

CONSTRUCTION SAFETY AND PHASING PLAN NARRATIVE

This Construction Safety and Phasing Plan (CSPP) Narrative is for the Aircraft Rescue and Firefighting (ARFF) Facility Renovations Project at the Tweed-New Haven Airport in New Haven, Connecticut.

1. COORDINATION. This section includes descriptions of design coordination efforts to date and proposed efforts during construction.

a) Scoping and Predesign Meeting: A Scoping and Predesign meeting was held. Attending this meeting were representatives from the Airport and Langan. During this meeting the general project description, planning and impacts were discussed as follows:

- Engineer's Contract
- Planning Considerations
- Design Parameters
- Document Deadlines

b) Construction Safety Phasing Plan (CSPP): A Construction Safety Phasing Plan (CSPP) was discussed with representatives from the Airport and Langan. Specific operational requirements, impacts and mitigation measures were discussed as follows:

- Anticipated Construction Season
- Construction Duration
- Construction Impacts and Operational changes
- Phasing
- Haul routes, stockpile areas, and staging areas for contractor use.

c) Pre-Bid Meeting: The CSPP will be reviewed in general with potential bidders during the pre-bid meeting.

d) Pre-Construction Conference: The CSPP will be reviewed with the contractor in detail at the pre-construction conference for the project. The contractor will be reminded to prepare and submit the required Safety Plan Compliance Document (SPCD) prior to beginning construction.

e) Contractor Progress Meetings: Progress construction meetings will be held during the duration of the construction activities. The CSPP and SPCD will be standing agenda items for these meetings. Daily coordination with the Airport Operations Manager will be mandatory and include a morning briefing of the proposed work for the day with an anticipated end time.

f) Scope or Schedule Changes: Changes in the scope or duration of the project will include a review of the Construction Safety Phasing Plan (CSPP). This review may necessitate revisions to the CSPP that will require review and approval by the Airport.

g) Phase of Work: The phasing of the work will be included with the bid documents.

2. CONSTRUCTION PHASING

To enhance safety during construction and minimize the impacts on Airport operations caused by the construction, the project is shown as three (3) Phases. CSPP drawings for each phase (Sheets KT101 through KT103) can be found attached to the end of this narrative.

Phase 1: - Expansion Bay and Driveway

- a) Duration: Eight (8) months
- b) Description: This phase includes utility installations and relocations, construction of the expansion bay, and construction of asphalt driveways and concrete aprons.
- c) Operational Impacts: Lighted barrels installed along eastern edge of existing driveway. Fire truck access to taxiway maintained at all times. Temporary closure (2 days) of the northern overhead door for utility work. Work schedule to be coordinated with Airport.
- d) Work Areas: This work area includes Phase 1 shown on sheet KT101.

Phase 2: - Driveway Connection to Taxiway

- a) Duration: Two (2) Days
- b) Description: This phase includes 2,300 sf extension of the asphalt driveway to connect to the taxiway. Work will occur within the taxiway safety area and require temporary closure of the taxiway. Work schedule to be coordinated with Airport.
- c) Operational Impacts: Temporary closure (2 days) of the taxiway for installation of encased electrical conduit and asphalt driveway. Excavation, loading and paving equipment temporarily operating within the taxiway safety area during work.
- d) Work Areas: This work area includes Phase 2 shown on sheet KT102.

Phase 3: - Utility Installations

- a) Duration: Two (2) Months
- b) Description: This phase includes installation of utility piping and equipment on the west side of the ARFF building.
- c) Operational Impacts: Temporary closure (2 days) of the existing driveway for utility piping installation. Airport to temporarily relocate fire truck outside of the project area. Crossing area to be protected with lighted barrels. Work schedule to be coordinated with Airport.
- d) Work Areas: This work area includes Phase 3 shown on sheet KT103.

3. AREAS AND OPERATIONS AFFECTED BY THE CONSTRUCTION ACTIVITY

- a) The following Areas will be affected during construction: Existing ARFF facility and operations as various phases outline above.
- b) Identification of Affected Areas: The CSPP drawings show the areas and operations affected by the construction activity.

c) Mitigation of Effects: To enhance safety and to minimize the impacts to Airport Operations:

- If the contractor wishes to have multiple crews working simultaneously in separate work areas, each work crew must be accompanied by a dedicated badged escort.
- Airport Management will coordinate the closure periods and times of affected operation areas with the Airport users to minimize the impact.
- All utilities within the work area will be maintained in a fully functional state unless otherwise specified in this CSPP. Temporary drainage will be installed, as required, to maintain existing flow patterns and prevent standing water.

4. **PROTECTION OF NAVIGATIONAL AIDS (NAVAIDS):** There will be no impact to NAVAIDS on this project.

5. **CONTRACTOR ACCESS:** The following describes the locations of stockpiles, site access, escorts, airfield driving, radio communications, and other procedures:

Stockpile and Equipment Parking Locations: The material stockpile locations and the equipment parking locations are as shown on Sheet CE101.

Site Access: The contractor will only be able to access the site through the vehicle gate as identified on Sheet CS101.

Driving on the Airfield: The contractor will be required to explicitly follow the directions of the approved escort while driving in the Airport Operations Area (AOA). The AOA is defined as the area inside of the defined perimeter fencing surrounding the Airport. Additionally, the contractor must follow the directions of Airport Air Traffic Control Tower and any Airport personnel. All movement of vehicles, outside of designated work areas must be approved by the escort or other approved personnel.

Conclusion of Work Daily: The contractor cannot leave the site until the work area has been inspected and accepted by the Airport Operator for safety compliance.

Escorts: The Contractor will be required to provide all escorts. The contractor's escort's sole responsibility will be the safety of the airfield operations and will have NO OTHER ASSIGNED DUTIES. The escorts will receive training from Airport Operations. No more than three (3) vehicles can be under the supervision of a single escort. All vehicles under the supervision of an escort must be in direct visual communication with the escort. It shall be the Contractor's responsibility to hire, have trained and have approved additional escorts if needed for this project.

Radio Communications: The Contractor, the escorts and the crossing guard will be required to monitor the tower ground radio frequency at all times during construction and will communicate directly with the ground controller for movement within the AOA which is outside of the designated work area(s).

Marking and Lighting of Vehicles: The marking and lighting of vehicles shall be in accordance with Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5210-5 ("Painting, Marking, and Lighting of Vehicles Used on an Airport"). The contractor will be required to provide the following for every vehicle:

- Each vehicle/equipment must be equipped with a construction flag.
 - 3' by 3' minimum overall dimensions.
 - checked with international orange and white squares.
 - square sizes 1' minimum; and
 - corner squares shall be international orange.
- Each vehicle must be equipped with a flashing yellow beacon.
 - must be on the tallest point of the vehicle; and
 - viewable from all directions.
- Each vehicle/equipment must be equipped with a placard with the company name on both sides of the vehicle/equipment.
 - must be easily recognizable; and
 - minimum of 200 square inches.

Vehicle and Personnel Operations: No person shall enter the AOA or any other restricted area without an appropriately badged escort. For this project, there will be visual boundaries installed for each phase, unless otherwise directed by Airport Operations. If nighttime visual boundaries are required, they will be low-profile barricades. The barricades will be provided by the airport. The contractor will be required to assist Airport Operations in the placement and removal of all barricades or other visual boundaries. Only vehicles essential in completing the work will be allowed access to the AOA. The Contractor will maintain a daily log of all personnel entering and leaving the site. The contractor shall provide personnel to become badged by ACK.

Employee Parking Area: The contractor (including subcontractors) may only park in areas designated by the owner. The contractor will be required to provide transportation for all employees from the employee parking area to the work area. No employee cars may be parked within the AOA for any reason and at any time.

Haul Routes: The haul route for the work is Thompson Avenue to the vehicle gate shown on Sheet CS101.

Rules of Vehicle Operations: The following are the rules of operation and must be followed at all times.

- Prior to entry onto the Airfield, vehicles shall be inspected by the driver. All dirt and debris shall be removed from the tires that can be tracked into the Airfield. Each operator must possess a valid license for operation of the particular vehicle and may be required to furnish the license for access to the AOA.
- Motor vehicles must not be operated in a reckless and/or negligent manner, a manner that may endanger other people or property, and/or in excess of 15 miles per hour unless the posted speed limit is less.
- Aircraft always have the right-of-way. Vehicles and equipment shall always pass behind aircraft.
- All appropriate signaling devices must be used at all times and obey all traffic signs, markings, and lanes.
- Each operator must not be under the influence of drugs or alcohol.
- No cell phone use is allowed while operating any vehicle or equipment.
- Escorts are required to drive from one work area to another.

- All vehicles must have the required and proper license plates and inspection stickers.
- All vehicles must have working head and taillights which are required to be used from one hour prior to dusk and one hour after sunrise, as required by Airport Operations, times of low visibility, and/or during Instrument Flight Rules (IFR) conditions.

6. WILDLIFE MANAGEMENT: Wildlife hazards will be mitigated during construction as follows:

Trash: All construction personnel will dispose of food scraps in the appropriate containers provided by the contractor. The contractor will be required to keep a closable trash receptacle in the back of a truck with each crew.

Standing Water: No pools of standing water shall be created during construction that may attract wildlife. Any such standing water shall be immediately corrected by the contractor.

Wildlife Sightings: The contractor will be responsible for reporting any wildlife sightings to Airport Operations immediately. Airport Operations will immediately notify pilots and the air traffic control tower via the appropriate airfield frequency.

7. FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT: FOD will be mitigated during construction as follows:

Training: The contractor shall provide training to all employees working within the AOA on effective FOD management. Training shall be documented and include information on the definition of FOD, consequences of FOD, FOD awareness, who is responsible for mitigating FOD, and housekeeping procedures.

Housekeeping: Prevention of FOD is the most effective form of FOD management. The contractor must monitor construction activities and proactively develop a plan to prevent FOD from occurring. Typical FOD prevention measures include the use of covered trash receptacles, covering of loads, zero tolerance of littering, no smoking in the AOA, unwrapping construction materials in a controlled environment, not opening both doors of equipment/vehicles at the same time, awareness of jet blast and propwash, and tying down items that can easily become windblown.

Trash: All construction personnel will dispose of food scraps, construction waste, boxes, paper, and other items in the appropriate containers provided by the contractor. The contractor will be required to keep a closable trash receptacle in the back of a truck with each crew.

Airfield Access: The contractor will be responsible for checking and removing dirt and debris from all tires and tracks from vehicles and equipment, including equipment on flat beds prior to entering the AOA. Additionally, flat beds shall be adequately cleaned. All materials removed shall be placed in an appropriate container and disposed of by the contractor. The contractor shall have all appropriate devices to clean any FOD from the pavement including sweepers and shop vacuums.

Smoking: Smoking will not be permitted while within the AOA.

8. **HAZARDOUS MATERIALS (HAZMAT) MANAGEMENT:** HAZMAT will be mitigated during construction as follows:

Spills: The contractor is required to have adequate spill kits capable of containing and removing leaked or spilled fuels. The contractor is required to immediately contact Airport Operations regarding all spills. The contractor will be required to pay any fines (including cleaning costs) levied against the Airport for any spill caused by the contractor.

Fueling: The contractor will only be allowed to fuel vehicles in the designated Contractor Staging area, unless authorized by the owner.

Airport Emergency Plan: In the event of an emergency event involving an aircraft the Contractor shall be required to stop work and vacate the area while following all Airport directions.

9. **NOTIFICATION OF CONSTRUCTION ACTIVITIES:** The following is the method of communication for the project.

Emergency: **911**

General Contact List: The following is contact list of Airport personnel and relevant contacts:

• Airport Operations	_____
• Airport Maintenance	_____
• CT State Police (Troop I)	<u>1-800-956-8818</u>
• Local FAA Control Tower	_____
• Poison Control	_____
• Resident Engineer	<u>TBD</u>
• Contractor	<u>TBD</u>

FAA Notification:

7460-1 forms have been submitted for the construction of this project.

Project: _____

Aeronautical Study Numbers: _____

Notice to Airmen (NOTAMs): Airport Operations will issue all NOTAMs.

Emergency Notification: In the case of a life-threatening situation, dial **911** and then contact the Airport immediately. The Airport will coordinate any emergency response as outlined in the Airport Emergency Plan (AEP).

10. **INSPECTION REQUIREMENTS:** The following are the inspection requirements:

Airport Requirements: Airport Operations will be responsible for inspecting all areas prior to reopening to aircraft operations as well as conducting a final inspection at the completion of the project.

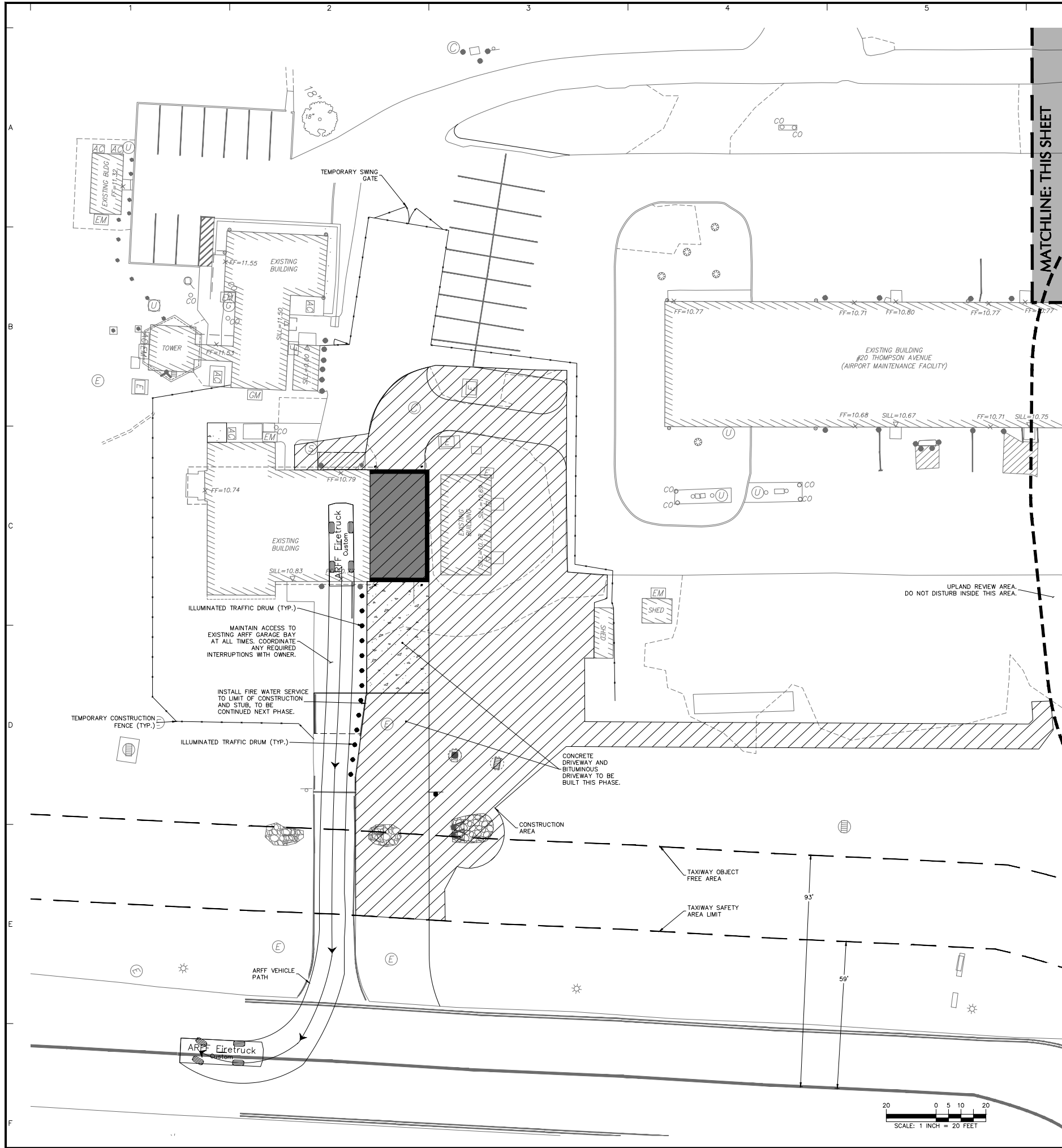
Resident Engineer Requirements: The resident engineer will conduct inspections at the end of each shift or when work progresses from one location to another location. The resident engineer will contact Airport Operations to conduct inspections as noted above. The resident engineer will attend the final inspection. In the event of any emergency the resident engineer will contact Airport Operations.

Contractor Requirements: The contractor will be required to conduct routine inspections of the work areas. The contractor may not leave the site for the day until the work areas have been approved by resident engineer.

11. **UNDERGROUND UTILITIES:** The contractor will be required to coordinate with Airport Operations, the Local FAA SSC, and Call-Before-You-Dig to determine if any underground cables exist in the work areas. The contractor shall make provisions to protect any cables identified by Airport Operations, the Local FAA SSC, or Call-Before-You-Dig. Any damage to cables identified by Airport Operations, the Local FAA SSC, or Call-Before-You-Dig shall be the responsibility of the Contractor to repair to the requirements of the Owner of the damaged utility. The Contractor shall locate or hire an experienced company to locate all utilities within each of the work areas.
12. **PENALTIES:** The following are a list of penalties for violations while working on the project:

Construction Suspension: Airport Operations will suspend all construction if a Contractor enters the AOA without the appropriate escort and approval from the CSPP.

Expulsion of Employees: The Airport may permanently prohibit any Contractor employee acting in violation of Airport rules and regulations.
13. **SPECIAL CONDITIONS:** None.
14. **RUNWAY AND TAXIWAY VISUAL AIDS:** Runway and taxiway visual aids will not be required as part of this project.
15. **MARKING AND SIGNS FOR ACCESS ROUTES:** Markings or signage will be installed as needed to delineate the access routes and all movements in the AOA by the Contractor will be under the supervision of an approved escort.
16. **HAZARD MARKING AND LIGHTING:** Vehicle marking, signage, and lighting will be as specified in Section 5.
17. **PROTECTION OF AREAS, ZONES, AND SURFACES:** No equipment will be allowed to penetrate any protected safety areas, object free zone or approach surfaces. The Contractor will be required to meet any additional requirements set by the Airport.



GENERAL NOTES

1. BOUNDARY AND TOPOGRAPHIC INFORMATION WAS OBTAINED FROM A PLAN TITLED "TOPOGRAPHIC SURVEY" FOR TWEED AIRPORT ARFF FACILITY RENOVATIONS BY LANGAN, DATED APRIL 15, 2025. COORDINATES REFERENCED TO NAD83 AND NAVD88 IN COMBINATION WITH TWEED AIRPORT PRIMARY AIRPORT CONTROLS AND SECONDARY AIRPORT CONTROLS.

2. THE SITE IS LOCATED IN A COASTAL ZONE AE (SHADED), AN AREA SUBJECT TO COASTAL FLOODING WITH MODERATE WAVE ACTION PER FIRM MAP 09009C0444J, EFFECTIVE DATE JULY 8, 2013. BASE FLOOD ELEVATION IS 12' NAVD88.

WORK AREA NOTES

PROJECT DURATION:

- ALL WORK MUST BE COMPLETED WITHIN THE 9 MONTH PROJECT DURATION

WORK ITEMS:

- INSTALL SAFETY EQUIPMENT FOR AREA CLOSURE AND MOBILIZE
- INSTALL TEMPORARY CONSTRUCTION FENCE, SWING GATE, BARRICADES, AND LOW PROFILE BARRICADES FOR PHASE 1 OF CONSTRUCTION.
- CONSTRUCT ARFF FACILITY EXPANSION. EXPAND CONCRETE DRIVEWAY, EXPAND BITUMINOUS DRIVEWAY. STRIPE AND SIGN EXPANDED DRIVEWAY, INSTALL FIRE WATER SERVICE LINE TO EXTENTS OF EXISTING PAVEMENT.
- REMOVE BARRIERS AND LOW PROFILE BARRICADES FOR PHASE 1.
- INSTALL BARRIERS FOR PHASE 2
- TRENCH REMAINDER OF FIRE WATER SERVICE LINE UNDER THE EXISTING DRIVEWAY.
- REMOVE SAFETY EQUIPMENT, TEMPORARY CONSTRUCTION FENCE, SWING GATE, AND BARRIERS.

OPERATIONAL IMPACTS:

- NONE

WORK AREA VISUAL AIDS:

- LOW PROFILE CONSTRUCTION BARRICADES WITH SOLAR POWERED RED FLASHING WARNING LIGHTS.
- BARRICADE FENCE MOUNTED, SOLAR POWERED RED FLASHING WARNING LIGHTS.

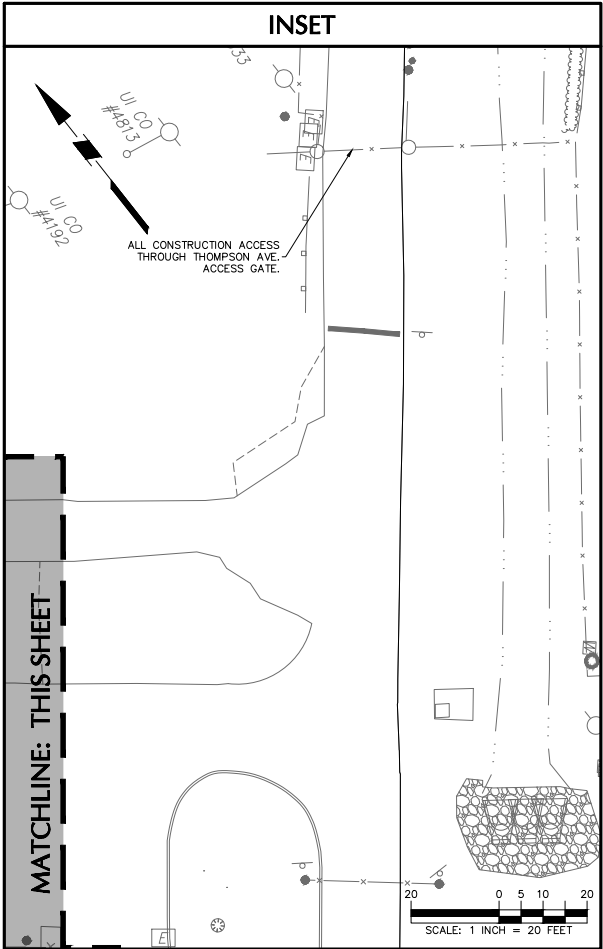
WORK HOURS:

- THE CONTRACTOR IS PERMITTED TO WORK BETWEEN 7 AM AND 5 PM UNLESS EXTENDED HOURS ARE AUTHORIZED BY THE AIRPORT.

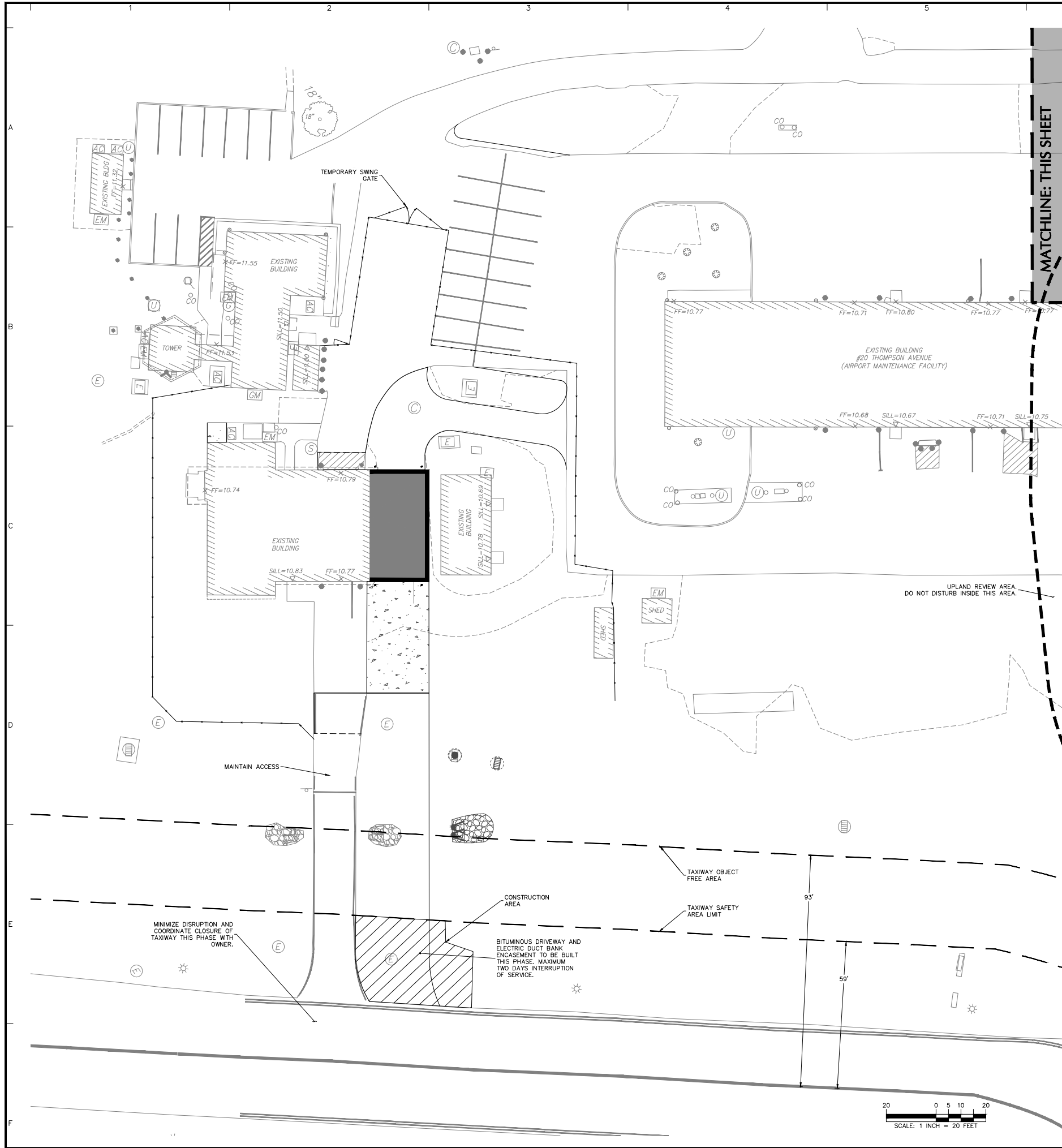
PHASING NOTES:

- CONTRACTOR ESCORT SHALL REMAIN WITH CONSTRUCTION CREW AT ALL TIMES.
- CONTRACTOR SHALL COMMUNICATE WITH ESCORT PRIOR TO CROSSING ANY AREAS OPEN TO AIRCRAFT OPERATIONS.
- DRIVEWAY ACCESS TO THE EXISTING ARFF GARAGE BAY MUST BE MAINTAINED AT ALL TIMES.
- THOMPSON AVE. ACCESS GATE MUST REMAIN CLEAR AT ALL TIMES FOR EMERGENCY VEHICLE ACCESS.
- CONTRACTOR SHALL PROVIDE GATE GUARD TO BE STATIONED AT THOMPSON AVE. ACCESS GATE DURING WORKING HOURS.

LEGEND		
	EXISTING	PROPOSED
BUILDING LINE		
EDGE OF PAVEMENT		
CATCH BASIN		
UTILITY MANHOLE		
FIRE HYDRANT		
CONSTRUCTION AREA THIS PHASE		
LOW PROFILE BARRICADE		
CONSTRUCTION BARRIER		
TEMPORARY CONSTRUCTION FENCE		
AREAS OPEN TO AIRCRAFT		



Date	Description	No.
Revisions		
Signature		Date
Christopher Cardany PEN. 21995		
LANGAN		
Langan CT, Inc. 555 Long Wharf Drive, 9th Floor New Haven, CT 06511		
T: 203.562.5771 F: 203.789.6142 www.langan.com		
Project		
TWEED-NEW HAVEN AIRPORT ARFF FACILITY RENOVATIONS		
EAST HAVEN CONNECTICUT		
Drawing Title		
CONSTRUCTION SAFETY AND PHASING PLAN PHASE 1		
Project No.		Drawing No.
140318901		KT101
Date		
4/30/2025		
Drawn By		
BTM		
Checked By		
JDD		



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- REMOVE SAFETY EQUIPMENT, TEMPORARY CONSTRUCTION FENCE, SWING GATE, AND BARRIERS.

OPERATIONAL IMPACTS:

- NONE

WORK AREA VISUAL AIDS:

- LOW PROFILE CONSTRUCTION BARRICADES WITH SOLAR POWERED RED FLASHING WARNING LIGHTS.
- BARRICADE FENCE MOUNTED, SOLAR POWERED RED FLASHING WARNING LIGHTS.

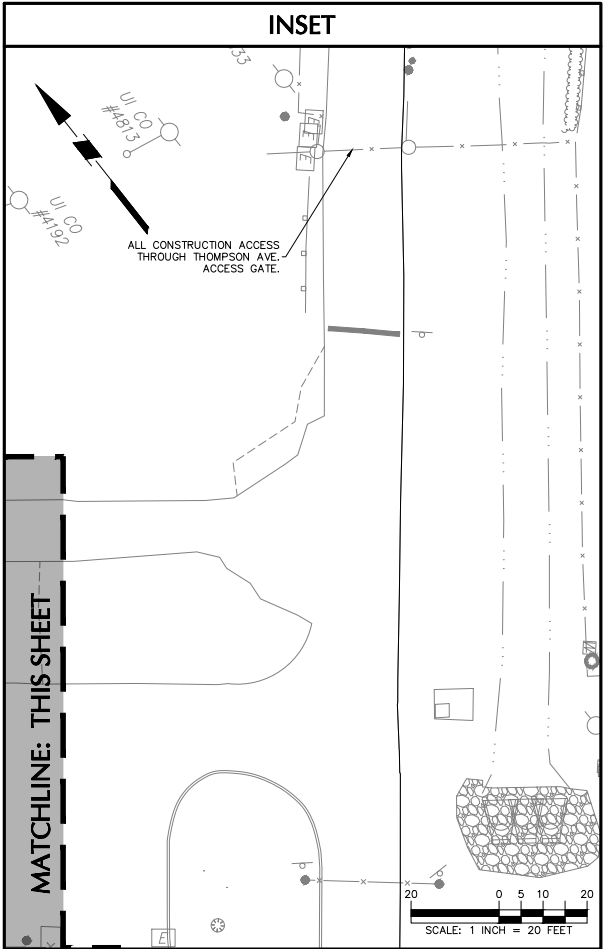
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PHASING NOTES:

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Drawing Title		
CONSTRUCTION SAFETY AND PHASING PLAN PHASE 2		
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