinking water for its service area, and wherein there is no reasonably available alternative drinking water sources should the aquifer become contaminated (USEPA 2022b).

According to the NJDEP GeoWeb, the groundwater recharge rates for the study area range from 0-7 in./year, and the groundwater recharge rates surrounding the Airport are primarily 8-10 in./year and 11-15 in./year. A few areas on the outskirts of the Airport property also have a groundwater recharge rate of 1-7 in./year. The western portion of Airport property is located over the Coastal Plain SSA while the eastern portion of the Airport property, including the study area, is not located over an SSA. In addition, per the NJDEP GeoWeb, there are also no community or non-community water supply wells on Airport property.

Per the NJDEP GeoWeb, the former Army National Guard hangar facility is listed as an SRP Preferred ID (PI) Site, identified as PI# 018708 and 000671. PI# 018708 is listed as closed; PI#000671 is currently listed as active; and both are listed as having confirmed historic contamination. In addition, an SRP PI Site (TBM Corporation; PI#G000014663), listed as closed, is located to the east of the study area, east of the railroad tracks. In addition, there are no Groundwater Contamination Areas located within the study area. One Groundwater Contamination Area identified as the Naval Air Warfare Center (PI 006048/Activity #RPC000004/Case Tracking #7320) is located to the southwest of the study area.

III-13.5 Wild and Scenic Rivers

The National Wild and Scenic Rivers System was created by Congress in 1968 (Public Law 90-542; 16 U.S.C. § 1271 *et seq.*) to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. Based on a review of the National Park Service (NPS) Wild and Scenic Rivers Program website (NPS 2021), there are no federally designated wild and scenic rivers on or adjacent to the TTN. The Lower Delaware River is the nearest designated wild and scenic river to the study area, of which the nearest portion is located approximately two miles west-northwest of the study area. The Lower Delaware River is classified as recreational but is also recognized for providing a wealth of natural, cultural, and historic features of national significance.

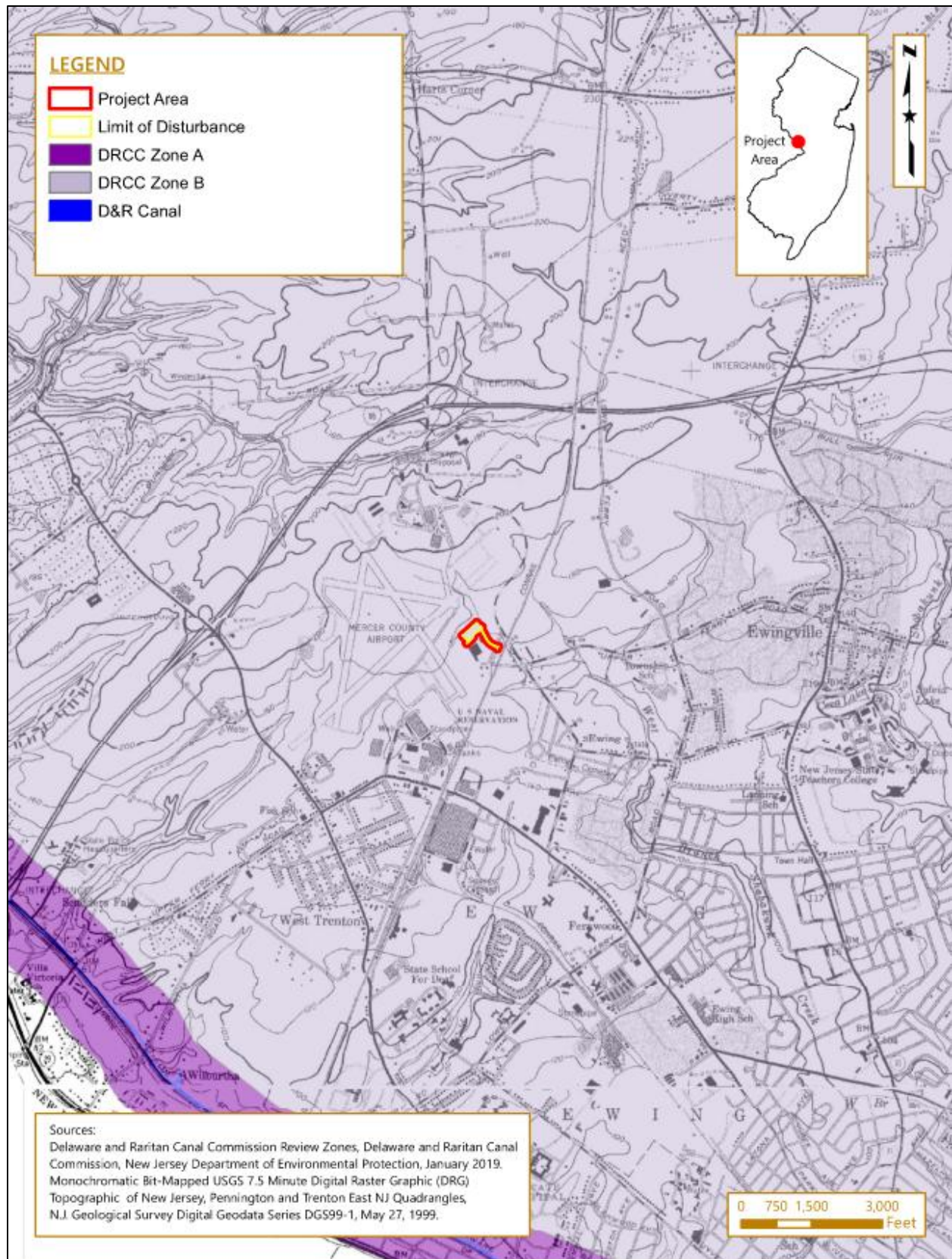


Figure III-9 DRCC Zone Map

NTS

IV Environmental Consequences

The environmental consequences chapter describes the anticipated direct, indirect, and reasonable foreseeable effects of the Proposed Action. The environmental consequences assessments for the proposed new replacement ATCT and AFLV project were collected through various means, including field visits and investigations, reviews of published information, agency coordination, and discussions with TTN staff.

As discussed in Chapter 2, Alternatives, ATCT Alternative 3-3 and AFLV Alternative 3-4 represent the Proposed Action. Under these alternatives, both the new replacement ATCT and AFLV would be located in the eastern quadrant of the Airport and would benefit from close proximity to one another. Therefore, for the purpose of this chapter, the discussion of the environmental consequences and mitigation measures is focused on ATCT Alternative 3-3 and AFLV Alternative 3-4. The Proposed Action is also compared to the No Action Alternative (ATCT Alternative 1 and AFLV Alternative 1) throughout this chapter in accordance with FAA Order 1050.1G. It should be noted that although other ATCT and AFLV alternatives were considered, they are not evaluated as they were eliminated through the screening and evaluation process conducted in Chapter 2. As documented in Chapter 3, Affected Environment, the following resources are not present within the study area or immediate vicinity and therefore do not require further evaluation:

- Coastal Resources
- Department of Transportation Act Section 303 (referred to as "Section 4(f)")
- Farmlands

IV-1 Aviation Emissions and Air Quality

This section sets forth the potential impacts to air quality from No Action Alternative and Proposed Action. Potential impacts related to the Proposed Action are considered herein. The Proposed Action would not induce changes in aircraft operations or additional vehicle trips, compared to the No Action alternative during or after construction. Therefore, air emissions associated with aircraft and general access vehicles were not inventoried or evaluated.

IV-1.1 Construction Activities

Estimates of construction and demolition-related emissions were developed for the Proposed Action using standard industry methodologies and techniques including the FAA Aviation Emissions and Air Quality Handbook and associated US EPA guidance.³⁶ The Proposed Alternative would consist of demolition of the existing air traffic control tower and asphalt parking area and constructing a new 11,126 square foot air traffic control tower and roadway and parking area. Additional utility work and new fencing will also be constructed. Table IV-1 presents the primary components of the Proposed Action.

³⁶ FAA Aviation Emissions and Air Quality Handbook Version 4,
https://www.faa.gov/regulations_policies/policy_guidance/envir_policy/airquality_handbook. Accessed August 2024

Construction of the Proposed Action would result in short-term changes in air emissions from sources such as exhaust emissions from nonroad construction equipment, haul trucks, site clearing, and grading. On-road vehicles include those associated with transport and delivery of supplies, materials, and equipment to and from the site, and construction worker trips. In addition, fugitive dust emissions include site preparation, land clearing, material handling, equipment movement on unpaved roads and evaporative emissions from the application of asphalt paving.

Table IV-1 Proposed Action – ATCT and Roadway Improvements

Project Action Component	Area (Square Feet)	Construction Start	Construction End
Demolition of Existing Air Traffic Control Tower	5,405	December 2028	December 2028
Demolition of existing parking area	13,500	December 2028	December 2028
Construction of New Air Traffic Control Tower	11,126	July 2027	May 2028
Construction of New Parking Area	39,000	April 2028	May 2028
Construction of New Roadway			
Utility Work	12,430 linear ft.	July 2027	September 2027
New Fencing	700 linear ft.	May 2028	June 2028

Source: DY Consultants

Construction activities associated with the Proposed Action are expected to begin in July 2027 and be completed by December 2028. The Airport Cooperative Research Board's (ACRP) Airport Construction Emissions Inventory Tool (ACEIT) model³⁷ was used to estimate the construction schedule of equipment only for each project component based on the project dimensions and project costs for each activity. ACEIT can also produce emission factors for nonroad and on-road construction equipment, as well as for fugitive emission sources using US EPA and industry standard models and methodologies. However, the current version of ACEIT includes an older version of the US EPA's Motor Vehicle Emission Simulator (MOVES) emission model, MOVES2010a and NONROADs, which have both been updated over the years. For this analysis, emission factors were generated outside of ACEIT using the current version of MOVES (Version MOVES5) for on-road and nonroad emission factors for Mercer County.³⁸ These emission factors were applied to estimates of vehicle miles traveled (VMT) and construction equipment (hours, horsepower, load factor), respectively, for each construction activity and year consistent with the latest FAA Air

³⁷ http://onlinepubs.trb.org/onlinepubs/acrp/docs/ACRP02-33_FR.pdf

³⁸ Construction emissions used in MOVES emission factors are specific to County as generated within MOVES for each year.

Quality Handbook.³⁹ It should be noted that the original construction schedule assumed that construction would occur in 2026 and 2027, and emission factors were generated using MOVES for those construction years. The construction schedule has since been revised to occur in 2027 and 2028. However, using the 2026 and 2027 emission factors to represent construction emissions in 2027 and 2028 is not expected to significantly affect the results or conclusions. In fact, emission factors are expected to be slightly lower in 2027 and 2028 due to continued modernization of the vehicle fleet and the adoption of cleaner fuels mandated by state and federal regulations. Therefore, as a conservative assumption, the 2026 and 2027 MOVES emission factors were used to represent construction emissions for the 2027 and 2028 construction years. Additional discussion on methodology, assumptions and spreadsheet calculations for construction and demolition analysis are presented in *Air Quality and Climate Technical Memorandum*, provided in Appendix D.

Construction-related emissions of criteria pollutants for the 2027 and 2028 construction period under the Proposed Action are summarized in Table IV-2. GHG emissions associated with the Proposed Action were also calculated and summarized for disclosure purposes in Table IV-3, as carbon dioxide equivalent (CO₂e) in metric tons per year.

Table IV-2 Proposed Action Construction Emission Inventory

Year	Estimated Total Annual Emissions (TPY)							
	VOC ¹	NO _x ¹	PM _{2.5}	CO	SO ₂	PM ₁₀	Lead ²	CO ₂ e ³
2027	0.07	0.76	0.04	1.55	0.003	0.12	0	776
2028	1.94	1.65	0.10	1.25	0.01	0.27	0	2,917

Source: HMMH, September 2026

Notes:

1. Following standard industry practice, ozone was evaluated by evaluating emissions of VOC and NO_x, which are precursors in the formation of ozone.
2. Pb emissions for construction emissions were not estimated since the fuel use for these sources are gasoline and diesel which do not contain lead.
3. CO₂e emissions are in metric tons per year equivalent relevant to their global warming potential (GWP).
4. As noted, as a conservative assumption, MOVES5 emission factors for 2026 and 2027 were used to determine emissions for 2027 and 2028 construction years

³⁹https://www.faa.gov/regulations_policies/policy_guidance/envir_policy/airquality_handbook/files/airquality_handbook_version_4.pdf

Table IV-3 Proposed Action GHG Construction Emission Inventory

Year	Estimated Total Annual Emissions (Metric TPY)			CO ₂ e (Metric Tons per Year)
	CO ₂	CH ₄	N ₂ O	CO ₂ e
2027	775	0.002	0.004	776
2028	2,916	0.002	0.004	2,917

Source: HMMH, September 2026.

Notes

1. Construction emissions derived from ACEIT and MOVES.
2. GWP values derived from IPCC Sixth Assessment Report were used in the calculations of CO₂e.
3. Emissions presented in the table include the GWP for each pollutant.
4. As noted, as a conservative assumption, MOVES5 emission factors for 2026 and 2027 were used to determine emissions for 2027 and 2028 construction years

IV-1.2 No Action Alternative

The No Action Alternative assumes that the Proposed Action is not implemented. Aircraft operations would be unchanged compared to the Proposed Action. Therefore, air quality would remain unchanged and no additional air quality impacts would occur.

IV-1.3 Proposed Action – Significance Analysis

As provided in FAA Order 1050.1G, an action would cause a significant air quality impact if pollutant concentrations would exceed one or more of the NAAQS established by the USEPA under the CAA, for any of the time periods analyzed, or would increase the frequency or severity of any such existing violations.

In addition, as discussed in Chapter 3, Affected Environment, the General Conformity Rule applies to this project since the study area is designated marginal non-attainment with the 2008 and 2015 ozone standards and maintenance for PM_{2.5}. If General Conformity applies, an applicability analysis is performed to determine if a General Conformity Determination is required to demonstrate that the Proposed Action conforms to the approved SIP(s). A conformity determination is not required if the total direct and indirect pollutant emissions resulting from a project are below the de minimis emissions threshold levels specified in the conformity regulations. The de minimis thresholds represent emission quantities of a NAAQS-regulated pollutant or its applicable precursors over which a proposed action in a nonattainment or maintenance area may cause or contribute to a new or continued violation of the NAAQS. A conformity determination is not required if the differences in emissions between the Proposed Action and the No Action Alternative are below the applicable de minimis emission threshold levels, or if the proposed action is exempt or included in the FAA list of "presumed to conform activities."

It should be noted the proposed project would fall under the FAA Presumed to Conform list under Project Category 15, Routine Installation and Operation of Airport Navigational Aids which covers "The routine installation, in-kind replacement, and maintenance of navigational aids (e.g., Air Traffic Control Towers (ATCT), Instrument Landing Systems (ILS), Approach Light Systems (ALS)) are

presumed to conform because these activities will not generate emissions that exceed *de minimis* levels.”⁴⁰

Federal *de minimis* emission thresholds for nonattainment and maintenance areas relevant to TTN are listed in Table IV-4. As noted in the table, pollutants designated as attainment do not have US EPA *de minimis* thresholds, therefore as a conservative assumption, the maintenance *de minimis* thresholds were used to determine significant impacts under NEPA for attainment pollutants. For transparency under NEPA and as a conservative approach, the construction emissions associated with the ATCT under the FAA presumed to conform list were included in the construction summary Table IV-5 for comparison to appropriate *de minimis* thresholds.

Table IV-5 presents the construction emissions associated with demolition and construction of the Proposed Action for the 2027 and 2028 construction years compared with the appropriate US EPA *de minimis* thresholds. As noted above, the project falls under the FAA Presumed to Conform activities and emissions will not exceed *de minimis* thresholds, therefore, a General Conformity determination is not required for the construction and demolition activities for the Proposed Action. In addition, the Proposed Action can be determined to “not cause a significant air quality impact, since it is unlikely the pollutant concentration analyzed would exceed a NAAQS,” according to the FAA 1050.1 Desk Reference⁴¹. No significant adverse air quality impacts would be expected to result from construction of the Proposed Action. Similarly, the emissions in Table IV-5 show the total emissions for on-road, nonroad, and fugitive sources for the 2027 and 2028 construction years would be below established *de minimis* thresholds for all pollutants.

Table IV-4 General Conformity De Minimis Thresholds Relevant to TTN

Pollutant	Attainment Status (Severity)	Pollutant	Thresholds (tons/year)
Ozone (O ₃) ¹	Nonattainment Marginal (2008 Standard), Moderate (2015 Standard)	Nitrogen Oxides (NO _x)	100
		Volatile Organic Compounds (VOC)	50
Fine Particulate Matter (PM _{2.5})	Maintenance	PM _{2.5}	100
Carbon Monoxide (CO) ²	Attainment	CO	100
Respirable Particulate Matter (PM ₁₀) ²	Attainment	PM ₁₀	100
Sulfur Dioxide (SO ₂) ²	Attainment	SO ₂	100
Lead (Pb)	Attainment	Pb	25

Source: EPA [https](https://www.epa.gov/general-conformity/de-minimis-table) (as accessed on July 30, 2024): <https://www.epa.gov/general-conformity/de-minimis-table>

Notes: 1. Following standard industry practice, ozone was evaluated by evaluating emissions of VOC and NO_x, which are precursors in the formation of ozone.

2. Pollutants designated as attainment, no *de minimis* threshold exists for attainment pollutants. As a conservative approach, the *de minimis* threshold for maintenance was assumed to determine significant impacts under NEPA.

⁴⁰ 72 Federal Register 41565

⁴¹ https://www.faa.gov/about/office_org/headquarters_offices/apl/enviro_n_policy_guidance/policy/faq_nepa_order/desk_ref

Table IV-5 Proposed Action Construction Emission Inventory Compared to EPA de minimis Thresholds

Year	Estimated Total Annual Emissions (TPY)						
	VOC ¹	NOx ¹	PM2.5 ³	CO ³	SO ₂ ³	PM10 ³	Lead ²
2027	0.07	0.76	0.04	1.55	0.003	0.12	0
2028	1.94	1.65	0.10	1.25	0.01	0.27	0
Peak Annual Emissions	1.94	1.65	0.10	1.25	0.01	0.27	0
De minimis threshold	50	100	100	100	100	100	25
Exceed de minimis threshold?	No	No	No	No	No	No	No

Source: HMMH, September 2026

Notes:

1. Following standard industry practice, ozone was evaluated by evaluating emissions of VOC and NO_x, which are precursors in the formation of ozone.
2. Pb emissions for construction emissions were not estimated since the fuel use for these sources are gasoline and diesel which do not contain lead.
3. CO₂e emissions are in metric tons per year equivalent relevant to their global warming potential (GWP).
4. As noted, as a conservative assumption, MOVES5 emission factors for 2026 and 2027 were used to determine emissions for 2027 and 2028 construction years

With respect to the criteria pollutant emissions, implementation of the Proposed Action would not be significant when compared to the No Action Alternative; therefore, no mitigation measures are required. However, TTN is committed to best practices to reduce public health and environmental impacts during construction and operation of the Proposed Action.

In addition to criteria pollutant emissions, the Proposed Action was evaluated for GHG emissions. The methodology and assumptions for the GHG analysis are consistent with the air quality analysis. GHG emissions associated with the construction activities were quantified and compared to state, national and global scale emissions. Table IV-3 **Error! Reference source not found.** presents the annual GHG emissions for construction activities associated with the Proposed Action for 2027 and 2028. In summary, there are no significance thresholds established for GHG impacts and GHGs associated with the Proposed Action have been calculated in accordance with the latest FAA guidelines in a NEPA document.^{42, 43}

Increases in construction emissions compared to the No Action Alternative would be temporary on the construction side, but necessary for the proposed improvements at TTN. However, the increases would comprise a small portion of the state of Mercer County 2015 GHG emissions 5 MMTCO₂e,

⁴² 1050.1 Desk Reference,

https://www.faa.gov/about/office_org/headquarters_offices/apl/enviro_policy_guidance/policy/faq_nepa_order/desk_ref/media/3-climate.pdf.

⁴³ FAA Aviation Emissions Air Quality Handbook Version 4 Accessed August 2024.

https://www.faa.gov/regulations_policies/policy_guidance/enviro_policy/airquality_handbook/files/airquality_handbook_version_4.pdf

the US-based emissions of 6,348 MMTCO₂e, and even less than the 49 gigatons of carbon dioxide equivalent global GHG emissions.^{44,45,46} Based on all this information and given the low percentage of overall emissions generated by the Proposed Action, the increase in emissions associated with both construction and operation would not be substantial on a state, national or global scale. Emission spreadsheets are included in Appendix D.

IV-2 Biological Resources

IV-2.1 Ecological Communities

A habitat assessment conducted by DRG in June 2023 evaluated existing conditions and vegetative communities in and within 50 feet of the proposed project limit of disturbance. The areas within the study area and surrounding Airport property consist of a variety of common habitats, of limited ecological function and value, and are abundant in the vicinity of the TTN property and within New Jersey. Therefore, significant impacts to ecological communities in the vicinity of the Study Area resulting from the Proposed Action are not anticipated.

IV-2.2 State and Federal Listed Threatened and Endangered Species

As discussed in Section III-2, federal and state databases have indicated the potential presence of threatened and endangered wildlife species within and in the vicinity of the Proposed Action (see Appendix F). Although not reported within these databases, three State-listed grassland bird species- American Kestrel, Eastern Meadowlark, and Grasshopper Sparrow- were observed within and immediately adjacent to the study area during a habitat assessment performed by DRG in June 2023. The grasses in the onsite infield area, which are maintained at taller heights than in the surrounding infields due to existing underground utilities, may provide potentially suitable breeding habitat for these species. All three of the above-described species are known to utilize airfields for nesting and foraging. Mercer County will coordinate with the NJDEP to determine if a timing restriction on activities with the potential to disturb grassland birds (i.e. ground disturbance or vegetation cutting/removal during the species' breeding season) will be required.

According to the NJ NHP database (letter dated September 11, 2026, (NHP File #26-4007437-38182), no records of rare plants, threatened or endangered wildlife species or wildlife habitat, or Natural Heritage Priority Sites on the project site. NJ NHP has records of potential vernal pool habitat on and within the immediate vicinity of the project site; however, no vernal pool habitat was identified during the field investigation performed in the Study Area.

Acoustic studies performed in 2015, 2021, and 2025 indicated the presence of potential habitat for federally listed northern long-eared bat, as well as little brown bat and tricolored bat, both of which are proposed for federal listing on portions of the Airport property. None of these bats were detected in the obstruction removal area closest to the study area during the 2015 and 2021 studies. During the 2025 survey, one tricolored bat was identified at an acoustic detector location approximately 2,180 feet to the south-southwest of the study area. No tree removal is anticipated

⁴⁴ <https://www.dvrpc.org/reports/18018.pdf>

⁴⁵ <https://www.epa.gov/system/files/documents/2023-02/US-GHG-Inventory-2023-Main-Text.pdf>

⁴⁶ IPCC, *AR4 Climate Change 2007 Synthesis Report*, http://ipcc.ch/publications_and_data/ar4/syr/en/contents.html.

to be required as part of the proposed project; in the event of a project design change that requires the cutting or removal of trees, a time-of-year restriction consistent with the USFWS NJFO's recommendations for the obstruction removal project (April 1 to September 30) will be implemented to prevent incidental death or injury to adult bat species or their pups potentially utilizing the wooded area in the southern portion of the Study Area.

The USFWS also identified monarch as potentially occurring onsite. As previously discussed in Section III-2.2 of this EA, no milkweed was observed onsite, and nectar-producing wildflowers were generally absent from the mowed/maintained infields and wood edges; therefore, the Study Area would not be expected to support significant populations of monarchs and impacts to the species resulting from the project would not be anticipated. Currently, the monarch is proposed for federal listing as a threatened species under the ESA and is therefore not protected by the take prohibitions under Section 9 of the ESA (USFWS 2024).

IV-2.3 No Action Alternative

The No Action alternative assumes that the existing ATCT and AFLV will be maintained as-is, with no major capital improvements to the facilities. No changes to biological resources would occur as a result of this alternative.

IV-2.4 Proposed Action – Significance Analysis

Under the Proposed Action, the study area would be located within areas of existing disturbance, including paved surfaces immediately adjacent to existing hangars and other facilities. Disturbance to vegetation communities and biological resources potentially occurring on site would be minimal. The presence of contractors and the construction noise generated by these proposed improvements may result in disturbances to onsite wildlife, including area avoidance and changes in foraging behaviors; however, these disturbances would be expected to be temporary and no permanent changes to habitat within and near the Proposed Action would be expected to occur.

FAA Order 1050.1G establishes the thresholds for significant threatened and endangered species impacts as follows: USFWS or the National Marine Fisheries Service (NMFS) determines that the action would be likely to jeopardize the continued existence of a federally listed threatened or endangered species or would result in the destruction or adverse modification of federally designated critical habitat. Based on FAA Order 1050.1G, the FAA has not established a significance threshold for non-listed species. However, factors to be considered in assessing impacts include whether the action would have the potential for:

- A long-term or permanent loss of unlisted plant or wildlife species (i.e., extirpation of the species from a large study area)
- Adverse impacts to special status species (e.g., state species of concern, species proposed for listing, migratory birds, Bald and Golden Eagles) or their habitats
- Substantial loss, reduction, degradation, disturbance, or fragmentation of native species habitats or their populations
- Adverse impacts on a species' reproductive success rates, natural mortality rates, non-natural mortality rates (e.g., road kills and hunting), or ability to sustain the minimum population levels required for population maintenance.

Based on the considerations presented above, it has been determined that the proposed action will have no effect on federally-listed species or critical habitat.

IV-3 Hazardous Materials, Solid Waste, and Pollution Prevention

Per the FAA 1050.1 Desk Reference, this section should describe waste generated as a result of the Proposed Action; waste handling and disposal requirements; identify if waste disposal would impact the capacity of the disposal facility; and determine whether the Proposed Action would interfere with ongoing remediation of contaminated sites within the study area or in the immediate vicinity.

The subsections that follow summarize the hazardous substances identified during the Phase I ESA, their significance as it relates to the NEPA evaluation, and the mitigation measures that would be implemented.

IV-3.1 Hazardous Materials

A Phase I ESA was completed by Prestige Environmental, Inc. (Prestige) in August 2023. The RECs and HRECs identified as part of the Phase I ESA, as well as the recommendations for each summarized below in Table IV-6. Additional details are summarized in Section **Error! Reference source not found.** of this EA and fully detailed in the complete Phase I ESA report provided in Appendix E.

Table IV-6 Phase I ESA Recommendations

Phase I ESA REC	Phase I ESA Recommendation
REC No. 1 – Former USTs	Based on the documented completion of remedial actions, no further investigation is warranted.
REC No. 2 – Drains	As this area is located outside of the study area, no further investigation is warranted.
REC No. 3 – Staining	- No specific investigation to evaluate the impacts is warranted due to the ubiquity and diffuse nature of this REC. - Potential subsurface impacts of this REC should be taken into consideration while developing the Project's MMP.
REC No. 4 – ASTs	Potential construction-related impacts of this REC should be taken into consideration when developing the Project's MMP.
REC No. 5 – Former Hazardous Waste/Chemical Storage Shed	Potential construction-related impacts of this REC should be taken into consideration when developing the Project's MMP.
REC No. 6 – OWSs	As this area is located outside of the study area, no further investigation is warranted.

Phase I ESA REC	Phase I ESA Recommendation
REC No. 7 – Monitoring Wells	Closure of these wells in accordance with N.J.A.C 7:9D Well Construction and Maintenance; Sealing of Abandoned Wells is recommended. However, since REC-7 is located outside of the limit of disturbance, no further action is required. Accordingly, the monitoring wells associated with REC-7 will not be addressed as part of the Proposed Project.
REC No. 8 – Historic Agricultural Operations	- No specific investigation to evaluate the impacts is warranted due to the ubiquity and diffuse nature of this REC. - Potential impacts of this REC should be taken into consideration when developing the Project's MMP.
REC No. 9 – Soil Exceedance in the Proposed ARFF Location	- No specific investigation to evaluate the impacts is warranted due to the ubiquity and diffuse nature of this REC. - Potential impacts of this REC should be taken into consideration when developing the Project's MMP.
HREC No. 1 – Deed Notice for Soil and CEA for Groundwater	As the Deed Notice and CEA are located well outside of the study area, no further investigation is warranted.

Source: Prestige Environmental, Inc.

Implementation and operation of the Proposed Action would comply with all applicable federal, State, and local regulations regarding hazardous materials, hazardous waste management, solid waste, and pollution prevention. The recommended measures described in Section 4 of the Phase I ESA would be conducted concurrently with the design development or construction phases of the proposed new replacement ATCT and AFLV and in accordance with NJDEP regulations.

In addition, an ATCT pre-demolition hazardous materials assessment was conducted by EC in July 2023. The results are summarized in Section III-6.1 of this EA and fully detailed in the complete report provided in Appendix E. As detailed in the report, asbestos containing materials and lead based paint were identified at the existing ATCT. As such, an abatement plan will be developed and implemented in accordance with state and federal regulations by a licensed contractor.

IV-3.2 Solid Waste

Management and disposal of construction and vegetative debris would be in accordance with federal, state, and local regulations. As applicable, debris from demolition activities would be transported to an authorized facility, with recycling capability for the potential to be used in future projects by others. Several facilities located near the Airport are authorized to recycle applicable demolition debris and have sufficient available capacity. Also, clean excavated soils may be reutilized on-site to the maximum extent possible and in accordance with site-specific design specifications. Excess soils could also be reutilized off-site, if warranted. Vegetative debris would be managed by chipping/grinding for use in landscape as mulch and compost, and excess disposed according with applicable regulation.

During the operational phase, solid waste would mainly consist of common office waste and trash containers associated maintenance activities. Solid waste would continue to be collected weekly in designated dumpsters and disposed in compliance with federal, state, and local regulations.

IV-3.3 Pollution Prevention

To further avoid and minimize the risk of unanticipated incidental impacts the following pollution prevention and mitigation measures would be implemented:

- Dispose of debris and solid waste generated by the project according to applicable federal, state, and local regulations
- Re-use excess soils on-site to the maximum extent possible
- Stage and operate construction equipment in designated areas
- Perform construction vehicle maintenance and inspections to reduce the risk for accidental spills
- Follow manufacturer's specifications when performing maintenance on equipment or storing hazardous material (e.g., batteries, fluids, lubricants, solvents, paints, etc.)
- Implement spill and leak prevention and response procedures for construction equipment
- Report releases of regulated quantities and perform cleanup according to applicable regulatory requirements
- Manage solid wastes in designated areas and establish routine pickup for disposal according to applicable regulations

IV-3.4 No Action Alternative

The No Action Alternative assumes that the existing ATCT and AFLV footprints would remain unchanged. As such, under the No Action Alternative, hazardous materials, solid waste, and pollution prevention conditions would be the same as under existing conditions.

IV-3.5 Proposed Action – Significance Analysis

The FAA has not established a significance threshold for hazardous materials, solid waste, or pollution prevention in FAA Order 1050.1G. The FAA has identified factors to consider in evaluating the context and intensity of potential impacts. If these factors exist, the FAA must evaluate these factors to determine if there are significant impacts. Per Exhibit 4-1 of FAA Order 1050.1G, factors to consider include, but are not limited to, situations in which the Proposed Action or alternative(s) would have the potential to:

- Violate applicable federal, state, tribal, or local laws or regulations regarding hazardous materials and/or solid waste management
- Involve a contaminated site (including, but not limited to, a site listed on the NPL). Contaminated sites may encompass relatively large areas. However, not all the grounds within the boundaries of a contaminated site are contaminated, which leaves space for siting a facility on non-contaminated land within the boundaries of a

contaminated site. If appropriately mitigated, actions within the boundaries of a contaminated site would not have significant impacts.

- Produce an appreciably different quantity or type of hazardous waste
- Generate an appreciably different quantity or type of solid waste or use a different method of collection or disposal and/or would exceed local capacity
- Adversely affects human health and the environment

The Proposed Action would include construction specifications and conditions that comply with applicable federal, state, tribal, and local regulations as a condition of the contract. In addition, as recommended in the Phase I ESA, a Project Materials Management Plan (MMP) will be developed, which will take into consideration the identified RECs.

Design, construction, and operation of the Proposed Action would not produce an appreciably different quantity or type of hazardous waste. If required, any importation of fill from off-site sources would use clean fill. There are no indications that the Proposed Action would “generate an appreciably different quantity or type of solid waste or use a different method of collection or disposal and/or would exceed local capacity⁴⁷.” In addition, the Proposed Action would not adversely affect human health and the environment. The data generated by the Phase I ESA would be used to inform the Proposed Project’s design and construction phases to assure that appropriate controls are in place to prevent the spread of contaminants and prevent exposure to humans. Lastly, as noted above, the Proposed Action will not introduce new avenues of hazardous waste exposure to the environment and surrounding communities.

Implementation and operation of the Proposed Action would comply with all applicable federal, state, and local regulations regarding hazardous materials, hazardous waste management, solid waste, and pollution prevention. Contaminated materials encountered during construction will be remediated in accordance with State and Federal requirements. It is generally expected that encountered contaminated materials would be removed from the site and disposed of at an appropriately licensed location. However, remediation methods will ultimately be determined by site specific conditions. The amount of solid waste to be generated by the Proposed Action during the operational phase is not expected to be a significant increase over the current levels produced by current TTN operations. Furthermore, findings and recommendations from the Phase I ESA are discussed in this EA and incorporated into the project’s final design.

In summary, if encountered during construction, contaminated materials will be handled in accordance with NJDEP requirements. It is anticipated that this would involve removal and disposal of the contaminated material at an appropriate facility, however this approach may be modified, if necessary, based upon actual site conditions. Modifications would be in accordance with applicable state and federal regulatory requirements.

IV-4 Historic, Architectural, Archeological and Cultural Resources

As previously discussed, a Phase IA Historical and Archaeological Survey and Intensive-Level Historic Architectural and Phase IB Archeological Survey were completed within the study area.

⁴⁷ Source: FAA Order 1050.1G, Exhibit 4.1, *Significance Determination for FAA Actions*

Per both surveys, these resources are not present within the study area and no further surveys were recommended. NJ HPO concurred with FAA's findings that the Proposed Action is unlikely to impact historic and archeological resources, that the proposed action will result in no adverse effect to the properties within the APE identified as eligible for listing in the NRHP, and that, pursuant to 36 CFR 800.4(d)(1), no further Section 106 consultation is required unless additional resources are discovered during project implementation pursuant to 36 CFR 800.13.

However, in the event of inadvertent discoveries, the following actions would be followed:

- Discoveries: If human remains, funerary objects, sacred objects or objects of cultural patrimony are discovered, immediate telephone notification of the inadvertent discovery, with written confirmation, to NJ HPO.
- Ceasing Activity: If the inadvertent discovery occurred in connection with the Proposed Action, the person, in addition to providing the notice described above, must stop the activity in the area of the inadvertent discovery and make a reasonable effort to protect the human remains, funerary objects, sacred objects, or objects of cultural patrimony discovered inadvertently.
- Resumption of activity: The activity that resulted in the inadvertent discovery would resume after coordination with NJ HPO and receipt of written confirmation.

IV-4.1 No Action Alternative

The No Action Alternative assumes that the existing ATCT and AFLV footprints would remain unchanged. As such, under the No Action Alternative, historic, architectural, archaeological and cultural resource conditions would be the same as under existing conditions.

IV-4.2 Proposed Action – Significance Analysis

The FAA has not established a significance threshold for historical, architectural, archeological, and cultural resources. However, the FAA has identified a factor to consider when evaluating the resources, in which the proposed action or alternative(s) would result in a finding of Adverse Effect through the Section 106 process.

As previously mentioned, NJ HPO concurred that the Proposed Action is unlikely to impact historic and archeological resources, and no further Section 106 consultation is required unless additional resources are discovered during project implementation pursuant to 36 CFR 800.13. Based on the above, the Proposed Action would not result in adverse effects to historical, architectural, archeological, and cultural resources.

IV-5 Land Use

The compatibility of existing and planned land uses in the vicinity of an airport is typically associated with the extent of an airport's noise impacts. Potential environmental consequences for noise compatible land use are discussed in Section IV-7. Land use compatibility can also be

associated with disruptions of the surrounding community, residential or business relocations, changes in vehicular traffic patterns, or induced socioeconomic effects.

Chapter 3 identified and discussed existing and planned land uses in the vicinity of the Proposed Action. As noted, the study area is zoned Industrial Park (IP-1), with an airport hazard zone applicable to the runway and runway end subzones. The Proposed Action, which involves the replacement of existing infrastructure at the Airport, is consistent with the current zoning and development in the surrounding area.

IV-5.1 No Action Alternative

The No Action Alternative assumes that the existing ATCT and AFLV footprints would remain unchanged. Therefore, there would be no land use impacts under the No Action Alternative.

IV-5.2 Proposed Action – Significance Analysis

The FAA has not established a significance threshold for land use, and specific factors to consider in making a significance determination for land use have not been provided. A determination of significant impacts is typically based on the significance of other impacts.

The Proposed Action would occur within TTN property and in accordance with current Airport land use. Land use surrounding the Airport would remain unchanged, and no adverse effects are expected. Implementation of the Proposed Action would not relocate residences, disrupt established communities, or induce negative socioeconomic impacts. Overall, no significant impact to land use compatibility is anticipated with implementation of the Proposed Action.

IV-6 Natural Resources and Energy Supply

Electrical and natural gas service would be provided to the proposed new replacement ATCT and AFLV by PSE&G. Treated municipal water is supplied to the Airport by Trenton Water Works. The Proposed Action would use readily available natural resources for construction and demolition.

The existing ATCT was constructed in 1961 and is in various stages of disrepair including roof leaks; single-pane windows that are aged and poorly-fitting; and an aged heating system that is expensive to operate/maintain and prone to failure in extended freezing spells. The new ATCT will be equipped with state-of-the-art energy-efficient solutions including a high-efficiency HVAC system, a well-insulated building envelope, high-efficiency glazing, maximum natural daylight, water-conserving fixtures, recycled materials, and lower-carbon construction materials reducing GHG.

IV-6.1 No Action Alternative

The No Action Alternative assumes that the existing ATCT and AFLV footprints would remain unchanged. Therefore, there would be no impacts to natural resources and energy supply under the No Action Alternative.

IV-6.2 Proposed Action – Significance Analysis

The FAA has not established a significance threshold for natural resources and energy supply. However, the FAA has identified the following factor to consider when determining potential impacts: whether the action would have the potential to cause demand to exceed available or future supplies of these resources. As such, the Proposed Action's potential to cause demand to exceed available or future supplies of these resources was evaluated.

The proposed new replacement ATCT and AFLV would be built to current energy standards and building codes. Based on the above, the Proposed Action is not expected to result in significant impacts to natural resources and energy supply and existing utilities can supply the project demand.

IV-7 Noise and Noise Compatible Land Use

The Proposed Action involves the replacement of the existing ATCT with a new ATCT and associated facility access and parking improvements. The Proposed Action is not anticipated to change aircraft operations, nor does it include any changes to runway lengths, runway alignments, instrument procedures, navigational equipment, or other factors that affect airfield capacity.

HMMH prepared a *Construction Noise Technical Memorandum* to assess the potential for impacts associated with the Proposed Action (see Appendix D). Detailed information including the noise analysis, and construction impacts related to noise are included in Appendix D. A summary of the analysis is provided below.

IV-7.1 Construction Noise

The FAA does not provide significance thresholds for construction noise and therefore, state, and local ordinances were used to identify potential construction noise impacts. Noise control and abatement within the State of New Jersey is regulated by the NJDEP within Title 7, Chapter 29 of the N.J.A.C 7:29. N.J.A.C 7:29 does not regulate noise from construction activities, however, provisions within N.J.A.C 7:29 allow local municipalities to adopt a noise ordinance that is at a minimum consistent with N.J.A.C 7:29 but can be more stringent.

The Proposed Action is located within Ewing Township and is subject to the Township's Noise Control Ordinance, which has been reviewed and approved by NJDEP. The Township has adopted exterior sound level limits for receiving land uses consistent with N.J.A.C 7:29 and are summarized below.

- For residential property, or residential portion of a multi-use property, a sound source or sources cannot equal or exceed a maximum sound level of 65 dBA between the hours of 7 AM and 10 PM.
- For residential property, or residential portion of a multi-use property, a sound source or sources cannot equal or exceed a maximum sound level of 50 dBA between the hours of 10 PM and 7 AM.
- For a commercial facility, public service facility, non-residential portion of a multi-use property, or community service facility, a sound source or sources cannot exceed a maximum sound level of 65 dBA at any time.

In addition to the limits set forth above, the Township's Noise Control Ordinance also regulates impulsive sound. As per the ordinance, impulsive sound occurring between 7 AM and 10 PM cannot equal or exceed 80 decibels. Between 10 PM and 7 AM, impulsive sound which occurs less than four times in any hour shall not equal or exceed 80 decibels. Impulsive sound which repeats four or more times in any hour shall be measured as continuous sound and shall meet the noise level limits in the bulleted list above.⁴⁸

According to the ordinance, construction noise within the Township of Ewing is exempt during weekdays between 7 AM and 6 PM and on weekends and federal holidays between 9 AM and 6 PM. Construction activities are not permitted outside of these time periods unless such activities can meet the applicable sound level limits summarized above.

The construction of the Proposed Action would commence in May of 2026 and be completed by October 2027. Construction activities would result in temporary elevated noise levels from on-site construction equipment, personal vehicles used by construction workers to access the construction employee parking areas, and delivery/haul trucks used for equipment and material delivery and haul trips along local roads surrounding the work area.

Roadways carrying worker vehicles and heavy truck traffic to and from the work area would experience an increase in traffic during certain periods of the day, however these traffic increases would be temporary in nature and not result in significant impacts to receptors adjacent to these routes. Noise generated from on-site construction equipment would be variable depending on the construction activity occurring on the project site. On-site construction activities include the demolition and construction of various airport facilities including demolition and construction of roadways, the ATCT, access road, parking, and general site work.

During typical workdays, construction noise levels would fluctuate and often be lower than the predicted worst-case levels. In addition, the analysis only considers the maximum noise level produced by a single piece of construction equipment and does not include other noise sources that make up the existing noise environment, such as airport operations and traffic noise from surrounding roadways. Due to the influence of these other noise sources, the overall contribution from construction activities related to the Proposed Action is not anticipated to significantly impact noise sensitive receptors when compared to the existing noise environment.

Construction activities are expected to occur during normal daytime working hours. Since the Township of Ewing exempts construction noise from 7 AM-6 PM on weekdays and from 9 AM-6 PM on weekends and holidays, no significant construction noise impacts would occur.

The loudest construction noise levels predicted are associated with activities that involve the use of an auger drill, scrapers, and dump trucks. The highest construction noise levels are predicted to occur at residences within the Scotch Run at Ewing condominium complex and Veterans Memorial Park during the construction of the new parking area. For all other noise-sensitive areas adjacent to the new ATCT work area, predicted construction noise levels will be lower due to the distances between the work area and each noise sensitive area as well as quieter construction activities occurring.

⁴⁸ Chapter 240.6 (B)

To minimize and reduce project construction noise within the surrounding community, best management practices (BMPs) will be implemented as needed. Noise reduction strategies should be implemented where practical and can include, but are not limited to, the use of noise pathway controls, which reduce noise levels by blocking the pathway of sound traveling from a noise source to a receiver and includes noise barriers and noise enclosures. In addition, a Noise Control Plan can be implemented to document planned noise control to be used during construction of the project and a plan to address community concerns related to construction noise. A detailed list of recommendations is included in the Noise Technical Memorandum within Appendix D.

Construction activities would be carefully coordinated with Airport FBO and the contractor(s). Notices to Airmen (NOTAM's) would be issued by Airport management as needed. The construction sites would be marked and barricaded in accordance with current FAA standards.

Airside construction activities would have minimal impacts on the operation of the Airport. As a result of the proposed construction activities, minimal closures to pavements throughout the construction period are anticipated, which would lead to variations in operations in the vicinity of the terminal apron. The existing runways and taxiways would remain operational throughout the duration of the ATCT construction. The new replacement ATCT will be fully operational prior to decommissioning the existing tower and will be fully equipped with airport-owned equipment and systems, as required by the MEL. Following construction, the FAA ATO and project engineers will install, test, and commission the systems. Once the new replacement ATCT is tested and operational, the Airport and FAA will coordinate a designated cutoff time for the existing ATCT and issue a formal notice to transfer services.

IV-7.2 No Action Alternative

The No Action alternative does not meet the purpose and need of the Proposed Action. The No Action assumes that no construction activities would be performed; therefore, related temporary increase in noise level would not be generated. Noise from aircraft operations would be identical under the No Action alternative when compared to the Proposed Action.

IV-7.3 Proposed Action – Significance Analysis

Similar to the No-Action alternative, the Proposed Action is not expected to induce additional aircraft operations and therefore would not have any effect on operational noise levels at TTN. In addition, the FAA does not provide significance thresholds for construction noise and therefore, state and local ordinances were used to identify potential construction noise impacts. Township of Ewing ordinances apply for this project. Temporary noise from construction of the Project would not result in significant impacts. Construction contract documents would require limits of certain activities at certain times, and construction equipment to be properly equipped and maintained, so as to minimize off-site construction noise impacts in accordance with the Township of Ewing ordinance.

IV-8 Socioeconomics and Children's Environmental Health and Safety

Risks

The scope of the Proposed Action does not have a regional impact and would not promote shifts in populations, incomes, and growth patterns; public service demands; or negative pressure over

business and economic activity, disruption to established neighborhoods, or urban proliferation. The Proposed Action does not require alterations to public services including fire and police protection, education and utility services or businesses.

IV-8.1 Socioeconomics

The Proposed Action would result in positive socioeconomic impact. During the construction phase temporary jobs would be created, supporting the local economy. With the Proposed Action, TTN would continue to support existing jobs and the local economy. The Proposed Action would also not require alterations to public services including fire and police protection, education and utility services, businesses, or weaken employment opportunities.

In addition, no significant changes are expected between pre-development and post-development conditions. The Proposed Action is located on Airport property and is not anticipated to negatively affect landowners and therefore would not produce a substantial change in the community tax base.

IV-8.2 Children's Health and Safety Risks

There are no schools, daycares, parks, or children's health clinics located within the study area. The nearest school to the study area is the Lore Elementary School, located approximately two miles northwest of the Airport. In addition, the nearest hospital is the Capital Health Medical Center - Hopewell, located approximately two miles northeast of the Airport, and the nearest children's hospital is the Children's Specialized Hospital – Hamilton, located approximately 10 miles southeast of the Airport.

No changes are expected between pre-development and post-development conditions, regarding health and safety risks. The proposed alternatives have been evaluated for their potential to have a disproportionate effect on children's environmental health or safety, including, but not limited to, water quality, air quality, and noise. The proposed project would not create or make more readily available products or substances that contact or ingestions through air, food, drinking water, recreational waters, or soil could harm children. It has been concluded that the Proposed Action is not of the nature or magnitude to have an adverse effect upon the health and safety of children.

IV-8.3 No Action Alternative

The No Action Alternative assumes that the Proposed Action would not be implemented and the existing ATCT and AFLV would remain unchanged. As the No Action Alternative does not support job creation within the community, including direct and induced jobs associated with the construction phase, it has the potential to result in negative socioeconomic impacts.

IV-8.4 Proposed Action – Significance Analysis

The FAA has not established a significance threshold for socioeconomics in FAA Order 1050.1G. However, factors that should be considered in assessing impacts include whether the action would have the potential to:

- Induce substantial economic growth in an area, either directly or indirectly (e.g., through establishing projects in an undeveloped area)

- Disrupt or divide the physical arrangement of an established community
- Cause extensive relocation when sufficient replacement housing is unavailable
- Cause extensive relocation of community businesses that would cause severe economic hardship for affected communities
- Produce a substantial change in the community tax base

The Proposed Action would stimulate the local economy by creating construction jobs, demand for readily available construction materials, and job availability for the ATCT and AFLV construction, resulting in increased tax revenue to the community. The increase in the community tax base is not expected to be significant. The Proposed Action would not adversely affect the health and safety of children. No relocation of residences or businesses is proposed.

Based on the above analysis, significant impacts to socioeconomic resources and children's health and safety resulting from the Proposed Action are not anticipated.

IV-9 Visual Effects

The proposed new replacement ATCT and AFLV would be located within the TTN boundaries away from neighboring developments. Lighting associated with the Proposed Action would incorporate energy efficient technologies, and the lighting design would follow TTN safety/security standards and applicable local codes and regulations. An evaluation of potential visual effects, (obstruction of visual resources, light emissions interference with normal activities and contrast with visual character) was conducted and is discussed below.

IV-9.1 Light Emissions

The FAA is required to consider potential lighting impacts associated with a proposed development action. As previously mentioned in Chapter 1, Purpose and Need, the Proposed Actions include the relocation (or provision of new) airport beacon atop the new replacement ATCT. However, the proposed project is not expected to produce lighting that would result in visual impacts to the surrounding community or properties given its height and location entirely within airport property, and the fact that it is a relocation or replacement of the existing airport beacon.

IV-9.2 Visual Resources and Character

Per FAA Desk Order 1050.1G, visual resources and visual character impacts are typically related to a decrease in the aesthetic quality of an area resulting from development, construction, or demolition.

Given its height and location entirely within the Airport property and involving replacement-related activities, the proposed new replacement ATCT and AFLV are not expected to affect existing views of the Airport from surrounding properties. In addition, the railroad, which extends along the Airport property southeast of the study area, is higher in elevation than the surrounding commercial, municipal and residential land uses, and would serve as a buffer for potential light emissions. In addition, there are no unique visual resources within or near the study area.

IV-9.3 No Action Alternative

The No Action Alternative assumes that the Proposed Action would not be implemented and the existing ATCT and AFLV would remain unchanged. As such, there would be no visual effects impact under the No Action Alternative.

IV-9.4 Proposed Action – Significance Analysis

Per FAA Order 1050.1G, significant thresholds have not been established for visual effects. Taking into consideration the scope of work from the project and its location, light emissions, and visual effects would be less than significant by the Proposed Action. The Proposed Action does not have the potential to:

- Create annoyance or interfere with normal activities from light emissions
- Affect the visual character of the area due to the light emissions
- Affect the nature of the visual character of the area, including the importance, uniqueness, and aesthetic value of the affected visual resources
- Block or obstruct the views of visual resources, including whether these resources would still be viewable from other locations

Based on the above evaluation and given the Airport's size, location, history, and surrounding land use, no adverse light emission or visual resource impacts are anticipated.

IV-10 Water Resources

No water resources occur within the Study Area and the Proposed Action avoids impacts to wetlands and State open waters occurring adjacent to the Study Area. Soil erosion and sediment controls will be implemented before any ground disturbance to prevent impacts on water resources located beyond the study area limits.

IV-10.1 Wetlands

No wetlands occur within the study area. A Line Verification LOI obtained from the NJDEP DLRP (NJDEP File #1102-12-0002.5 FWW190001, issued September 18, 2020) for the adjacent ARFF Study Area identified intermediate resource value wetlands (delineated features "HH" and "II" in the Approved LOI plans provided in Appendix G) and State open waters associated with the West Branch Shabakunk Creek; these occur adjacent to but outside the limits of the study area. No impacts to these wetlands or their associated 50-foot standard transition areas are proposed.

IV-10.2 Floodplains

As discussed above, West Branch Shabakunk Creek occurs near the limits of the study area. As previously discussed in Section III-13.2 of this EA, a request for an FHA Verification (NJDEP File No. 1102-12-0002.5 LUP 200001) was previously prepared and submitted to the NJDEP for the ARFF Study Area, located immediately adjacent to the Study Area, to verify the FHA limit, the riparian zone limit, and FHA design flood elevation of this watercourse. As the ARFF study area occurs immediately adjacent to the ATCT study area (refer to Figure III-9), the resources studied as part of the ARFF project may also apply to this ATCT study.

Although the NJDEP FHA Verification (issued May 12, 2020) will need to be reauthorized to comply with the revised NJDEP FHACA Rules (effective July 17, 2023), it is expected that the Proposed Action will not impact regulated FHA and riparian zone.

IV-10.3 Surface Waters

No impacts to or direct discharge to West Branch Shabakunk Creek are proposed as part of the proposed project. Any impacts to surface waters, including associated riparian zone, FHAs, wetlands, and wetland transition areas, must be authorized through one or more permits authorized by the NJDEP DLRP under the FWPA Rules (N.J.A.C. 7:7A) and the FHACA Rules (N.J.A.C. 7:13). No impacts are proposed for any of the above referenced NJDEP-regulated areas.

IV-10.4 Delaware River & Raritan Canal Commission

TTN, and the Study Area, are situated within DRCC Review Zone B. The Proposed Action would automatically be considered a "Major Project," as defined at N.J.A.C. 7:45-1.3; therefore, approval from DRCC will be required, which would include a review of stormwater runoff quantity and water quality impact (N.J.A.C. 7:45-8), as well as an evaluation of stream corridor impacts (N.J.A.C. 7:45-9).

As discussed above in Section 4-11.2, a request for an FHA Verification (NJDEP File No. 1102-12-0002.5 LUP 200001) was previously prepared and submitted to the NJDEP for the ARFF Study Area, located immediately adjacent to the ATCT and AFLV Study Area, to verify the FHA limit. The existing NJDEP FHA Verification will need to be reauthorized to comply with the revised NJDEP FHACA Rules, which became effective July 17, 2023 (NJDEP 2023a). The use of this new methodology may change the limits of the DRCC-regulated stream corridor since it is measured 100 feet from the FHA limit. Correspondence with the DRCC regarding the use of the FHA is provided in Appendix G.

IV-10.5 Groundwater

According to the NJDEP GeoWeb, the western portion of Airport property is located over the Coastal Plain SSA while the eastern portion of the Airport property, including the study area, is not located over an SSA. In addition, per the NJDEP GeoWeb, there are also no community or non-community water supply wells on Airport property.

IV-10.6 Wild and Scenic Rivers

Per the NPS Wild and Scenic Rivers Program website (NPS 2021), there are no designated federal wild and scenic rivers located within the study area or adjacent to TTN. No changes are proposed to wild and scenic rivers as part of the proposed project.

IV-10.7 No Action Alternative

The No Action Alternative does not meet the purpose and need of the project. Under this alternative, the existing ATCT and AFLV will be maintained in their current state and no major capital improvements will be made. No impacts to water resources would occur.

IV-10.8 Proposed Action – Significance Analysis

The proposed project's potential to impact water resources, including wetlands, floodplains, surface waters, and groundwater are discussed below.

Wetlands, Floodplains, and Surface Waters

FAA Order 1050.1G provides a significance threshold for wetlands. A significant impact exists if the action would:

- Adversely affects a wetland's function to protect the quality or quantity of municipal water supplies, including surface waters and sole source and other aquifers
- Substantially alters the hydrology needed to sustain the affected wetland system's values and functions or those of a wetland to which it is connected
- Substantially reduce the affected wetland's ability to retain floodwaters or storm runoff, thereby threatening public health, safety, or welfare (the term welfare includes cultural, recreational, and scientific resources or property important to the public)
- Adversely affect the maintenance of natural systems supporting wildlife and fish habitat or economically important timber, food, or fiber resources of the affected or surrounding wetlands.
- Promote the development of secondary activities or services that would cause the circumstances listed above to occur.
- Be inconsistent with applicable state wetland strategies.

FAA Order 1050.1G provides a significance threshold for floodplains. A significant impact exists if the action would cause notable adverse impacts on natural and beneficial floodplain values. In addition, FAA Order 1050.1G provides a significance threshold for surface waters. A significant impact exists if the action would:

- Exceed water quality standards established by federal, state, local, and tribal regulatory agencies; or
- Contaminate public drinking water supply such that public health may be adversely affected

As discussed above, no wetlands, wetland transition areas, State open waters, riparian zones, or flood hazard areas occur within the study area. Appropriate soil erosion and sediment control measures will be implemented to prevent soils, sediment, and other materials from being introduced to offsite water resources. Therefore, no significant impacts to wetlands, floodplains, and surface waters are anticipated to result from the Proposed Action.

Groundwater

FAA Order 1050.1G provides a significance threshold for groundwater. A significant impact exists if the action would:

1. Exceed groundwater quality standards established by federal, state, local, and tribal regulatory agencies; or

2. Contaminate an aquifer used for public water supply such that public health may be adversely affected

Based on the above information, the Proposed Action is not expected to cause any significant impacts to groundwater quality in the study area during the operation or construction phases of the project. In addition, BMPs, such as engineering and administrative controls, would be incorporated into the design of the Proposed Action to avoid contamination of groundwater.

Wild and Scenic Rivers

The FAA has not established a significance threshold for wild and scenic rivers in FAA Order 1050.1G. Per FAA Order 1050.1G, factors to consider include, but are not limited to:

1. Destroying or altering a river's free-flowing nature;
2. A direct and adverse effect on the values for which a river was designated (or under study for designation);
3. Introducing a visual, audible, or other type of intrusion that is out of character with the river or would alter outstanding features of the river's setting;
4. Causing the river's water quality to deteriorate;
5. Allowing the transfer or sale of property interests without restrictions needed to protect the river or the river corridor (which cannot exceed an average of 320 acres per mile which, if applied uniformly along the entire designated segment, is one-quarter of a mile on each side of the river); or
6. Any of the above impacts preventing a river on the National Rivers Inventory (NRI) or a Section 5(d) river that is not included in the NRI from being included in the Wild and Scenic River System or causing a downgrade in its classification (e.g., from wild to recreational)

As discussed above, there are no designated wild and scenic rivers within the study area or adjacent to TTN. Therefore, no significant impacts to wild and scenic rivers are anticipated to result from the Proposed Action.

IV-11 Reasonably Foreseeable Effects

Consistent with the process of determining overall environmental consequences, the preparation of this EA considers the reasonably foreseeable effects associated with the Proposed Action and the alternatives considered.⁴⁹

As detailed in the preceding sections, the Proposed Action is not anticipated to result in significant reasonably foreseeable adverse effects. Construction activities may result in short-term and

⁴⁹ FAA Order 1050.1G provides for an evaluation of cumulative impacts. The term cumulative effects (impacts) was defined in CEQ's NEPA-implementing regulations. 40 CFR § 1508(i)(3) (2024). However, on February 25, 2025, CEQ published an interim final rule to remove these regulations in accordance with Executive Order 14154, Unleashing American Energy. See 90 Fed. Reg. 36 (February 25, 2025). The rule became effective on April 11, 2025. On Feb. 19, 2025, CEQ issued a memorandum titled Implementation of the National Environmental Policy Act, that provided guidance to Federal agencies on how to implement NEPA. The memo provides, "Federal agencies should analyze the reasonably foreseeable effects of the proposed action consistent with section 102 of NEPA, which does not employ the term "cumulative effects;" NEPA instead requires consideration of "reasonably foreseeable" effects, regardless of whether or not those effects might be characterized as "cumulative." Based on the CEQ memo and on and the U.S. Supreme Court's recent decision in *Seven Cnty. Infrastructure Coal. v. Eagle Cnty., Colorado*, 145 S.Ct. 1497 (U.S. 2025), this draft EA does not include a discussion of Cumulative Impacts.

temporary effects related to air quality, noise, traffic, solid waste, soil erosion, water quality and stormwater runoff. These effects would be minimized through compliance with applicable NJDEP regulations, NJDEP New Jersey State Standards and Specifications for Erosion and Sediment Control, the current New Jersey State Stormwater Management Rules, FAA construction standards and applicable BMPs. Construction activities are typically short-term and temporary, with minimal long-term environmental impacts at airports. Accordingly, the temporary construction effects associated with the Proposed Action are not expected to result in lasting environmental harm.

Considering the effects of all project components evaluated in this EA, along with the consequences of other related actions, implementation of the Proposed Action is not anticipated to result in significant reasonably foreseeable adverse effects.

IV-12 Permits Required

NJDEP Freshwater Wetlands Letter of Interpretation (LOI)

An LOI is issued by the NJDEP to verify the presence or absence of wetlands, State open waters, or transition areas, and their boundaries. LOIs also determine the resource value classification of a wetland when present, thus indicating the width of the regulated transition area. A LOI does not provide authorization to conduct a regulated activity. When requesting a LOI, a Division of Land Resource Protection Application form must be completed, in addition to all requirements at N.J.A.C. 7:7A Subchapter 4. Once issued, a LOI is valid for five years, unless it is determined that the LOI is based on inaccurate or incomplete information, in which case the NJDEP would void the original letter and reissue a revised LOI reflecting the actual conditions onsite. A LOI may be extended one time for an additional five years provided the information upon which the original LOI was based remains valid. Obtaining a LOI may expedite the processing of a general or individual freshwater wetland permit application.

Delaware & Raritan Canal Commission

The Proposed Action is located within the DRCC's jurisdictional Review Zone B and is automatically considered a "major project," since it would disturb one (1) acre or more of land and would result in the cumulative coverage, since January 11, 1980, of one-quarter acre of land with impervious surface, as defined at N.J.A.C. 7:45-1.3. Therefore, approval from the DRCC will be required.

A review of visual, historic, and natural quality impact is only required for projects situated within Zone A. Review of traffic impacts is required for any major project within one mile of any portion of the Canal State Park and having direct access to a road that enters Zone A. The Proposed Action does not appear to be within one mile of any portion of the Canal State Park and has access to a road that enters Zone A. Therefore, a review of visual, historic, natural quality, and traffic impacts is not anticipated. DRCC review of stormwater runoff quantity and water quality impact (N.J.A.C. 7:45-8), as well as evaluation of stream corridor impacts (N.J.A.C. 7:45-9), would be required.

Soil Erosion and Sediment Control Plan (SESCP) Certification

New Jersey has required the management of soil erosion and stormwater from virtually all non-agriculture, construction-based soil disturbances through its adoption of the NJ Soil Erosion and

Sediment Control Act (N.J.S.A. 4:24-39 et seq.). Implemented by the Department of Agriculture (NJDA) and the state's soil conservation districts, the act requires all construction activities greater than 5,000 square feet to be developed following a plan to control erosion during construction. The plan must also ensure that erosion will not occur once construction is completed. The SESCO would be submitted to the Mercer Soil Conservation District (SCD).

Mercer County Soil Erosion and Sediment Control Plan

The Soil and Sediment Control Act of 1976 stipulates that any project proposing more than 5,000 square feet of soil disturbance must have a Soil Erosion and Sediment Control Plan certified by the local District to ensure that the project meets State Standards.

IV-13 Public Involvement

A notice of availability for the draft environmental assessment for public review will be filed. The public review period will be set as 30 calendar days minimum or as directed by the FAA. After the public review and comment period has concluded, all comments received throughout the process will be included in the project record and responses will be prepared as appropriate. If needed, the Draft EA will be revised to address received comments. The comments and responses will be reviewed by the FAA.