

**ADDENDUM No. 3**

for

**Partial Rehabilitation of Runway 6-24**

**AIP # 3-33-0011-TBD-2023**

**Bid # FY23-805-29**

at the Manchester – Boston Regional Airport

Due to be opened 2:00 p.m., on December 22, 2022

Date: December 15, 2022

The attention of firms submitting proposals for the work named above is called to the following modifications to the documents as were issued.

The items set forth herein, whether of clarification, omission, addition and/or substitution, shall be included and form a part of the Proposer's submitted materials and the corresponding contract when issued. No claim for additional compensation, due to lack of knowledge of the contents of this Addendum will be considered.

All Proposer's are advised that receipt of this notice and all attached material must be duly acknowledged in the space provided on the signature page of the proposal documents, and **by the insertion of this sheet, signed, and submitted with your Proposal package.**

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This form must be signed and attached to the original copy of your submission.

The attached sheets contain information or clarifications requested or discussed.

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Receipt of **Addendum No. 3** to the REQUEST FOR PROPOSALS for **Partial Rehabilitation of Runway 6-24** at the MANCHESTER-BOSTON REGIONAL AIRPORT is hereby acknowledged.

COMPANY NAME: \_\_\_\_\_

SIGNED BY: \_\_\_\_\_

NAME AND TITLE PRINTED: \_\_\_\_\_

TELEPHONE: \_\_\_\_\_ FAX: \_\_\_\_\_

## GENERAL

In general, this addendum is accomplishing the following:

1. Answers to questions to date.
2. Updates to the Bid Proposal and Certificates of Compliance.
3. Updates to the Required Contract Provisions for AIP Projects.
4. Updates to the Technical Specifications Section G-001 Special Work Requirements and Construction Safety and Phasing Plan.
5. Updates to the Technical Specifications Section P-621 Saw Cut Grooves. To eliminate a second mobilization for the Runway 24 grooving in Phase D, the grooving for Phase D will be accomplished by the Runway 17-35 grooving subcontractor that will be grooving at approximately the same time. An allowance is provided to pay for the Runway 24 grooving.
6. Updates to the Technical Specifications Section L-140 Runway Weather Information System.
7. Updates to the Drawings:
  - a. G-002 Index of Sheets.
  - b. G-003 Radio Control notes.
  - c. G-004 General Plan.
  - d. G-100 to -102 and G-202 Construction Safety and Phasing Plans, Notes, and Details.
  - e. E-002 Electrical General Plan.
  - f. E-201 Electrical Details.
  - g. E-401 Maintenance Building Weather Sensor Mounting (new drawing).

## QUESTIONS/CLARIFICATIONS

### **Addendum Item No.1 -**

*Q1: I would like confirmation on the base cans to go back in. Removing 1A (galvanized) and installing 1B(stainless Steel). Please confirm.*

A1: The response provided in the previous Addendum No. 2 was incorrect. New light base cans to be installed shall be Class 1B, either stainless or epoxy-coated steel. Galvanized steel shall not be used.

*Q2: In reference to the Qualifications of Bidders section of the project manual, found on page 83 of the Project Manual we had the following question. If we meet the qualifications as outlined in the contract Qualification Statement and have a company DUNS No., would that be sufficient for being qualified to submit a bid for this project? Or, would we also need to be prequalified with the New Hampshire State Highway Division and on the current "bidder's list"?*

A2: Bidders are not required to be pre-qualified with New Hampshire State Highway Division or City of Manchester. Bidders shall complete the Qualification Statement in the Bid Proposal to demonstrate their qualifications.

*Q3: I was wondering if I could get a copy of the pre-bid meeting sign in sheet?*

A3: See attached sign-in sheet from the Pre-Bid meeting on December 7, 2022.

*Q4: For bid item G-003-1, Gate Guard Allowance, is this bid item intended to be a fix price item? If so, could the fixed unit price and extension price be provided for the bid form?*

A4: See attached Bid Proposal for the allowance amount for Item G-003-1.

*Q5: What are the depths of electrical cans? What is the depth of the concrete below the cans?*

A5: Depths of electrical cans are approximately 16" and depth of concrete is approximately 6" below the cans. See detail on attached Drawing E-201.

*Q6: Is routing required for all cracks?*

A6: Routing shall be used to remove existing sealant. Other equipment used to prepare cracks prior to repairing or sealing may include concrete saw, hot air lance, and hand tools. The exact number of cracks to be prepared via certain equipment shall be determined in the field and coordinated with the Resident Project Representative (RPR).

### **PROJECT MANUAL**

Note that where a change was made to the specifications, a vertical line (|) is provided in the left margin denoting that a change was made. Sample vertical line shown next to this paragraph.

#### **Addendum Item No.2 -**

Bid Proposal, Pages 1 to 12; and Certificates of Compliance, Pages 5, 6, and 14:

REMOVE and REPLACE with the attached Pages 1 to 14 of the Bid Proposal and Pages 5, 6, and 14 of the Certificates of Compliance.

#### **Addendum Item No.3 -**

Required Contract Provisions for AIP Projects, All Pages:

REMOVE and REPLACE with the attached Required Contract Provisions for AIP Projects, dated 11/18/2022.

#### **Addendum Item No.4 -**

Technical Specifications Section G-001 Special Work Requirements and Construction Safety and Phasing Plan, All Pages:

REMOVE and REPLACE with the attached Item G-001 Special Work Requirements and Construction Safety and Phasing Plan.

#### **Addendum Item No.5 -**

Technical Specifications Section P-621 Saw-Cut Grooves, Pages P-621-3 and P-621-4:

REMOVE and REPLACE with the attached Item P-621 Saw-Cut Grooves Pages P-621-3 and P-621-4.

#### **Addendum Item No.6 -**

Technical Specifications Section L-140 Runway Weather Information System, All Pages:

REMOVE and REPLACE with the attached Item L-140 Runway Weather Information System, All Pages.

### **DRAWINGS**

#### **Addendum Item No.7 -**

REMOVE and REPLACE the attached drawings:

- a. G-002 Index of Sheets.
- b. G-003 General Notes.
- c. G-004 General Plan.
- d. G-100 to -102 and G-202 Construction Safety and Phasing Plans, Notes, and Details.
- e. E-002 Electrical General Plan.
- f. E-201 Electrical Details.

ADD the attached drawing:

- g. E-401 Maintenance Building Weather Sensor Mounting.

### **LIST OF ATTACHMENTS**

- Pre-Bid Meeting Sign-In Sheet (1 page)
- Bid Proposal, Pages 1 to 14 (14 pages)
- Certificates of Compliance, Pages 5, 6, and 14 (3 pages)
- Required Contract Provisions for AIP Projects, dated 11/18/2022 (40 pages)
- Item G-001 Special Work Requirements and Construction Safety and Phasing Plan (28 pages)
- Item P-621 Saw-Cut Grooves Pages P-621-3 and P-621-4 (2 pages)
- Item L-140 Runway Weather Information System (4 pages)
- G-002 Index of Sheets (1 page)
- G-003 General Notes (1 page)
- G-004 General Plan (1 page)
- G-100 to -102 and G-202 Construction Safety and Phasing Plans, Notes, and Details (4 pages)
- E-002 Electrical General Plan (1 page)
- E-201 Electrical Details (1 page)
- E-401 Maintenance Building Weather Sensor Mounting (1 page)

**END OF ADDENDUM No. 3**





# Manchester-Boston REGIONAL AIRPORT

## MEETING ATTENDEES

DATE: December 7, 2022

MEETING: Runway 6/24 Project Pre-Bid Meeting

NAME	COMPANY	PHONE NUMBER	E-MAIL ADDRESS
John German	Jacobs	603 545 2959	John.German@jacobs.com
Mason Munger	Rifenburg Construction	518-598-8962	mmunger@riftenburg.com
Luis Elguera	MHT- Airport	603-659-6409	LElguera@flymanchester.com
Bethany Huckins	Pike Industries	603-521-5125	bhuckins@pikeindustries.com
Jay Pelletier	Pike Industries	603-521-5186	JPelletier@pikeindustries.com
Frank Bauer	Continental Paving	603 437 5387	BAUER@CONTINENTALPAVING.COM
Bill Wolford	indus	617-590-4865	Bill.Wolford@indus.com
Dick Smith	"	" 835-7009	dicksmith@indus.com
Tom Tillingsworth	Brox	978-770-8599	tillingsworth@broxindustries.com
Nate Hoitt	Brox	978-735-6459	nhoitt@broxindustries.com
KEVIN GARITY	Brox	978-427-7567	KGARITY@BROXINDUSTRIES.COM
Mark Tower	MHT	603 660 7242	mtower@flymanchester.com
Andrew Fournier	MHT	603 624 6592	Afournier@flymanchester.com
Andre Garcia	MHT	603-506-9605	Agarcia@flymanchester.com
TOM MAURFLORE	MHT	603-365-7094	TMAURFLORE@flymanchester.com
Tom Kitchens	MHT	603-851-3119	tkitchens@flymanchester.com

# PROPOSAL

for

## ***PARTIAL REHABILITATION OF RUNWAY 6-24***

at

**Manchester • Boston Regional Airport**

Proposal of \_\_\_\_\_ (hereinafter called "Bidder") a corporation organized under the laws of the State of \_\_\_\_\_, a partnership, or an individual\*\* doing business as \_\_\_\_\_, to the **City of Manchester, New Hampshire, Department of Aviation** (hereinafter called "Owner").

The bidder in compliance with your invitation for bids for the construction of airport improvements having examined the plans and specifications with related documents and the site of the proposed work if required, and being familiar with all of the conditions surrounding the construction of the proposed project including the availability of materials, and labor, hereby proposes to furnish all plant, labor, materials, supplies, equipment, services, and to construct the work in accordance with the Contract Documents, within the time set forth therein, and at the amount in U.S. dollars provided herein. This price is to cover all expenses incurred in performing the work required under the Contract Documents, of which this proposal is a part.

### Time of Completion and Liquidated Damages

Bidder hereby agrees to commence work under this Contract on the date to be specified in written "Notice to Proceed" of the Owner, and to fully complete the project within **3438 calendar days**.

Bidder further agrees to pay to the Owner, as liquidated damages, the sum of **one thousand dollars (\$1,000.00)** for each and every **calendar day** that the work remains incomplete beyond the time specified for milestone dates and completion as hereinafter provided in the Contract Documents.

In addition, Bidder must agree to pay the Owner as liquidated damages the sum of **twenty-five thousand dollars (\$25,000.00)** for each and every calendar day the phase concurrent (Phase C) to the work in the runway 17-35 and 6-24 intersection remains incomplete beyond the specified time on the phasing plans.

Bidder acknowledges receipt of the addenda shown on the attached form entitled, **ACKNOWLEDGMENT OF ADDENDA**.

**\*\* *Strike out inapplicable terms.***

Bidder agrees to perform all the work described in the specifications, shown on the plans or directed, for the unit prices provided in the Bid Forms provided herein.

**ACKNOWLEDGMENT OF ADDENDA**

Addendum No. \_\_\_\_\_ Date:

Addendum No. \_\_\_\_\_ Date:

Addendum No. \_\_\_\_\_ Date:

Addendum No. \_\_\_\_\_ Date:

Addendum No. \_\_\_\_\_ Date:

Addendum No. \_\_\_\_\_ Date:

Addendum No. \_\_\_\_\_ Date:

Addendum No. \_\_\_\_\_ Date:

Addendum No. \_\_\_\_\_ Date:

**Manchester • Boston Regional Airport**  
**PARTIAL REHABILITATION OF RUNWAY 6-24**  
**BID FORM**

**BASE BID**

ITEM NO.	ESTIMATE QUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
G-002-1	1 LS	As-Built Plans _____ Dollars and _____ Cents				
G-003-1	1 AL	Gate Guard Allowance <u>Fifteen Thousand</u> Dollars and <u>Zero</u> Cents	<u>15,000</u>	<u>00</u>	<u>15,000</u>	<u>00</u>
G-004-1	1 LS	Maintenance and Protection of Traffic _____ Dollars and _____ Cents				
G-004-2	1 LS	Contractor's Safety Plan Compliance Document _____ Dollars and _____ Cents				
C-100-1	1 LS	Contractor Quality Control Program (CQCP) _____ Dollars and _____ Cents				
C-105-1	1 LS	Mobilization (3% Max.) _____ Dollars and _____ Cents				
M-001-1	1 LS	Construction Access Modifications _____ Dollars and _____ Cents				
P-101-1	4,515 LF	Crack Repair – Type 1A _____ Dollars and _____ Cents				
P-101-2	2,100 LF	Crack Repair – Type 1C _____ Dollars and _____ Cents				

**Manchester • Boston Regional Airport**  
**PARTIAL REHABILITATION OF RUNWAY 6-24**  
**BID FORM**

**BASE BID**

ITEM NO.	ESTIMATE QUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
P-101-3	470 SY	Crack Repair – Type 1D _____ Dollars and _____ Cents				
P-101-4	15,855 LF	Crack Seal _____ Dollars and _____ Cents				
P-101-5	39,960 SY	Cold Milling (4" Nominal Depth) _____ Dollars and _____ Cents				
P-101-6	1,280 SY	Cold Milling (2" Nominal Depth) _____ Dollars and _____ Cents				
P-101-7	2,000 SY	Cold Milling (1" Nominal Depth) _____ Dollars and _____ Cents				
P-401-1	10,415 TON	Asphalt Surface Course _____ Dollars and _____ Cents				
P-603-1	8,120 GAL	Emulsified Asphalt Tack Coat _____ Dollars and _____ Cents				
P-605-1	21,630 LF	Saw and Seal Pavement Joints _____ Dollars and _____ Cents				
P-608-R-1	73,555 SY	Asphalt Surface Treatment _____ Dollars and _____ Cents				

**Manchester • Boston Regional Airport**  
**PARTIAL REHABILITATION OF RUNWAY 6-24**  
**BID FORM**

**BASE BID**

ITEM NO.	ESTIMATE QUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
P-608-R-2	11,200 SY	Pavement Marking Protection _____ Dollars and _____ Cents				
P-620-1	42,765 SF	Runway and Taxiway Marking – Color _____ Dollars and _____ Cents				
P-620-2	2,305 SF	Runway and Taxiway Marking – Black Borders _____ Dollars and _____ Cents				
P-620-3	7,590 SF	Removal of Markings _____ Dollars and _____ Cents				
P-621-1	<del>31,480</del> 26,000 SY	Saw-Cut Grooves – <u>Runway 6</u> _____ Dollars and _____ Cents				
<u>P-621-2</u>	<u>1 AL</u>	<u>Saw-Cut Grooves – Runway 24</u>  <u>Eleven Thousand Six Hundred</u> Dollars and <u>Zero</u> Cents	<u>11,600</u>	<u>00</u>	<u>11,600</u>	<u>00</u>
L-105-1	1 LS	Temporary Lighting _____ Dollars and _____ Cents				
L-108-1	800 LF	No. 8 AWG, 5kV, L-824, Type C Cable, Installed in Duct Bank or Conduit _____ Dollars and _____ Cents				

**Manchester • Boston Regional Airport**  
**PARTIAL REHABILITATION OF RUNWAY 6-24**  
**BID FORM**

**BASE BID**

ITEM NO.	ESTIMATE QUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
L-108-2	440 LF	No. 6 AWG, Solid, Bare Copper Counterpoise Wire, Installed Above the Duct Bank or Conduit, Including Connections/Terminations  _____ Dollars and _____ Cents				
L-108-3	2 EA	3/4" Dia x 10' Copper Clad Steel Ground Rod  _____ Dollars and _____ Cents				
L-110-1	420 LF	Concrete Encased Schedule 40 PVC Electrical Conduit, 1-Way 2-inch, in Existing Pavement  _____ Dollars and _____ Cents				
L-110-2	300 LF	Concrete Encased Schedule 40 PVC Drainage Conduit, 1-Way 2-inch, in Existing Pavement  _____ Dollars and _____ Cents				
L-125-1	8 EA	Existing In-Pavement Runway Light Installed on New Base Can  _____ Dollars and _____ Cents				
L-140-1	3 EA	Runway Pavement Surface Sensor  _____ Dollars and _____ Cents				
L-140-2	1 <del>EA</del> <u>AL</u>	Runway Weather Information System Upgrades and Commissioning  <u>Forty Thousand</u> Dollars and <u>Zero</u> Cents	<u>40,000</u>	<u>00</u>	<u>40,000</u>	<u>00</u>

<b>Manchester • Boston Regional Airport</b> PARTIAL REHABILITATION OF RUNWAY 6-24 <b>BID FORM</b>						
<b>BASE BID</b>						
ITEM NO.	ESTIMATE DQUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
L-140-3	1 LS	<u>Installation of Rooftop Weather Sensor</u>  <u>                                Dollars and</u>  <u>                                Cents</u>				



**BASE BID SUMMARY**

**TOTAL BASE BID:**

dollars

(amount in words)

(\$).

(amount in figures)

**Manchester • Boston Regional Airport**  
**PARTIAL REHABILITATION OF RUNWAY 6-24**  
**BID FORM**

**ADDITIVE ALTERNATE NO. 1 – SEAL COAT REMAINDER OF RUNWAY 24**

ITEM NO.	ESTIMATED QUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
P-101-4	5,880 LF	Crack Seal _____ Dollars and _____ Cents				
P-608-R-1	44,140 SY	Asphalt Surface Treatment _____ Dollars and _____ Cents				
P-608-R-2	5,600 SY	Pavement Marking Protection _____ Dollars and _____ Cents				

**ADDITIVE ALTERNATE NO. 1 SUMMARY**

**TOTAL ADDITIVE ALTERNATE NO. 1:**

\_\_\_\_\_ **dollars**  
(amount in words)

(\$ \_\_\_\_\_).  
(amount in figures)

**TOTAL BID SUMMARY (Transcribe from above bid summaries)**

TOTAL BASE BID: \$ \_\_\_\_\_

TOTAL ADD. ALT. NO. 1: \$ \_\_\_\_\_

**TOTAL THE ABOVE:** \$ \_\_\_\_\_

The stated prices shall include-all plant, labor, materials, supplies, equipment, services, incidentals, expenses, overhead, profit, insurance, etc., perform all work required by the Contract Documents.

The bidder agrees that the Owner may base the low bid on the Base Bid plus any or all of the Additive Alternates, if applicable.

The bidder understands that the Owner reserves the right to reject any or all bids and to waive any informalities in the bidding.

The bidder agrees that this bid shall be good and may not be withdrawn prior to **90 calendars** from the bid opening.

The bidder agrees that the Owner may reduce the quantities or may delete work items altogether if necessary to bring the contract awarded within funds available to finance the project. Such reduction or deletion of work shall not constitute a basis for withdrawal of this proposal.

Upon receipt of written notice of acceptance of this bid, bidder will execute the formal contract provided within 15 calendar days and deliver the Surety Bonds as required by the General Provisions. The bid security attached in the sum of \_\_\_\_\_

\_\_\_\_\_ is to become the property of the Owner in the event the contract and bonds are not executed within the time above set forth, as liquidated damages for the delay and additional expenses to the Owner caused thereby.

Respectfully submitted:

Name of Bidder: \_\_\_\_\_

By: \_\_\_\_\_

Name and Title: \_\_\_\_\_

Business Address: \_\_\_\_\_

(Affix corporate seal if bid is by a corporation)

**CERTIFICATE AS TO CORPORATE PRINCIPAL  
PROPOSAL**

I, \_\_\_\_\_ certify that I am the \_\_\_\_\_ of the corporation named as Bidder in the above Proposal; that \_\_\_\_\_ who signed the said Proposal on behalf of the Bidder was then \_\_\_\_\_ of said Corporation; that I know his/her signature and his/her signature thereto is genuine; and that said Proposal was duly signed, sealed and attested to for and in behalf of said Corporation by authority of its governing body and is within the scope of its corporate powers.

\_\_\_\_\_  
(Signature)

(Corporate Seal)

## BID BOND

KNOW ALL MEN BY THESE PRESENTS, THAT WE, THE UNDERSIGNED,

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*(Name of Principal)*

as PRINCIPAL, and

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*(Name of Surety)*

as SURETY, are held and are firmly bound unto **The City of Manchester, New Hampshire, Department of Aviation** hereinafter called the Owner, in the penal sum of

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lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

**THE CONDITION OF THIS OBLIGATION IS SUCH**, that whereas the Principal has submitted the accompanying Bid Amount of \_\_\_\_\_ for

***PARTIAL REHABILITATION OF RUNWAY 6-24***

**at**

**Manchester • Boston Regional Airport**

NOW, THEREFORE, if the Principal shall not withdraw said bid within 180 calendar days after the opening thereof, and shall within fifteen (15) calendar days after the prescribed forms are presented to him/her for signature, enter into a written Contract with the Owner in accordance with the bid as accepted, and give bonds with good and sufficient Surety or sureties, as may be required, for the faithful performance and proper fulfillment of such Contract; or in the event of the withdrawal of said bid within the period specified, or the failure to enter into such Contract and give such bonds within the time specified, if the Principal shall pay the Owner the difference between the amount specified in said bid and the amount for which the Owner may procure the required work or supplies or both, if the latter amount be in excess of the former, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above named Principal and Surety have executed this instrument under their several seals this \_\_\_\_\_ day of \_\_\_\_\_, name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

In presence of: \_\_\_\_\_ SEAL  
*Individual Principal*

\_\_\_\_\_

\_\_\_\_\_  
*Business Address*

\_\_\_\_\_  
*Individual Principal* SEAL

\_\_\_\_\_

\_\_\_\_\_  
*Business Address*

Attest:

\_\_\_\_\_

\_\_\_\_\_  
*Corporate Principal*

\_\_\_\_\_

\_\_\_\_\_  
*Business Address*

**Affix  
Corporate  
Seal**

By: \_\_\_\_\_

Attest:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
*Corporate Surety*

\_\_\_\_\_  
*Business Address*

**Affix  
Corporate  
Seal**

By: \_\_\_\_\_

*Attorney-in-Fact*

*\* Power of attorney for person(s) signing for surety company must be attached to this bond.*

**CERTIFICATE AS TO CORPORATE PRINCIPAL**

**BID BOND**

I, \_\_\_\_\_, certify that I am the  
\_\_\_\_\_ of the Corporation named as principal in the within  
bond; that \_\_\_\_\_, who signed the said bond on  
behalf of the Principal was then \_\_\_\_\_  
of said Corporation; that I know his/her signature, and his/her signature thereto is genuine, and  
that said bond was duly signed, sealed, and attested to for and in behalf of said Corporation by  
authority of its governing body.

\_\_\_\_\_

**Affix  
Corporate  
Seal**

**Manchester • Boston Regional Airport  
Partial Rehabilitation of Runway 6-24**

**Certification of Compliance with FAA Buy American Preference – Construction Projects**

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with its proposal. The bidder or offeror must indicate how it intends to comply with 49 USC § 50101, BABA and other related Made in America Laws, U.S. statutes, guidance, and FAA policies, by selecting one of the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (i.e., not both) by inserting a checkmark (✓) or the letter “X”.

☐ Bidder or offeror hereby certifies that it will comply with 49 USC § 50101, BABA and other related U.S. statutes, guidance, and policies of the FAA by:

- a) Only installing iron, steel and manufactured products produced in the United States;
- b) Only installing construction materials defined as: an article, material, or supply – other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives that are or consist primarily of non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber or drywall that have been manufactured in the United States.
- c) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
- d) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

- a) To provide to the Airport Sponsor or the FAA evidence that documents the source and origin of the iron, steel, and/or manufactured product.
- b) To faithfully comply with providing U.S. domestic products.
- c) To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.
- d) Certify that all construction materials used in the project are manufactured in the U.S.

☐ The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:

- a) To submit to the Airport Sponsor or FAA within 15 calendar days of being selected as the responsive bidder, a formal waiver request and required documentation that supports the type of waiver being requested.
- b) That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination that may result in rejection of the proposal.
- c) To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
- d) To furnish U.S. domestic product for any waiver request that the FAA rejects.



**Manchester • Boston Regional Airport  
Partial Rehabilitation of Runway 6-24**

- e) To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

**Required Documentation**

**Type 2 Waiver (Nonavailability)** - The iron, steel, manufactured goods or construction materials or manufactured goods are not available in sufficient quantity or quality in the United States. The required documentation for the Nonavailability waiver is

- a) Completed Content Percentage Worksheet and Final Assembly Questionnaire
- b) Record of thorough market research, consideration where appropriate of qualifying alternate items, products, or materials including;
- c) A description of the market research activities and methods used to identify domestically manufactured items capable of satisfying the requirement, including the timing of the research and conclusions reached on the availability of sources.

**Type 3 Waiver** – The cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components and subcomponents of the “facility/project.” The required documentation for a Type 3 waiver is:

- a) Completed Content Percentage Worksheet and Final Assembly Questionnaire including;
- b) Listing of all manufactured products that are not comprised of 100 percent U.S. domestic content (excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).
- c) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly and installation at project location.
- d) Percentage of non-domestic component and subcomponent cost as compared to total “facility” component and subcomponent costs, excluding labor costs associated with final assembly and installation at project location.

**Type 4 Waiver (Unreasonable Costs)** - Applying this provision for iron, steel, manufactured goods or construction materials would increase the cost of the overall project by more than 25 percent. The required documentation for this waiver is:

- a) A completed Content Percentage Worksheet and Final Assembly Questionnaire from
- b) At minimum two comparable equal bids and/or offers;
- c) Receipt or record that demonstrates that supplier scouting called for in Executive Order 14005, indicates that no domestic source exists for the project and/or component;
- d) Completed waiver applications for each comparable bid and/or offer.

**False Statements:** Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Title

**Manchester • Boston Regional Airport  
Partial Rehabilitation of Runway 6-24**

**CERTIFICATION REGARDING DOMESTIC PREFERENCES FOR PROCUREMENTS**  
**(2 CFR § 200.322; 2 CFR Part 200, Appendix II(L))**

The Bidder or Offeror certifies by signing and submitting this bid or proposal that, to the greatest extent practicable, the Bidder or Offeror has provided a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including, but not limited to, iron, aluminum, steel, cement, and other manufactured products) in compliance with 2 CFR § 200.322.



**FAA  
Airports**

# **Required Contract Provisions for Obligated Sponsors and Airport Improvement Program Projects**

(Issued on November 18, 2022)

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**Meaning of cell values in table below:**

- Info – Sponsor has discretion on whether to include clause in its contracts.
- Limited – Provision with limited applicability depending on circumstances of the procurement.
- n/a – Provision that is not applicable for that procurement type.
- NIS – Provision that does not need to be included or referenced in the solicitation document
- REF – Provision to be incorporated into the solicitation by reference.
- REQD – Provision the Sponsor must incorporate into procurement documents.

**Table 1 – Applicability of Provisions**

Provisions/Clauses	Dollar Threshold	Solicitation	Professional Services	Construction	Equipment	Property (Land)	Non-AIP Contracts
<a href="#">Access to Records and Reports</a>	\$ 0	NIS	REQD	REQD	REQD	REQD	n/a
<a href="#">Affirmative Action Requirement</a>	\$10,000	REQD	Limited	REQD	Limited	Limited	n/a
<a href="#">Breach of Contract</a>	\$250,000	NIS	REQD	REQD	REQD	REQD	n/a
<a href="#">Buy American Preferences</a>	\$ 0	REF	Limited	REQD	REQD	Limited	n/a
(1) <a href="#">Buy American Statement</a>	\$ 0	NIS	Limited	REQD	REQD	Limited	n/a
(2) <a href="#">Construction</a>	\$ 0	NIS	Limited	REQD	REQD	Limited	n/a
<a href="#">Civil Rights – General</a>	\$ 0	NIS	REQD	REQD	REQD	REQD	REQD
<a href="#">Civil Rights - Title VI Assurances</a>	\$ 0	REF	REQD	REQD	REQD	REQD	REQD
(1) <a href="#">Notice - Solicitation</a>	\$ 0	REQD	REQD	REQD	REQD	REQD	REQD
(2) <a href="#">Clause - Contracts</a>	\$ 0	NIS	REQD	REQD	REQD	REQD	REQD
(3) <a href="#">Clause – Transfer of U.S. Property</a>	\$ 0	NIS	n/a	n/a	n/a	Limited	REQD
(4) <a href="#">Clause – Transfer of Real Property</a>	\$ 0	NIS	n/a	n/a	n/a	REQD	REQD
(5) <a href="#">Clause - Construct/Use/Access to Real Property</a>	\$ 0	NIS	n/a	n/a	n/a	REQD	REQD
(6) <a href="#">List – Pertinent Authorities</a>	\$0	NIS	REQD	REQD	REQD	REQD	REQD
<a href="#">Clean Air/Water Pollution Control</a>	\$150,000	NIS	REQD	REQD	REQD	REQD	n/a
<a href="#">Contract Work Hours and Safety Standards</a>	\$100,000	NIS	Limited	REQD	Limited	Limited	n/a
<a href="#">Copeland Anti-Kickback</a>	\$ 2,000	NIS	Limited	REQD	Limited	Limited	n/a
<a href="#">Davis Bacon Requirements</a>	\$ 2,000	REF	Limited	REQD	Limited	Limited	n/a
<a href="#">Debarment and Suspension</a>	\$25,000	REF	REQD	REQD	REQD	Limited	n/a
<a href="#">Disadvantaged Business Enterprise</a>	\$ 250,000	REQD	REQD	REQD	REQD	REQD	n/a
<a href="#">Distracted Driving</a>	\$10,000	NIS	REQD	REQD	REQD	REQD	n/a
<a href="#">Domestic Preferences for Procurements</a>	\$0	NIS	REQD	REQD	REQD	REQD	Info
<a href="#">Equal Employment Opportunity</a>	\$10,000	NIS	Limited	REQD	Limited	Limited	n/a
(1) <a href="#">EEO Contract Clause</a>	\$10,000	NIS	Limited	REQD	Limited	Limited	n/a
(2) <a href="#">EEO Specification</a>	\$10,000	NIS	Limited	REQD	Limited	Limited	n/a
<a href="#">Federal Fair Labor Standards Act</a>	\$ 0	REQD	REQD	REQD	REQD	REQD	Info
<a href="#">Foreign Trade Restriction</a>	\$ 0	REQD	REQD	REQD	REQD	REQD	n/a
<a href="#">Lobbying Federal Employees</a>	\$ 100,000	REF	REQD	REQD	REQD	REQD	n/a
<a href="#">Occupational Safety and Health Act</a>	\$ 0	NIS	REQD	REQD	REQD	REQD	Info
<a href="#">Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment</a>	\$0	NIS	REQD	REQD	REQD	REQD	Info
<a href="#">Prohibition of Segregated Facilities</a>	\$0	NIS	Limited	REQD	Limited	Limited	n/a
<a href="#">Recovered Materials</a>	\$10,000	REF	Limited	REQD	REQD	Limited	n/a
<a href="#">Right to Inventions</a>	\$ 0	NIS	Limited	Limited	Limited	n/a	n/a
<a href="#">Seismic Safety</a>	\$ 0	NIS	Limited	Limited	Limited	n/a	n/a
<a href="#">Tax Delinquency and Felony Conviction</a>	\$ 0	NIS	REQD	REQD	REQD	REQD	n/a
<a href="#">Termination of Contract</a>	\$10,000	NIS	REQD	REQD	REQD	REQD	n/a
<a href="#">Veteran's Preference</a>	\$ 0	NIS	REQD	REQD	REQD	REQD	n/a

**ACCESS TO RECORDS AND REPORTS**  
**(2 CFR § 200.334, 2 CFR § 200.337, FAA Order 5100.38)**

The Contractor must maintain an acceptable cost accounting system. The Contractor agrees to provide the Owner, the Federal Aviation Administration and the Comptroller General of the United States or any of their duly authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO  
ENSURE EQUAL EMPLOYMENT OPPORTUNITY  
(41 CFR Part 60-4, Executive Order 11246)**

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

**Timetables**

Goals for minority participation for each trade:      **0.7%**

Goals for female participation in each trade:      6.9%

These goals are applicable to all of the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a) and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs (OFCCP) within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this notice and in the contract resulting from this solicitation, the "covered area" is **New Hampshire, Hillsborough and Rockingham Counties.**

**BREACH OF CONTRACT TERMS**  
**(2 CFR Part 200, Appendix II(A))**

Any violation or breach of terms of this contract on the part of the *Contractor* or its subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement.

Owner will provide *Contractor* written notice that describes the nature of the breach and corrective actions the *Contractor* must undertake in order to avoid termination of the contract. Owner reserves the right to withhold payments to Contractor until such time the Contractor corrects the breach or the Owner elects to terminate the contract. The Owner's notice will identify a specific date by which the *Contractor* must correct the breach. Owner may proceed with termination of the contract if the *Contractor* fails to correct the breach by the deadline indicated in the Owner's notice.

The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder are in addition to, and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by law.

## **FAA BUY AMERICAN PREFERENCE**

**(Title 49 USC § 50101; Executive Order 14005, *Ensuring the Future is Made in All of America by All of America's Workers*; Bipartisan Infrastructure Law (Pub. L. No. 117-58), Build America, Buy America (BABA))**

The Contractor certifies that its bid/offer is in compliance with 49 USC § 50101, BABA and other related Made in America Laws,<sup>1</sup> U.S. statutes, guidance, and FAA policies, which provide that Federal funds may not be obligated unless all iron, steel and manufactured goods used in AIP funded projects are produced in the United States, unless the Federal Aviation Administration has issued a waiver for the product; the product is listed as an Excepted Article, Material Or Supply in Federal Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued list.

The bidder or offeror must complete and submit the certification of compliance with FAA's Buy American Preference, BABA and Made in America laws included herein with their bid or offer. The Airport Sponsor/Owner will reject as nonresponsive any bid or offer that does not include a completed certification of compliance with FAA's Buy American Preference and BABA.

The bidder or offeror certifies that all constructions materials, defined to mean an article, material, or supply other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives that are or consist primarily of: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber; or drywall used in the project are manufactured in the U.S.

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<sup>1</sup> Per Executive Order 14005 "Made in America Laws" means all statutes, regulations, rules, and Executive Orders relating to federal financial assistance awards or federal procurement, including those that refer to "Buy America" or "Buy American," that require, or provide a preference for, the purchase or acquisition of goods, products, or materials produced in the United States, including iron, steel, and manufactured products offered in the United States.



### **Certification of Compliance with FAA Buy American Preference – Construction Projects**

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with its proposal. The bidder or offeror must indicate how it intends to comply with 49 USC § 50101, BABA and other related Made in America Laws, U.S. statutes, guidance, and FAA policies, by selecting one of the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (i.e., not both) by inserting a checkmark (✓) or the letter “X”.

- ☐ Bidder or offeror hereby certifies that it will comply with 49 USC § 50101, BABA and other related U.S. statutes, guidance, and policies of the FAA by:
- a) Only installing iron, steel and manufactured products produced in the United States;
  - b) Only installing construction materials defined as: an article, material, or supply – other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives that are or consist primarily of non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber or drywall that have been manufactured in the United States.
  - c) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
  - d) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

- a) To provide to the Airport Sponsor or the FAA evidence that documents the source and origin of the iron, steel, and/or manufactured product.
  - b) To faithfully comply with providing U.S. domestic products.
  - c) To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.
  - d) Certify that all construction materials used in the project are manufactured in the U.S.
- ☐ The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:
- a) To submit to the Airport Sponsor or FAA within 15 calendar days of being selected as the responsive bidder, a formal waiver request and required documentation that supports the type of waiver being requested.
  - b) That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination that may result in rejection of the proposal.
  - c) To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
  - d) To furnish U.S. domestic product for any waiver request that the FAA rejects.

- e) To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

### **Required Documentation**

**Type 2 Waiver (Nonavailability)** - The iron, steel, manufactured goods or construction materials or manufactured goods are not available in sufficient quantity or quality in the United States. The required documentation for the Nonavailability waiver is

- a) Completed Content Percentage Worksheet and Final Assembly Questionnaire
- b) Record of thorough market research, consideration where appropriate of qualifying alternate items, products, or materials including;
- c) A description of the market research activities and methods used to identify domestically manufactured items capable of satisfying the requirement, including the timing of the research and conclusions reached on the availability of sources.

**Type 3 Waiver** – The cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components and subcomponents of the “facility/project.” The required documentation for a Type 3 waiver is:

- a) Completed Content Percentage Worksheet and Final Assembly Questionnaire including;
- b) Listing of all manufactured products that are not comprised of 100 percent U.S. domestic content (excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).
- c) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly and installation at project location.
- d) Percentage of non-domestic component and subcomponent cost as compared to total “facility” component and subcomponent costs, excluding labor costs associated with final assembly and installation at project location.

**Type 4 Waiver (Unreasonable Costs)** - Applying this provision for iron, steel, manufactured goods or construction materials would increase the cost of the overall project by more than 25 percent. The required documentation for this waiver is:

- a) A completed Content Percentage Worksheet and Final Assembly Questionnaire from
- b) At minimum two comparable equal bids and/or offers;
- c) Receipt or record that demonstrates that supplier scouting called for in Executive Order 14005, indicates that no domestic source exists for the project and/or component;
- d) Completed waiver applications for each comparable bid and/or offer.

**False Statements:** Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

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Date

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Signature

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Company Name

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Title

## **GENERAL CIVIL RIGHTS PROVISIONS (49 USC § 47123)**

In all its activities within the scope of its airport program, the Contractor agrees to comply with pertinent statutes, Executive Orders, and such rules as identified in Title VI List of Pertinent Nondiscrimination Acts and Authorities to ensure that no person shall, on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

The above provision binds the Contractor and subcontractors from the bid solicitation period through the completion of the contract.

### **Title VI Solicitation Notice (49 USC § 47123, FAA Order 1400.11):**

The **City of Manchester – Department of Aviation**, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that for any contract entered into pursuant to this advertisement, **disadvantaged business enterprises** will be afforded full and fair opportunity to submit bids in response to this invitation and no businesses will be discriminated against on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability in consideration for an award.

### **Title VI List of Pertinent Nondiscrimination Acts and Authorities**

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “Contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 USC § 2000d *et seq.*, 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination in Federally-Assisted programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 USC § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973 (29 USC § 794 *et seq.*), as amended (prohibits discrimination on the basis of disability); and 49 CFR part 27 (Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance);
- The Age Discrimination Act of 1975, as amended (42 USC § 6101 *et seq.*) (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982 (49 USC § 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987 (PL 100-259) (broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);

- Titles II and III of the Americans with Disabilities Act of 1990 (42 USC § 12101, et seq) (prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities) as implemented by U.S. Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration’s Nondiscrimination statute (49 USC § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations);
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs [70 Fed. Reg. 74087 (2005)];
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC § 1681, et seq).

#### **Compliance with Nondiscrimination Requirements:**

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “Contractor”), agrees as follows:

1. **Compliance with Regulations:** The Contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Nondiscrimination:** The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.
3. **Solicitations for Subcontracts, including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the contractor’s obligations under this contract and the Nondiscrimination Acts and Authorities on the grounds of race, color, or national origin.
4. **Information and Reports:** The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the Sponsor or the Federal

Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

5. **Sanctions for Noncompliance:** In the event of a Contractor's noncompliance with the non-discrimination provisions of this contract, the Sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:
  - a. Withholding payments to the Contractor under the contract until the Contractor complies; and/or
  - b. Cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations, and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the Sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the Sponsor to enter into any litigation to protect the interests of the Sponsor. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

**CLEAN AIR AND WATER POLLUTION CONTROL**  
**(2 CFR Part 200, Appendix II(G); 42 USC § 7401, et seq; 33 USC § 1251, et seq)**

Contractor agrees to comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act (42 USC §§ 7401-7671q) and the Federal Water Pollution Control Act as amended (33 USC §§ 1251-1387). The Contractor agrees to report any violation to the Owner immediately upon discovery. The Owner assumes responsibility for notifying the Environmental Protection Agency (EPA) and the Federal Aviation Administration.

Contractor must include this requirement in all subcontracts that exceed \$150,000.

**CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS**  
**(2 CFR Part 200, Appendix II(E); 2 CFR § 5.5(b); 40 USC § 3702; 40 USC § 3704)**

**1. Overtime Requirements.**

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic, including watchmen and guards, in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

**2. Violation; Liability for Unpaid Wages; Liquidated Damages.**

In the event of any violation of the clause set forth in paragraph (1) of this clause, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this clause, in the sum of \$29 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this clause.

**3. Withholding for Unpaid Wages and Liquidated Damages.**

The Federal Aviation Administration (FAA) or the Owner shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this clause.

**4. Subcontractors.**

The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) and also a clause requiring the subcontractor to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this clause.

**COPELAND “ANTI-KICKBACK” ACT  
(2 CFR Part 200, Appendix II(D); 29 CFR Parts 3 and 5)**

Contractor must comply with the requirements of the Copeland “Anti-Kickback” Act (18 USC 874 and 40 USC 3145), as supplemented by Department of Labor regulation 29 CFR part 3. Contractor and subcontractors are prohibited from inducing, by any means, any person employed on the project to give up any part of the compensation to which the employee is entitled. The Contractor and each Subcontractor must submit to the Owner, a weekly statement on the wages paid to each employee performing on covered work during the prior week. Owner must report any violations of the Act to the Federal Aviation Administration.



**DAVIS-BACON REQUIREMENTS**  
**(2 CFR Part 200, Appendix II(D); 29 CFR Part 5; 49 USC § 47112(b); 40 USC §§ 3141-3144, 3146, and 3147)**

1. Minimum Wages.

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalent thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can easily be seen by the workers.

(ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination;
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, U.S. Department of Labor,

Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the Contractor, the laborers, or mechanics to be employed in the classification, or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii) (B) or (C) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding. The Federal Aviation Administration or the Sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the Federal Aviation Administration may, after written notice to the Contractor, Sponsor, Applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

### 3. Payrolls and Basic Records.

(i) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types

described in 1(b)(2)(B) of the Davis-Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records that show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit the payrolls to the applicant, Sponsor, or Owner, as the case may be, for transmission to the Federal Aviation Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR § 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (*e.g.*, the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker and shall provide them upon request to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit them to the applicant, Sponsor, or Owner, as the case may be, for transmission to the Federal Aviation Administration, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, Sponsor, or Owner).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR § 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR § 5.5 (a)(3)(i), and that such information is correct and complete;

(2) That each laborer and mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the “Statement of Compliance” required by paragraph (3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The Contractor or subcontractor shall make the records required under paragraph (3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the Sponsor, the Federal Aviation Administration, or the Department of Labor and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the Contractor, Sponsor, applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR § 5.12.

#### 4. Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman’s hourly rate) specified in the Contractor’s or subcontractor’s registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice’s level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits,

apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR § 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination that provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate that is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal Employment Opportunity. The utilization of apprentices, trainees, and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

#### 5. Compliance with Copeland Act Requirements.

The Contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

#### 6. Subcontracts.

The Contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR §§ 5.5(a)(1) through (10) and such other clauses as the Federal Aviation Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR § 5.5.

#### 7. Contract Termination: Debarment.

A breach of the contract clauses in paragraph 1 through 10 of this section may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR § 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements.

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes Concerning Labor Standards.

Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of Eligibility.

(i) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR § 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR § 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 USC § 1001.

**CERTIFICATION OF OFFEROR/BIDDER REGARDING DEBARMENT  
(2 CFR Part 180 (Subpart B); 2 CFR Part 200, Appendix II(H); 2 CFR Part 1200; DOT Order  
4200.5; Executive Orders 12549 and 12689)**

By submitting a bid/proposal under this solicitation, the bidder or offeror certifies that neither it nor its principals are presently debarred or suspended by any Federal department or agency from participation in this transaction.

**CERTIFICATION OF LOWER TIER CONTRACTORS REGARDING DEBARMENT**

The successful bidder, by administering each lower tier subcontract that exceeds \$25,000 as a “covered transaction”, must confirm each lower tier participant of a “covered transaction” under the project is not presently debarred or otherwise disqualified from participation in this federally-assisted project. The successful bidder will accomplish this by:

1. Checking the System for Award Management at website: <http://www.sam.gov>.
2. Collecting a certification statement similar to the Certification of Offeror /Bidder Regarding Debarment, above.
3. Inserting a clause or condition in the covered transaction with the lower tier contract.

If the Federal Aviation Administration later determines that a lower tier participant failed to disclose to a higher tier participant that it was excluded or disqualified at the time it entered the covered transaction, the FAA may pursue any available remedies, including suspension and debarment of the non-compliant participant.

**DISADVANTAGED BUSINESS ENTERPRISES**  
**(49 CFR Part 26)**

The Owner's award of this contract is conditioned upon Bidder or Offeror satisfying the good faith effort requirements of 49 CFR § 26.53.

As a condition of responsiveness, the Bidder or Offeror must submit the following information with its proposal on the forms provided herein:

- 1) The names and addresses of Disadvantaged Business Enterprise (DBE) firms that will participate in the contract;
- 2) A description of the work that each DBE firm will perform;
- 3) The dollar amount of the participation of each DBE firm listed under (1);
- 4) Written statement from Bidder or Offeror that attests their commitment to use the DBE firm(s) listed under (1) to meet the Owner's project goal
- 5) Written confirmation from each listed DBE firm that it is participating in the contract in the kind and amount of work provided in the prime contractor's commitment; and
- 6) If Bidder or Offeror cannot meet the advertised project DBE goal, evidence of good faith efforts undertaken by the Bidder or Offeror as described in appendix A to 49 CFR part 26. The documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.

The requirements of 49 CFR part 26 apply to this contract. It is the policy of the [Owner](#) to practice nondiscrimination based on race, color, sex, or national origin in the award or performance of this contract. The Owner encourages participation by all firms qualifying under this solicitation regardless of business size or ownership.

**Contract Assurance (49 CFR § 26.13) –**

The Contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- 1) Withholding monthly progress payments;
- 2) Assessing sanctions;
- 3) Liquidated damages; and/or
- 4) Disqualifying the Contractor from future bidding as non-responsible.

**Prompt Payment (49 CFR § 26.29) –**

The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than [15](#) days from the receipt of each payment the prime contractor receives from [The Owner](#). The prime contractor agrees further to return retainage payments to each



subcontractor within 15 days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the Owner. This clause applies to both DBE and non-DBE subcontractors.

**Termination of DBE Subcontracts (49 CFR § 26.53(f); acceptable/sample text provided) –**

The prime contractor must not terminate a DBE subcontractor listed in response to the condition on the previous page (or an approved substitute DBE firm) without prior written consent of the Owner. This includes, but is not limited to, instances in which the prime contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm.

The prime contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the contractor obtains written consent of the Owner. Unless the Owner consent is provided, the prime contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE.

The Owner may provide such written consent only if the Owner agrees, for reasons stated in the concurrence document, that the prime contractor has good cause to terminate the DBE firm. For purposes of this paragraph, good cause includes the circumstances listed in 49 CFR §26.53.

Before transmitting to the Owner its request to terminate and/or substitute a DBE subcontractor, the prime contractor must give notice in writing to the DBE subcontractor, with a copy to the Owner, of its intent to request to terminate and/or substitute, and the reason for the request.

The prime contractor must give the DBE five days to respond to the prime contractor's notice and advise the Owner and the contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Owner should not approve the prime contractor's action. If required in a particular case as a matter of public necessity (e.g., safety), the Owner may provide a response period shorter than five days.

In addition to post-award terminations, the provisions of this section apply to preaward deletions of or substitutions for DBE firms put forward by offerors in negotiated procurements.

**TEXTING WHEN DRIVING**  
**(Executive Order 13513; DOT Order 3902.10)**

In accordance with Executive Order 13513, “Federal Leadership on Reducing Text Messaging While Driving”, (10/1/2009) and DOT Order 3902.10, “Text Messaging While Driving”, (12/30/2009), the Federal Aviation Administration encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or subgrant.

In support of this initiative, the Owner encourages the Contractor to promote policies and initiatives for its employees and other work personnel that decrease crashes by distracted drivers, including policies that ban text messaging while driving motor vehicles while performing work activities associated with the project. The Contractor must include the substance of this clause in all sub-tier contracts exceeding \$10,000 that involve driving a motor vehicle in performance of work activities associated with the project.

#### **EQUAL OPPORTUNITY CLAUSE**

**(2 CFR Part 200, Appendix II(C); 41 CFR § 60-1.4; 41 CFR § 60-4.3; Executive Order 11246)**

During the performance of this contract, the Contractor agrees as follows:

(1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff, or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

(4) The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers' representative of the Contractor's commitments under this section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(5) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(6) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any such rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such

other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(8) The Contractor will include the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions, including sanctions for noncompliance: *Provided*, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

#### **STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS**

1. As used in these specifications:

- a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
- b. "Director" means Director, Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, or any person to whom the Director delegates authority;
- c. "Employer identification number" means the Federal social security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;
- d. "Minority" includes:
  - (1) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
  - (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);
  - (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
  - (4) American Indian or Alaskan native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the Contractor is participating (pursuant to 41 CFR part 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in

accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in a geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

- c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
- d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with onsite supervisory personnel such as superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other contractors and subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a contractor's work force.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR part 60-3.

l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel, for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant may be asserted as fulfilling any one or more of its obligations under 7a through 7p of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, sexual orientation, gender identity, or national origin.

11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR part 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee, the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g. those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).



**FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE)**  
**(29 USC § 201, et seq; 2 CFR § 200.430)**

All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR part 201, et seq, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part-time workers.

The *Contractor* has full responsibility to monitor compliance to the referenced statute or regulation. The *Contractor* must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.

**CERTIFICATION REGARDING LOBBYING**  
**(31 USC § 1352 – Byrd Anti-Lobbying Amendment; 2 CFR Part 200, Appendix II(I); 49 CFR**  
**Part 20, Appendix A)**

The Bidder or Offeror certifies by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Bidder or Offeror, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

**PROHIBITION OF SEGREGATED FACILITIES**  
**(2 CFR Part 200, Appendix II(C); 41 CFR Part 60-1)**

(a) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Employment Opportunity clause in this contract.

(b) “Segregated facilities,” as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

(c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Employment Opportunity clause of this contract.

**OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970  
(29 CFR Part 1910)**

All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. The employer must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The employer retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (29 CFR Part 1910). The employer must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

**PROCUREMENT OF RECOVERED MATERIALS**  
**(2 CFR § 200.323; 2 CFR Part 200, Appendix II(J); 40 CFR Part 247; 42 USC § 6901, et seq**  
**(Resource Conservation and Recovery Act (RCRA)))**

Contractor and subcontractor agree to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, and the regulatory provisions of 40 CFR Part 247. In the performance of this contract and to the extent practicable, the Contractor and subcontractors are to use products containing the highest percentage of recovered materials for items designated by the Environmental Protection Agency (EPA) under 40 CFR Part 247 whenever:

- 1) The contract requires procurement of \$10,000 or more of a designated item during the fiscal year;  
or
- 2) The contractor has procured \$10,000 or more of a designated item using Federal funding during the previous fiscal year.

The list of EPA-designated items is available at [www.epa.gov/smm/comprehensive-procurement-guidelines-construction-products](http://www.epa.gov/smm/comprehensive-procurement-guidelines-construction-products).

Section 6002(c) establishes exceptions to the preference for recovery of EPA-designated products if the contractor can demonstrate the item is:

- a) Not reasonably available within a timeframe providing for compliance with the contract performance schedule;
- b) Fails to meet reasonable contract performance requirements; or
- c) Is only available at an unreasonable price.

## **CERTIFICATION OF OFFEROR/BIDDER REGARDING TAX DELINQUENCY AND FELONY CONVICTIONS**

**(Section 8113 of the Consolidated Appropriations Act, 2022 (Public Law 117-103); DOT Order 4200.6)**

The applicant must complete the following two certification statements. The applicant must indicate its current status as it relates to tax delinquency and felony conviction by inserting a checkmark (✓) in the space following the applicable response. The applicant agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification in all lower tier subcontracts.

### **Certifications**

- 1) The applicant represents that it is ( ☐ ) is not ( ☐ ) a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.
- 2) The applicant represents that it is ( ☐ ) is not ( ☐ ) a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.

### **Note**

If an applicant responds in the affirmative to either of the above representations, the applicant is ineligible to receive an award unless the Sponsor has received notification from the agency suspension and debarment official (SDO) that the SDO has considered suspension or debarment and determined that further action is not required to protect the Government's interests. The applicant therefore must provide information to the owner about its tax liability or conviction to the Owner, who will then notify the FAA Airports District Office, which will then notify the agency's SDO to facilitate completion of the required considerations before award decisions are made.

### **Term Definitions**

**Felony conviction:** Felony conviction means a conviction within the preceding twenty four (24) months of a felony criminal violation under any Federal law and includes conviction of an offense defined in a section of the U.S. Code that specifically classifies the offense as a felony and conviction of an offense that is classified as a felony under 18 USC § 3559.

**Tax Delinquency:** A tax delinquency is any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

**TERMINATION FOR CONVENIENCE (CONSTRUCTION & EQUIPMENT CONTRACTS)**  
**(2 CFR Part 200, Appendix II(B); FAA Advisory Circular 150/5370-10, Section 80-09)**

The Owner may terminate this contract in whole or in part at any time by providing written notice to the Contractor. Such action may be without cause and without prejudice to any other right or remedy of Owner. Upon receipt of a written notice of termination, except as explicitly directed by the Owner, the Contractor shall immediately proceed with the following obligations regardless of any delay in determining or adjusting amounts due under this clause:

1. Contractor must immediately discontinue work as specified in the written notice.
2. Terminate all subcontracts to the extent they relate to the work terminated under the notice.
3. Discontinue orders for materials and services except as directed by the written notice.
4. Deliver to the Owner all fabricated and partially fabricated parts, completed and partially completed work, supplies, equipment and materials acquired prior to termination of the work, and as directed in the written notice.
5. Complete performance of the work not terminated by the notice.
6. Take action as directed by the Owner to protect and preserve property and work related to this contract that Owner will take possession.

Owner agrees to pay Contractor for:

1. Completed and acceptable work executed in accordance with the contract documents prior to the effective date of termination;
2. Documented expenses sustained prior to the effective date of termination in performing work and furnishing labor, materials, or equipment as required by the contract documents in connection with uncompleted work;
3. Reasonable and substantiated claims, costs, and damages incurred in settlement of terminated contracts with Subcontractors and Suppliers; and
4. Reasonable and substantiated expenses to the Contractor directly attributable to Owner's termination action.

Owner will not pay Contractor for loss of anticipated profits or revenue or other economic loss arising out of or resulting from the Owner's termination action.

The rights and remedies this clause provides are in addition to any other rights and remedies provided by law or under this contract.

**TERMINATION FOR CAUSE (CONSTRUCTION)**

Section 80-09 of FAA Advisory Circular 150/5370-10 establishes standard language for conditions, rights, and remedies associated with Owner termination of this contract for cause due to default of the Contractor.

**TRADE RESTRICTION CERTIFICATION**  
**(49 USC § 50104; 49 CFR Part 30)**

By submission of an offer, the Offeror certifies that with respect to this solicitation and any resultant contract, the Offeror –

- 1) is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (USTR);
- 2) has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country included on the list of countries that discriminate against U.S. firms as published by the USTR; and
- 3) has not entered into any subcontract for any product to be used on the Federal project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18 USC § 1001.

The Offeror/Contractor must provide immediate written notice to the Owner if the Offeror/Contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The Contractor must require subcontractors provide immediate written notice to the Contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR § 30.17, no contract shall be awarded to an Offeror or subcontractor:

- 1) who is owned or controlled by one or more citizens or nationals of a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR; or
- 2) whose subcontractors are owned or controlled by one or more citizens or nationals of a foreign country on such USTR list; or
- 3) who incorporates in the public works project any product of a foreign country on such USTR list.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

The Offeror agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in all lower tier subcontracts. The Contractor may rely on the certification of a prospective subcontractor that it is not a firm from a foreign country included on the list of countries that discriminate against U.S. firms as published by USTR, unless the Offeror has knowledge that the certification is erroneous.

This certification is a material representation of fact upon which reliance was placed when making an award. If it is later determined that the Contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration (FAA) may direct through the Owner cancellation of the contract or subcontract for default at no cost to the Owner or the FAA.



**VETERAN'S PREFERENCE**  
**(49 USC § 47112(c))**

In the employment of labor (excluding executive, administrative, and supervisory positions), the Contractor and all sub-tier contractors must give preference to covered veterans as defined within Title 49 United States Code Section 47112. Covered veterans include Vietnam-era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns (as defined by 15 USC § 632) owned and controlled by disabled veterans. This preference only applies when there are covered veterans readily available and qualified to perform the work to which the employment relates.

**CERTIFICATION REGARDING DOMESTIC PREFERENCES FOR PROCUREMENTS  
(2 CFR § 200.322; 2 CFR Part 200, Appendix II(L))**

The Bidder or Offeror certifies by signing and submitting this bid or proposal that, to the greatest extent practicable, the Bidder or Offeror has provided a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including, but not limited to, iron, aluminum, steel, cement, and other manufactured products) in compliance with 2 CFR § 200.322.

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**Item G-001 Special Work Requirements**

**GENERAL**

**001-1.1 General.** The purpose of these requirements is to ensure that the contract work does not damage private property or create any hazard to aircraft operations, and to bring to the Contractor's attention special coordination that the Contractor should be aware of that may be unique to airfield construction or unique to the Owner's Facility. It is Contractor's responsibility to conduct all work in strict accordance with the requirements set forth herein and to fully cooperate with the Resident Project Representative (RPR) in every way necessary to fulfill the purposes of these requirements as set forth above.

**001-1.2 Work Limitations.** There are no limitations on work hours. Nightwork is generally 7PM to 7AM. Work on weekends is permitted. Request to work on weekends shall be submitted to the RPR 72 hours in advance. Work may not be allowed on specific days as determined by the RPR and/or the Owner. Such days will not count towards exhausted contract time.

The following specification sections and regulations further define how work must be executed.

- General Provisions Section 80-04 Limitation of Operations
- General Provisions Section 80-04.1 Operational Safety on Airport During Construction
- FAA Advisory Circular 150/5370-2 (latest revision) "Operational Safety on Airports during Construction"
- The Construction Safety and Phasing Plans
- Airport Security and Compliance Requirements

**001-1.3 Prior Notification.** In accordance with Section 80-03 of the General Provisions, the Contractor shall submit their coordinated construction schedule showing all work activities for the RPR's review and acceptance prior to the pre-construction meeting. This schedule shall be updated during the project as specified.

In addition, the Contractor shall coordinate with the RPR and Owner and submit a detailed written weekly schedule of work that provides the work task by specification number for each day of the following week. The weekly schedule shall be submitted each week for the duration of the project, a minimum of 3-days prior to the week covered by the schedule.

In accordance with Section 80-04 of the General Provisions, the Contractor shall notify the RPR at least one (1) week in advance of the time he/she intends to start work or begin work in a new work area. It should be noted by the Contractor that 48 hours is the minimum time required by the Owner to issue a proper Notice to Airmen (NOTAM) of the pending construction activities. The Contractor's weekly construction schedules will also provide advance notice. The RPR and/or Owner may disallow work in areas not included in the weekly schedule and for which the required 1-week advance notice is not provided. Such instance shall not be a valid claim for delays. Prior to the beginning of work each day, the Contractor's Site Superintendent shall meet with the RPR to discuss the day's work schedule. The Contractor must notify the RPR at least 24-hours in advance of any items that will require acceptance testing. 72-hours' notice must be provided for testing on Mondays or testing the day immediately following a Holiday.

**001-1.4 Operational Safety.** Work performed under this contract will require safety and phasing in accordance with FAA regulations defined in Section 80-04.1 *Operational Safety on Airports During Construction* of the General Provisions. The Contractor shall take all precautions necessary to ensure the safety of operating aircraft, as well as his/her own equipment and personnel.

**001-1.5 Coordination.** The Contractor must coordinate all operations with the RPR and/or Owner. The

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RPR or Owner will handle coordination with the Federal Aviation Administration, Air Traffic Control Tower, and Tenants.

**001-1.6 Regulations.** All work shall be performed in accordance with FAA Advisory Circular 150/5370-2 (latest revision), “*Operational Safety on Airports during Construction*”.

**001-1.7 Construction Safety and Phasing Plans (CSPP).** In addition, all work shall be performed in accordance with the approved Construction Safety and Phasing Plans. The plans have been prepared by the Owner and RPR and approved by the FAA. It outlines the site-specific requirements for safely performing the work in accordance with AC 150/5370-2 (latest revision). The Contractor shall review, in detail, the Construction Safety and Phasing Plans.

Refer to the Construction Safety and Phasing Plans at the end of this specification.

**001-1.8 Contractor’s Safety Plan Compliance (SPCD).** Once the Contractor has read and fully understands the CSPP, they shall prepare and submit for approval a Safety Plan Compliance Document (SPCD) as required by FAA AC 150/5370-2 (latest revision).

Similar to a shop drawing the SPCD, including all requirements of this specification, shall be submitted to the RPR for review prior to the Pre-Construction Meeting. The SPCD must be reviewed and approved by the Owner prior to issuance of the notice-to-proceed.

The Contractor shall designate an individual as the Site Safety officer (SSO). The SSO may be the Contractor’s Site Superintendent who is responsible for day-to-day operations on the site. The SSO shall be on site daily and work on a daily basis to implement and enforce the CSPP and SPCD. The SSO shall conduct daily inspections. Among other items, the daily inspections shall include inspection of the barricades, lights, closure markers and protection of the taxiway/runway safety and object free areas. When necessary, the SSO will work with the RPR and Owner on safety related items.

**001-1.9 Barricades.** The Contractor shall place and maintain construction barricades to clearly define and close work areas to aircraft operations. The barricades are shown in the safety and phasing plans. Barricades shall be placed as shown or as directed by the RPR and/or Owner. Barricades shall meet the minimum requirement of FAA AC 150/5370-2 (latest revision). Refer to details in the contract documents. All temporary lights and barricades shall be weighted against jet blasts (100 mph). The barricades shall be supplied by the Contractor. The Contractor will maintain ownership of the barricades at the completion of the project. Reference Section 70-08 *Construction Safety and Phasing Plan (CSPP)* of the General Provisions for further requirements. There will be no additional compensation for maintenance and repair of barricades.

**001-1.10 Runway and Taxiway Closure Markers.** The Contractor shall transport, place, and maintain runway and taxiway closure markers to clearly define surfaces closed to aircraft operations. The Runway Closure Markers shall be supplied by the Airport, and Taxiway Closure Markers shall be supplied by the Contractor. The required markers are shown in the contract drawings. Markers shall be placed as shown or as directed by the RPR and/or Owner. Closure Markers shall meet the minimum requirement of FAA AC 150/5370-2 (latest revision). The method and procedure for securing the markers from dislodging must be approved by the Owner and RPR. Refer to marker details in the contract documents.

**001-1.11 Height Restrictions.** No equipment will be allowed to penetrate the Runway approach surfaces and transitions defined in 49 CFR Part 77 when the runway is active. Tall equipment, such as cranes or boom trucks, will be required to have a flag attached to the highest point. Additionally, during periods of darkness or reduced visibility a red light at the highest point shall also be required.

**001-1.12 Marking of Vehicles and Equipment.** Each motorized vehicle operating on the airport shall be

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equipped with an amber flashing light. All equipment must have a 3-foot square flag consisting of international orange and white squares not less than one foot square displayed in full view above the vehicle.

Equipment must also have an amber flashing light when operated during periods of limited visibility including darkness, fog, and rain. When not in use, all equipment shall be returned to the designated staging area and lowered to the maximum extent possible. All Contractor and subcontractor vehicles shall have the company identification plainly visible on both sides of the vehicle in order to identify the vehicle.

**001-1.13 Setback Requirements.** No construction operations shall be carried on within 129.5 feet from the centerline of any active taxiway or within 250 feet of the centerline of any active runway unless prior approval has been obtained and such actions are included in the phasing plans. The distances above represent the Taxiway Object Free Area and the Runway Safety Area respectively.

**001-1.14 Protection of Restricted Areas.** The Contractor shall stake and permanently mark on the ground with a readily recognizable marking (football field marking, flagging, cones, or similar material) the restriction lines adjacent to the work area so that workmen can readily recognize the limitations. The restricted areas are defined in the phasing plans and contract drawings.

**001-1.15 Trenches and Excavations.** The Contractor will not be permitted to leave any trenches or other excavations open at night, on weekends or at other times when the Contractor is not on the site, except as approved by the RPR. Open trenches must be clearly defined, confined to the work area(s), and completely surrounded with construction barricades. In addition, no excavations exceeding three inches (3”) in depth shall be left open within the object free areas while the runway, taxiways, or aprons, are in use. All excavations in paved areas must be backfilled and the pavement repaired and properly cured prior to the area being opened to traffic.

**001-1.16 Grading of Temporary Conditions.** The following applies when runways or taxiways must be re-opened. The Contractor shall ensure that the work area within the safety areas of the runways, taxiways and aprons are graded away from the pavements at a maximum slope of 5% for the first 10-feet and then 3% thereafter and shall be left in such condition that it will drain readily and effectively and will not pose a hazard to aircraft. No piles of soil shall be left unspread, no drops or projections in excess of three inches, no sharp changes in grade will be permitted, and the surface shall be thoroughly compacted.

**001-1.17 Radio Control and Communication.** At a minimum, the Contractor shall have two-way communications between the superintendent, escorts, and gate guards to coordinate access to and from the work site. No FAA or airport radio frequency shall be used for this purpose. The Owner-provided escorts will provide radio control and operation safety oversight.

When work areas are adjacent to, within, or require traversing active movement areas (such as taxiways and the runway) the Contractor shall ~~have on-site at all times at least two radios capable of monitoring the airport ground frequency (121.9). The radio shall be capable of reliable two-way communications from any location on the airport. The Contractor shall, before the start of construction, test his/her radio(s) with the appropriate agencies to demonstrate the capabilities and to demonstrate the performance of the operator and the equipment remain with the Owner-provided escorts at all times.~~ Only MHT Operations will communicate directly with the ATCT. ~~The Contractor shall operate these radios, at his/her expense~~

**001-1.18 Flag Persons.** The Contractor shall provide flag persons or uniformed officers at locations where the haul routes enter public streets or highways from airport property in accordance with the applicable local requirements. Additionally, the Contractor shall provide flag persons whenever the service road is restricted to one lane of traffic.

**001-1.19 Owner Provided Escorts.** The Owner will provide escorts throughout the duration of construction. Contractor to coordinate schedule of activities at least one week in advance so that the Owner ~~can schedule escorts.~~

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**001-1.20 Contractor Provided Escorts.** Not required.

**001-1.21 Haul Routes.** When public highways must be used for haul routes, it will become the Contractors responsibility to obtain the proper permits needed for this function and to obey all rules and regulations pertinent to the public highways.

Haul routes on the airport are shown on the contract drawings and the safety plans. The Contractors vehicles and equipment shall operate within the limits of the indicated haul route.

The Contractor's personnel and vehicles will not have access to the entire airport but shall be limited to the designated work area(s), staging area(s), and haul route(s).

All paved haul roads or access roads shall be kept clean at all times to prevent the accumulation of dirt and mud and the generation of dust by sweeping, washing or other methods as directed by the Airport. Unpaved haul roads, if any, shall be maintained by blading and filling when directed by the Airport and dust shall be controlled at all times.

All paved haul roads disturbed shall be restored to their original condition or better before the contract will be considered complete. All restoration and dust control on haul roads shall be at the Contractors expense.

All non-paved areas on the airport which are disturbed by the Contractors operations shall be scarified or otherwise loosened to a depth not less than five inches (5"). Clods shall be broken and the top three inches (3") of soil shall be worked into a satisfactory seedbed by disking, or by use of cultipackers, rollers, drags, harrows, or other appropriate means. This area shall be seeded, fertilized, and mulched.

**001-1.22 Security and Contractor Provided Gate Guards.** The Contractor shall comply with all airport security requirements as directed by the Owner. The Contractor's personnel, equipment, materials, and deliveries shall be subject to security checks prior to or while on airport property. Any delays incurred due to security inspections shall not be a valid claim for delays.

The Contractor is responsible for maintaining controlled access to the airfield via any and all project access gates. The Contractor must provide an Owner approved security gate guard during all work hours. Gate guards are required to have an Airport issued SIDA badge. Refer to Section G-003 Gate Guard Allowance. The Contractor shall only allow access to personnel directly working on the project. The access gate will be opened and closed by a MHT Airport Operations Specialist.

Personal Vehicles (POV) are not permitted on the Airfield. The Contractor shall provide safe and adequate transportation to and from the area where POVs are parked and the work area(s).

**001-1.23 Disposal of Surplus and Unsuitable Materials.** All surplus and unsuitable materials not identified to be retained by the Owner, whether suitable or unsuitable, shall be legally disposed of by the Contractor off airport property. No separate measurement or payment will be made for the handling, hauling or disposal, but rather shall be incidental to the item that generated that material.

**001-1.24 Storm Water Management.** The Contractor is responsible for managing all storm water for the duration of the project including all diversion and dewatering of the site. The Contractor is also responsible for repairing all damage caused by storm water. All costs associated with the storm water management shall be incidental to the overall project. The Contractor shall follow all U. S. Environmental Protection Agency and N.H. Department of Environmental Service regulations.

**001-1.25 U. S. EPA National Pollutant Discharge Elimination System (NPDES) Construction General Permit for Stormwater Discharges during Construction.** Storm Water Pollution Prevention Plan (SWPPP) and SWPPP monitoring are not required for this project.

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Partial Rehabilitation of Runway 6-24**

**001-1.26 Storage of Materials and Equipment.** The area for storing materials and parking/servicing equipment is shown in the contract drawings. The Contractor will be required to return all equipment to the appropriate Contractor's staging area at the end of work, each day, unless otherwise approved.

Equipment shall be parked in the designated area when not in use.

The Contractor shall provide all necessary temporary fencing and gates to protect materials and equipment from pilferage. The Owner is not responsible for any vandalized equipment or materials stored on the property.

Any area occupied or utilized by the Contractor shall be maintained in a clean and orderly condition satisfactory to the Owner. At the completion of the project, all Contractors' facilities shall be removed promptly and in a workman like manner and the area left clean and free of all debris or surplus material. The Contractor is responsible for restoring to original condition any areas used for the Contractor's operation at no additional cost to the Owner.

**001-1.27 Maintenance of the Construction Site.** The Contractor shall keep the construction site free of paper, boxes, and other debris that could be blown onto the runways, taxiways, and/or aprons.

All airport pavements shall be kept clear and clean at all times. All rocks, mud, and other debris carried on to the airport pavement by the Contractor's equipment must be report to the RPR or Airport Operations. Airport Operations will then close the affected area to air traffic and the Contractor will immediately sweep the area to the satisfaction of Airport Operations.

The Contractor shall have access to the equipment for the application of water to control dust within the construction site and on haul roads. The equipment shall be equipped with a shut-off control valve which can be operated from the cab by the operator. The Contractor shall apply water for dust control as necessary to prevent dust from the construction site and/or haul roads from being a hazard to aircraft and from being a nuisance to the public as direct by the RPR. All water shall be supplied by the Contractor at no additional cost to the Owner.

The Contractor shall maintain at the job site at all times while the construction under this contract is in progress a self-propelled, self-contained vacuum sweeper with rotating brooms and with a 4-cubic yard capacity approved by the RPR. The sweeper shall operate as necessary to keep active aircraft pavements, access roads and the work areas clean. At the close of each day's work, all active aircraft pavements and airport paved roads used or dirtied by the Contractor shall again be swept.

The Contractor shall also be responsible for supplying any other equipment as may be necessary to clean all areas that are contaminated as a result of his/her operations to the complete satisfaction of the RPR and the Owner.

Trucks loaded in the construction area shall have loads trimmed as necessary to ensure that no particles, stones, or debris will fall off and that no legal load limits are exceeded.

The Contractor shall be particularly careful not to track foreign material onto pavements outside of the work area(s) (e.g., tack-coat, rocks, etc.). The Contractor shall be responsible for removing foreign materials from vehicle tires prior to the vehicle leaving its work area.

**001-1.28 Maintenance of the Existing Airfield Lighting.** All existing airfield lighting systems required to safely operate aircraft shall be operational each night and during inclement weather throughout the construction period.

It shall be the responsibility of the Contractor to check the operation of the existing lights each day, to notify the RPR and the Owner of any problems and make any repairs necessary due to his/her operation.

The Contractor shall furnish and install all materials necessary to provide temporary lighting and make any temporary connections to keep the existing airfield lighting operational until the new lighting fixtures, cables, etc. can be installed.



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**001-1.29 Smoking.** Absolutely no smoking will be permitted within the AOA. Any Contractor violating this rule shall be asked to leave the premises.

**001-1.30 Employee Identification Badges.** Full-time competent and responsible employees of the Contractor, such as superintendents and foremen, shall obtain an Airport SIDA badge. Additionally, employees who will be onsite for more than two continuous weeks shall obtain an Airport SIDA badge. The SIDA badge requires finger printing screening and a criminal history check. The badge application process may take up to fourteen (14) days, the Contractor shall plan accordingly.

The Contractor shall have a minimum of 1/2 (50%) of on-site workers, including sub-contractors, submit to the badging process, unless otherwise approved by MHT Operations Management. Badged individuals must display their Airport issued badges on their outermost garment at all times while on the airfield.

The costs associated with Airport issued security access badges (approx. \$100 each) are the responsibility of the Contractor and shall not be paid for by the Owner.

At all times while on the airfield, non-badged workers must be:

1. Within 100 feet of a badged worker
2. Within visual contact of a badged worker
3. Able to respond to the requests of a badged worker
4. Able to command the attention of a badged worker.

Any non-badged workers will not be allowed on the airfield without valid picture identification acceptable to the TSA (current and valid driver's license, passport, etc.), and shall remain with a badged worker or Airport escort at all times.

The Contractor shall provide the Owner with a list of employees on the job site and their badge number. The list shall include subcontractors and employees. The list shall be updated and submitted weekly.

**Upon completion of the contract the Contractor shall turn all the badges into the Owner for disposal.**

**001-1.31 Record Documents.** The Contractor shall provide all Final Project Documentation as specified throughout the projects specifications and summarized in FAA General Provisions Section 90 *Measurement and Payment*, paragraph 90-11 *Contractor Final Project Documentation*, and Specification G-002 *Record Documents*. The As-built Plans shall also include digital submission in AutoCAD and PDF formats.

## **MATERIALS**

**001-2.1 Materials.** Prior to ordering, the Contractor shall submit shop drawings to the RPR for all materials to be used on the project. The submittals and shop drawings shall include a manufacturer's certification that each product meets the specified standard(s), when applicable. Materials not reviewed and approved prior to any installation for the project are subject to having the Contractor remove the unacceptable materials and replaced with approved materials at no additional expense to the Owner.



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Rehabilitate Runway 17-35**

**METHOD OF MEASUREMENT**

**001-3.1 Mobilization.** Mobilization shall be measured in accordance with Item C-105 *Mobilization* lump sum item.

**001-3.2 Safety and Phasing.** Safety and Phasing items as outlined in Section G-004 *Maintenance and Protection of Traffic* and the Contract Documents shall include: Contractor provided barricades, cones, taxiway closure signs, lighted X for runway closure, construction signs, furnishing and installing blank panels for existing guidance signs, covering lights during closures as indicated, disabling circuits during closures as indicated, routing new temporary FAA L-824 cable with temporary connections to keep light circuits active as indicated, lockout/tagout of circuits, maintenance of the construction site, sweeping, application of water for dust control and clean-up of stockpiles on pavements, flaggers, ~~radios~~, training, badging, badging fees, preparation of required schedules, and all requirements of the project safety and phasing plans. It shall also include all work associated with the Contractor provided barricades. Assembly, transport, placement, repositioning, maintaining, disassembly and removal of all safety and phasing items shall not be measured separately but rather shall be considered incidental to the item. All Safety and Phasing materials and work will not be measured separately and shall be incidental to the lump sum item for the requirements outlined in Section G-004 *Maintenance and Protection of Traffic*.

**001-3.3 Contractor's Safety Plan Compliance Document (SPCD).** The Contractor's preparation and submission of the SPCD will not be measured separately and shall be incidental to the lump sum item for the requirements outlined in Section G-004 *Maintenance and Protection of Traffic*.

**001-3.4 Safety Barricades.** Safety barricades will not be separately measured and shall be incidental to the lump sum item as outlined in Item G-004 *Maintenance and Protection of Traffic*.

**001-3.5 Gate Guard - Allowance.** Measurement for this allowance will be as outlined in Item G-003 *Gate Guard Allowance Item*.

**001-3.6. USEPA NPDES Construction General Permit (CGP) for Stormwater Discharges during Construction/SWPPP.** Not used.

**BASIS OF PAYMENT**

**001-4.1 Mobilization.** Mobilization will be paid for in accordance with the Item C-105 *Mobilization* lumpsum item.

**001-4.2 Safety and Phasing.** Payment for all Safety and Phasing materials and work will not be paid for separately and will be incidental to lump sum item as outlined in Item G-004 *Maintenance and Protection of Traffic*. Payment thereof shall constitute full compensation for all labor, preparation, materials, equipment, expenses, and incidentals. Payment shall be made after review and upon acceptance of the Contractor's Safety Plan Compliance Document by the Owner and in accordance with the requirements in Item G-004 *Maintenance and Protection of Traffic* Basis of Payment.

**001-4.3 Safety Plan Compliance Document (SPCD).** Payment for the preparing, furnishing materials and implementing the SPCD, will not be paid for separately and will be incidental to lump sum item as outlined in Item G-004 *Maintenance and Protection of Traffic*. Payment thereof shall constitute full compensation for all labor, preparation, materials, equipment, expenses, and incidentals. Payment shall be made after review and upon acceptance of the document by the Owner and in accordance with the requirements in Item G-004 *Maintenance and Protection of Traffic* Basis of Payment.

**001-4.4 Safety Barricades.** Safety barricades will not be paid for separately and will be incidental to the lump sum item as outlined in Item G-004 *Maintenance and Protection of Traffic*. Payment thereof shall constitute full compensation for all labor, preparation, materials, equipment, expenses, and incidentals. Payment shall be made after review and upon acceptance of the materials by the Owner and in accordance

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with the requirements in Item G-004 *Maintenance and Protection of Traffic* Basis of Payment.

**001-4.5 Gate Guard - Allowance.** Payment for this allowance will be paid as outlined in Item G-003 *Gate Guard Allowance*.

**Payment shall be made under:**

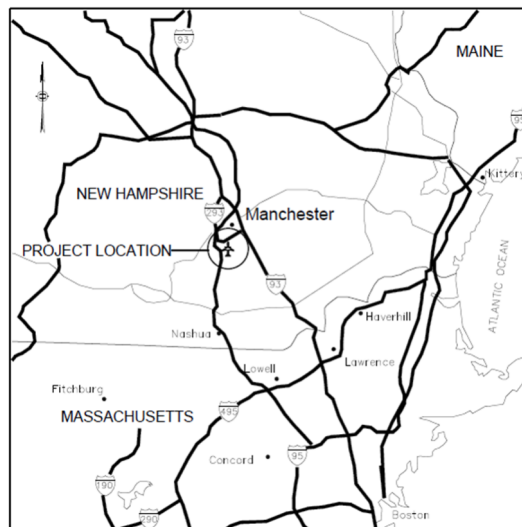
Refer to the individual item descriptions from this Section for measurement and payment as referenced above. These referenced items from this section are to be measured and paid under other referenced item sections of the Contract. Any other items, not identified under the Method of Measurement and Basis of Payment as outlined above, shall be considered incidental to the overall project, and will not be measured or paid for separately.

**Construction Safety and Phasing Plan Follows**



Manchester – Boston Regional Airport  
**Partial Rehabilitation of Runway 6-24**  
FAA AIP #: 3-33-0011-TBD-2023

**CONSTRUCTION SAFETY AND PHASING PLAN (CSPP)**



Prepared by:

**Jacobs**

Jacobs Engineering Inc.  
November 2022

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## 1. GENERAL

It is imperative that all personnel who may have a role in the safety and/or security of Manchester-Boston Regional Airport, and any associated construction and staging areas, be thoroughly familiar with their responsibilities as described herein, all personnel involved in the project are mutually responsible for the safety and security of Manchester-Boston Regional Airport and the traveling public. Safety and security must be the main priority when coordinating daily activities and work assignments.

Manchester-Boston Regional Airport is owned and operated by the City of Manchester, Department of Aviation. When the term “Airport” or “Airport Operator” is used herein it shall be understood to mean the City of Manchester, Department of Aviation.

## 2. PROJECT DESCRIPTION

The base bid work to be completed consists of the following:

- Rehabilitate two 25-foot-wide pavement sections of Runway 6-24, approximately 4,380 feet long, along with twelve patches approximately 13-feet by 25-feet
- Seal coat and crack repair/sealing the remainder of Runway 6 south-west of the Runway 6-24/17-35 intersection
- Repaint select markings on Runway 6-24 and intersecting taxiways
- Rehabilitate a 150-foot by 360-foot portion of Runway 6-24 at the Runway 24/Taxiway K intersection
- Rehabilitate an approximately 7,800 square yard portion of the Taxiway H/JK intersection and 780 square yards of Taxiway J

Additive Alternates (ADD-ALT) consist of the following:

- ADD-ALT #1 Seal coat and crack repair/sealing remainder of Runway 24 northeast of the Runway 6-24/17-35 intersection

General work items include:

- Construction safety and phasing to include barricades, lights, and signs
- Milling of the existing HMA pavement
- Installation of new drainage conduits to drain the electrical system
- Removal of electrical structures, pipes, ducts, and lights
- New pavement marking
- New in-pavement edge light and new centerline lights
- Replacement of pavement temperature and moisture sensors
- Light base adjustments for all existing base cans to be reused within the paving limits
- Crack repairs/sealing of the existing milled surfaces
- New hot mix asphalt pavements
- Pavement grooving

The project is anticipated to be completed in four (4) phases. Construction phases are shown on the Construction Safety and Phasing drawings which are included by reference to the Project Plans.

### **3. COORDINATION**

The Airport Operator will notify the tenants, FBO's, local users, and any field operations personnel of the planned construction activity via the following methods or a combination thereof: public 'flyers', notification calls/emails/letters, local publication briefings, and project meetings.

The project shall be coordinated among the MHT, the FAA, the RPR, and Contractor in the following manner:

#### **a. Pre-Bid Meeting**

At the pre-bid meeting, the Construction Safety and Phasing Plan (CSPP) will be introduced as the standard for operational safety during construction in accordance with FAA AC 150/5370-2G (current edition). Contractors will be made aware of the operational impacts on certain aspects of their construction and should plan accordingly. In addition, Contractors will be informed of the requirement for producing a Safety Plan Compliance Document (SPCD) prior to beginning construction. The SPCD describes how the Contractor plans to comply with the requirements of the CSPP.

#### **b. Pre-Construction Meeting**

In addition to the standard agenda items concerning the award of construction, this meeting will again present the CSPP. During the pre-construction meeting, the Contractor will be informed of the specific operations impacts to construction and safety requirements. Prior to the construction Notice to Proceed, the Contractor must meet the requirements of providing an approved SPCD.

#### **c. Contractor progress meetings**

Weekly progress meetings will be held with the Airport Operator, the Contractor and the RPR. Safety is a required standing agenda item and will include both operational and personal safety. Airport tenants and users will be invited to these progress meetings.

In addition to progress meetings, the Airport Operator, the Contractor and the RPR will meet prior to the end of each phase in order to coordinate the location, limits, NOTAMS, and notices required for the next construction phase work area.

#### **d. Scope or Schedule Changes**

Changes to the scope of work or construction schedule as detailed here-in may require portions of this document to be revised and submitted for approval by the Airport Operator and/or the FAA. Approval may take up to 45 working days.

**e. FAA ATO & SEC Coordination**

Runway 6-24 will be closed during construction. The Taxiway K and Runway 24 intersection will be closed during Phases B and D. Coordination shall be made with the air traffic control tower (ATCT) to allow aircraft back-taxi operations on Runway 17.

Refer to the Section 5 entitled 'AREAS AND OPERATIONS AFFECTED BY CONSTRUCTION ACTIVITY' of this document for additional information.

**f. Contact Information:**

Reference Section 11.a. entitled '*List of Responsible Representatives/ Points of Contact*'.

## 4. PHASING

This project is divided into specific phases of construction to minimize disruptions and maintain a safe environment for airport operations. The work will be completed in four (4) construction phases. Construction will take place during daytime and nighttime hours. Contractor must coordinate with Airport Operations before beginning all construction phases.

**a. Phase Elements**

(1) Areas closed to aircraft operations:

Phase A takes place ~~in~~ Runway 6 ~~southwest~~ of the Runway 6-24/17-35 intersection. This phase includes the following closures:

- Runway 6-24
- Taxiways M and M1
- Taxiway Z closed from Runway 6-24 to the Ammon Ramp
- Taxiway A closed from Runway 6-24 to Taxiway Z

Phase B reconstructs the Runway 6-24 and Taxiway ~~HK~~ intersection. This phase includes the following closures:

- Runway 6-24
- Taxiway M and M1
- Taxiway Z closed from Runway 6-24 to Ammon Ramp
- Taxiway A closed from Runway 6-24 to Taxiway Z
- Taxiway H north of Taxiway B
- Taxiway J
- Taxiway K south of Taxiway K2

Phase C takes place concurrently with Phase 2 of the Runway 17-35 Rehabilitation project. This phase includes the following closures:

- Runway 17-35 north of the Runway 6-24/17-35 intersection (Partially Closed Runway 17-35 is open south of Taxiway B)
- Runway 6-24
- Taxiway K1 and K2
- Taxiway J
- Taxiway M and M1
- Taxiway Z closed from Runway 6-24 to Ammon Ramp

- Taxiway A closed from Runway 6-24 to Taxiway Z

Phase D includes closure of ~~Runway 24 north of the~~ Runway 6-24/~~17-35 intersection~~ for seal coating, including ADD-ALT #1 work. This phase includes the following closures:

- Runway 6-24
- Taxiway K south of Taxiway K2
- Taxiway H north of Taxiway B
- Taxiway J
- Taxiway M and M1
- Taxiway Z closed from Runway 6-24 to Ammon Ramp
- Taxiway A closed from Runway 6-24 to Taxiway Z

(2) Phase Durations:

Phase A – 14 Calendar Days

Phase B – 10 Calendar Days

Phase C – 7 Calendar Days

Phase D – ~~37~~ Calendar Days

**Overall Project Duration: ~~3438~~ Calendar Days (See concurrent phases on Drawing G-100)**

(3) Taxi Routes:

Contractor to coordinate setup of construction safety signs and barricades.

Note: Airport operations will coordinate with Air Traffic Control (ATCT) for movement during closures.

Phase A – Runway 6-24 is closed. See Section 4.a for taxiway closures. Taxi to Runway 17 via Taxiways H, K, K1 & K2. Taxi to Runway 35 via Taxiway A, A1 & A2.

Phase B – Runway 6-24 is closed. See Section 4.a for taxiway closures. Aircraft shall back-taxi to Runway 17 via Runway 17, Taxiways K1 and K2. Taxi to Runway 35 via Taxiway A, A1 & A2.

Phase C – Runway 6-24 is closed. See Section 4.a for taxiway closures. Taxi to Runway 17 via Taxiways H, K, K1 & K2. Taxi to Runway 35 via Taxiway A, A1 & A2.

Phase D – Runway 6-24 is closed. See Section 4.a for taxiway closures. Aircraft shall back-taxi to Runway 17 via Runway 17, Taxiways K1 and K2. Taxi to Runway 35 via Taxiway A, A1 & A2.



(4) Emergency Access Routes:

- The Contractor shall ensure emergency services shall always have access to all areas of the airport. Airport Operations shall notify ARFF 72 hours prior to the start of construction.

(5) Construction Staging Areas:

- The construction staging areas for this project shall be located as shown on the attached drawings.
- Any deviations from the planned staging area location will be as determined by the Airport.
- The height of equipment and stockpiles shall be limited to 20 feet as shown on the reference Construction Safety and Phasing Plan drawings.
- Equipment stationed within a staging area shall not obstruct nor impede aircraft or airport vehicle movement or any protected imaginary surface.

(6) Construction Access and Haul Routes:

- Access to the airfield shall be via the designated haul routes and existing airport access Gates #1 and #39 as shown on the attached drawings. See drawing no. G-004 for locations.
- Haul routes will require use of active, public roadways. The Contractor shall not impede vehicles on public roadways during hauling activities.
- Airport Operations will lock the access gate when the Contractor is not on-site. During all work hours the Contractor's security guard shall control access by allowing only authorized vehicles and personnel into the Airport.

(7) Impacts to Visual Aids/NAVAIDS:

- The locations of the NAVAID critical areas are shown on the attached drawings. This project will require work within NAVAID critical areas. Work within NAVAID critical areas will be coordinated with FAA 45 days in advance.

(8) Lighting and Marking Changes:

- The Contractor shall disable portions of the existing airport lighting by disconnecting electrical and covering or removing lights and removing and replacing sign panels with blank panels. Refer to the drawings for the locations of the lights and signs.
- Centerline markings leading into work areas shall be removed by the Contractor.

(9) Available Runway Length:

- None. Runway 6-24 will be closed full length.

(10) Declared Distances:

- None. Runway 6-24 will be closed full length.

(11) Required Hazard Marking and Lighting:

- Refer to Section 7.b for vehicle marking and lighting.

(12) Lead Times:

- The Contractor shall provide 72-hour advanced notice prior to the start of work and advancement to the next Phase of work.

**b. Construction Safety and Phasing Plan Drawings**

- Refer to the Construction Safety and Phasing Plan Drawings found in the plans.

## **5. AREAS AND OPERATIONS AFFECTED BY CONSTRUCTION ACTIVITY**

**a. Identification of Affected Areas**

**(1) Closing, or partial closing of runways, taxiways and aprons:**

Refer to Section 4.a entitled '*Phase Elements*'.

**(2) Closing of Emergency access routes:**

Emergency response access routes will not be impeded during construction. The work to be performed will occur in a manner that allows existing pavements to be always accessible and traversable by emergency response crews. ARFF response to both runways will be reviewed and confirmed with the Airport Operator prior to the commencement of any construction phase of this project.

**(3) Closing of access routes used by airport and FBO support vehicles:**

Vehicular access routes used by the airport will not be closed. All will be advised to avoid work areas whenever possible due to areas where construction vehicles will be traveling.

**(4) Interruption of utilities, including water supplies for firefighting:**

Utilities, including water supplies for firefighting, will not be interrupted during construction. If required, the contractor shall provide advance notice of any utility interruptions.

**(5) Approach/departure surfaces affected by heights of objects:**

Object heights are specified to not affect the approach/departure surfaces.

**(6) Construction areas:**

Refer to the construction areas, storage areas, and access/haul routes as shown on the referenced Construction Safety and Phasing Plans. All work conducted by the Contractor within the Taxiway Object Free Area (TOFA) shown on the drawings will be conducted with a partial or total closure of the Taxiway. All Contractor escorts will monitor radios when traversing active aircraft areas and ensure that construction equipment will give the right of way to aircraft. The Contractor shall ensure that all construction equipment shall give the right of way to aircraft. The Airport will provide escorts whenever the Contractor is working in the AOA. Contractor vehicle operators will always remain with the escort when traveling to and from the work site. The Contractor shall be responsible for maintaining pavements free of foreign object debris (FOD) by sweeping any construction debris from the pavements. The sweeper shall be motorized. The sweeper shall be equipped with a vacuum and have not less than a 6 cubic yard storage container. The sweeper shall apply water prior to sweeping to minimize dust.

**b. Mitigation of Effects**

**(1) Temporary changes to runway and/or taxi operations:**

Taxiway operations will be impacted during each phase of the project. Refer to Section 4.a above. The Contractor will give a minimum of 1-week advance notice to the Airport Operator for any phase that requires a taxiway closure. The Airport Operator will coordinate all taxiway restrictions with the appropriate FAA Airports Regional or District Office and issue NOTAMs as required.

Should there be a need for a temporary change of the Runway or adjacent taxiway condition, such as during an emergency, the Airport Operator will notify and coordinate with the Contractor. The Contractor will remove the barricades/safety items as quickly as possible. Everyone will remain clear of the area until notified by the Airport Operator that work may resume.

**(2) Detours for Emergency and other airport vehicles:**

Emergency response access to areas of the airport will not be impeded during construction. When possible, all vehicles will be advised to avoid work areas due to general construction operations.

**(3) Maintenance of essential utilities:**

Essential utilities are not expected to be impacted during the construction activity. Should an unforeseen utility be encountered and determined to be essential, the contractor shall clear the area around the utility, and it shall be protected.

**(4) Temporary changes to air traffic control procedures:**

Aircraft ground traffic patterns will be impacted during this project due to partial taxiway closures. Refer to Section 4.a above

## **6. PROTECTION OF NAVIGATION AIDS (NAVAIDS)**

NAVAID critical areas are shown on the referenced Construction Safety and Phasing Plan drawings. Impacts to NAVAIDS will be coordinated with the local FAA technical service representative through MHT and the RPR. Equipment/materials stockpiles are not permitted in the NAVAID critical areas. The Contractor will be required to verify the location of all

utilities in the field prior to starting excavation. Any impact to NAVAIDs, airfield lighting circuits, communication or power circuits shall be immediately communicated to MHT Operations through the RPR for coordination with the FAA, ATC, and any other relevant stakeholder.

## **7. CONTRACTOR ACCESS**

The Contractor shall be provided with an escort by the Airport for all Phases. Refer to Section 4.a for airport access and haul routes in the referenced Construction Safety and Phasing Plan drawings.

### **a. Location of Stockpiled Construction Materials**

All stockpiles and construction materials shall be located within the Contractor's construction staging area. If there is any deviation from the planned area, then the Contractor must obtain approval regarding the location of the stockpiled materials from the Airport. No materials shall be stockpiled within the TOFA or ROFA. The TOFA and ROFA dimensions are shown on the referenced Construction Safety and Phasing Plan drawings.

### **b. Vehicle and Pedestrian Operations**

#### **1. Construction Site Parking:**

- Contractor employee parking shall be in the Contractor's staging area as shown. It is the Contractor's responsibility to establish a privately owned vehicle (POV) parking area and safely transport work crews from the POV parking area to the construction site. The Contractor must obtain approval regarding the location of the parked vehicles from the Airport prior to the start of construction. No personal vehicles shall operate on the airport outside of the designated parking area.

#### **2. Construction Equipment Parking:**

- The Contractor shall park and service all construction vehicles in an area designated by the Airport outside the TOFA. Inactive equipment shall not be parked on a closed taxiway or runway. Return all equipment to the construction staging area at night, on weekends, holidays and when not in use.

#### **3. Access and haul roads:**

- The haul routes are defined as shown on the referenced Construction Safety and Phasing Plan drawings. The Contractor shall not use any access or haul roads other than those approved. The Contractor's equipment shall not operate on any taxiways that are open to aircraft.
- When required, the Contractor's equipment shall yield and give way to all aircraft. When aircraft and construction equipment are passing, the Contractor shall provide a minimum of 50 ft. clear distance between the equipment and wingtips.
- The Contractor shall keep the haul routes clear of debris or FOD at all times.

4. Marking and lighting of vehicles:
  - All vehicles shall comply with FAA AC 150/5210-5D, Painting, Marking, and Lighting of Vehicles Used on an Airport.
  - All vehicles to be used on the airport shall have the company logo or name visible and legibly identified on both sides of vehicle.
  - Each construction vehicle shall be equipped with an approved yellow rotating or flashing beacon light and this light must be unobstructed from view.
  - Each piece of construction equipment shall have a 3' x 3' orange/white checkered flag attached to their highest point.
5. Description of proper vehicle operations:
  - Contractor vehicle operators shall always remain with the Airport escort while traveling to or from the work site.
  - At all times, vehicles shall give right of way to any passing aircraft.
  - When within the Airport Operations Area (AOA), all construction vehicles must remain within the designated work areas and travel along the planned haul routes.
  - If a vehicle is inoperable due to a mechanical emergency, it must be moved to a safe area, away from aircraft and airport vehicles, for normal repairs that take less than 10 minutes or removed from within the AOA for complex repairs requiring extended time.
  - Repairs involving the use of petrochemicals and other flammable fluids, flammable aerosols and powders, and small parts and accessories that can easily become FOD shall not be conducted on the airfield.
  - Vehicles that lose communications shall immediately return to the Contractor staging area along the approved haul route.
6. Required escorts:
  - The Contractor shall be provided with an escort by the Airport for all Phases.
7. Training requirements for vehicle drivers:
  - Prior to operating on the Airfield, the Airport shall brief the Contractor on the features of the airfield and areas affected by the construction activity. This includes but is not limited to; the location of airport runway and taxiway safety areas, airfield signage, NAVAIDs, special airport markers, fueling areas, and aircraft parking and transit areas, heavy pedestrian crossing areas, and areas with obstructed views.
  - The Contractor's badged employees shall also be briefed by the Airport on how to interpret the airport signage encountered along the haul routes and within the work area.

8. Situational awareness:

- At all times, vehicles shall give the right of way to any passing aircraft.
- Aircraft with their rotating beacons and/or strobe lights flashing are typical indications that the engine is running or that the engine start procedure has begun.
- The Contractor shall treat all aircraft with caution, regardless of whether they are occupied or not.

9. Radio Communications:

- ~~The Contractor's site superintendent will be required to carry a portable radio to communicate with the gate guard(s) and Airport Operations.~~
- The Airport Communications Center monitors four airport operating (granite) frequencies – i.e. Channels 1 through 4. All emergency calls and emergency communication shall take place on granite channel 1. When there is an emergency in progress, all communications relative to the emergency shall take place on channel 1. All other granite users shall utilize other assigned frequencies until the emergency has been resolved and the emergency alert is terminated by the airport communications center.
- The ATCT will have direct communication with the Airport Operations personnel who are providing contractor escorts and operation safety oversight. This communication will take place on the MHT ground frequency.

10. Maintenance of the secured area of the airport:

- All personnel with regular job duties and responsibilities within the Airport Operations Area, including contractors, subcontractors, general workers and/or security personnel will obtain an MHT Security Identification Badge. In addition, all applicants will attend an airport security briefing prior to being granted access to any secure area.
- All authorized visitors and short-term workers will be issued a temporary escorted badge. Issuance of escorted badges will be noted in the daily security access log. The log and badges will be returned to airport operations at the close of each workday. The contractor's MHT badged supervisor(s) are required to coordinate AOA escort assignments with airport operations. An escorted worker will be informed (by the contractor) as to their MHT badged escort and will at all times remain within line of sight of the escort.
- All personnel and vehicles that are granted access to the AOA will submit to random security inspections conducted by airport law enforcement, security, operations, and Transportation Security Administration personnel. Random inspections may occur at any time and may take place at the perimeter gates, on the AOA, and/or within other secure areas of the airport. Mirrors will be used to ensure a thorough inspection of the undercarriage of vehicles.
- Security Gates #1 and #39 will be manned by an Airport approved security guard during normal business hours. The following procedures will be followed for contractor access:

- Gate guards will have an approved means of communication -i.e. - “granite” radio contact with his/her supervisors, the contractor, airport operations, and Airport Communications in the event of an emergency.
- Vehicle Inspections will take place on the public side of the security fence prior to the gate being opened.
- All personnel entering an AOA access gate will sign the daily security/AOA access log (once per day for all personnel except when leaving the secured area or hauling material off site). The daily log will be maintained by the gate guard and turned over to airport operations at the close of each workday.

## **8. WILDLIFE MANAGEMENT**

### **a. Trash**

The Contractor will immediately secure and clean up all FOD upon observation of the objects. The Contractor will be required to keep the work areas clean of trash and food waste which might attract wildlife. If wildlife is observed in the vicinity of the worksite the Contractor or RPR will notify the Airport Operator of the type and last known location of the sighting. The Airport Operator will determine the appropriate course of action if so required.

### **b. Standing Water**

The Contractor shall not permit standing water in the work site.

### **c. Poorly Maintained Fencing and Gates**

Access gates that are opened or utilized for the purpose of construction vehicle and work crew access must be closed and locked. Fence in need of maintenance will be identified and reported to Airport Operator as necessary.

### **d. Wildlife Encounters**

Notify either the Airport Operator or RPR in the case of any wildlife encounters.

## **9. FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT**

The Contractor will implement the following FOD management procedures for the duration of the project. The work areas and adjacent airport areas will be kept free of unsecured paper, boxes, litter and other debris that could be blown onto the runways and taxiways or pose a hazard to aircraft.

Access roads and haul routes used by the Contractor will be maintained and kept clean throughout the course of work to prevent the accumulation of dirt and mud and the generation of dust by sweeping, washing or other methods approved by the RPR.

Immediately prior to the end of each work shift, all airport pavements to be re-opened must be inspected by the Contractor, Airport Operator and RPR to ensure these areas are swept clean, free of FOD and that the pavement markings, signage and lights are unobstructed.



## 10. HAZARDOUS MATERIALS (HAZMAT) MANAGEMENT

The Contractor will comply with all Federal, State, and local laws and regulations controlling pollution of the environment and hazardous waste. The Contractor will always have on hand and accessible the MSDS sheets for all chemicals on site. All construction equipment will be serviced and refueled in the Contractor's staging area. Approved secondary containment will be used during servicing and refueling. Airport Operations and/or the RPR must be notified of any spills. The Airport Operator will notify the appropriate responders. The Contractor will have a HAZMAT management procedure manual in place. Copies will be available upon request and must be included with the Safety Plan Compliance Document (SPCD).

## 11. NOTIFICATION OF CONSTRUCTION ACTIVITIES

The RPR and site superintendent are available 24-hours a day for any emergency involving the construction of the project. Any emergency involving the construction of the project will be notified to the airport, airfield maintenance, RPR, contractor, and engineer. Before beginning any construction activity, the contractor will, through airport operations and the RPR, ensure that all appropriate safeguards are in place and that all required notifications e.g., Notices to Airmen (NOTAMS) have been disseminated.

### a. List of Responsible Representatives/ Points of Contact

A list of responsible representatives and the associated contact numbers shall be maintained in this document and shall be distributed to the Contractor, RPR, and Airport. Any updates to the original list in this document must be made promptly and the full list reflecting those amendments shall be redistributed separately.

1. Emergency (Airport Comm. Center)	603-628-6222
2. Airport Owner/Operator	603-628-6539
3. RPR	Name & # (TBD)
4. Contractor (Office)	Name & # (TBD)
5. Contractor (Site Superintendent)	Name & # (TBD)
6. Tech Ops	603-621-1762

### b. Notices to Airmen (NOTAMS)

- NOTAMS must be issued to advise pilots and other airport users of the construction activity, closure period and other operational impacts. **Only the Airport Operator will initiate or cancel NOTAMS and is the only entity that can close or open any part of the Airfield.** The Airport Operator must coordinate the issuance, maintenance and cancellation of NOTAMS about airport conditions resulting from the construction activities with tenants and the local air traffic facility and must provide information on the closed or hazardous conditions on the airport movement areas to the FAA Flight Service Station (FSS) so that it can issue a NOTAM. Any person having reason to believe that a NOTAM is missing, incomplete, or inaccurate must notify the Airport Operator immediately.

### c. Emergency Notification Procedures



- The Airport shall be the first point of contact for any emergency involving the construction of the project after which the RPR shall be immediately contacted as well. The Airport Operator and RPR will be called for non-emergency incidents.
- For an emergency requiring immediate medical attention the Airport Communication Center will be notified via the emergency number (603-628-6222) The Communication Center will dispatch ARFF.
- Refer to Section 15 “Special Conditions” in the event of an emergency on the Airfield.

**d. Coordination with Emergency Response Personnel**

- The ARFF Personnel will be notified a minimum of 72 hours prior to the notice to proceed of the project as well as any changes to the emergency access route or any deactivation and subsequent reactivation of waterlines and fire hydrants.

**e. Notification to the FAA**

- Prior to the start of construction, the Airport will file a FAA Form 7460-1, Notice of Proposed Construction or Alteration for the locations and anticipated heights of equipment. The Contractor shall review the submitted FAA Form 7460-1 and notify the Airport of any deviation requests. The Contractor shall plan on a 45 working day approval process by the FAA for any deviation requests.

## **12. INSPECTION REQUIREMENTS**

**a. Daily Inspections**

- Inspections to ensure compliance with this CSPP shall be performed daily by the Contractor and RPR. A sample checklist is provided in Appendix 4 of FAA AC 150/5370-2G.
- Airport operations personnel make frequent checks of the airfield and work areas. If a deficiency is found, airport operations personnel will contact the Contractor and RPR.
- Safety issues are to be corrected immediately by the Contractor.
- All areas scheduled to be opened to aircraft shall be inspected by the RPR and the Airport prior to completion of the work shift and opening of the area.
- At the conclusion of the workday, the contractor will ensure that the worksite is vacated, is properly secured, and that all escorted badges are collected, accounted for, and returned to airport operations. Airport operations will make a final inspection prior to the contractor leaving. This may include a lighting inspection.

**b. Final Inspections**

- When the Contractor determines the Contract is completed, the Contractor shall notify the RPR in writing and the RPR will schedule a final inspection of the work with the appropriate parties.

- Any work found to be unsatisfactory at the time of the inspection shall be noted and the Contractor shall be provided instructions on how to remedy the deficient areas.
- Upon completion of any 'punch-list' work, the RPR and Airport will inspect the areas again for acceptance.
- The FAA will be notified of the project completion and invited to attend the final inspection.

### **13. UNDERGROUND UTILITIES GENERAL**

The Contractor is specifically cautioned that the locations and/or elevations of existing underground utilities as shown on these plans are based on record drawings and were field surveyed for confirmation where possible. This information is not to be relied on as being complete or exact and the Contractor shall field verify all information prior to the commencement of the work. The Contractor shall immediately notify the RPR in writing of any discrepancy discovered during field verification.

The Contractor shall provide a utility locating service to locate/verify utility location prior to commencing excavation. All existing utilities in the vicinity of any excavation shall be clearly marked on the ground by the Contractor prior to beginning excavation.

The Contractor shall coordinate all work on and in the vicinity of the underground utilities and cables with the following agencies as appropriate:

- MHT Facilities/Electrical
- Local Federal Aviation Administration

The Contractor shall provide the RPR with records of coordination prior to commencing with excavation.

The Contractor shall hand dig when within three (3) feet of any known or suspected underground utility.

The Contractor shall repair, at his/her own expense, any underground utilities damaged by his/her operations.

The Contractor shall perform an airfield lighting check at the completion of each work shift to verify that the lighting system and NAVAIDS are operational.

Any impacts to NAVAIDS, airfield lighting circuits, communications or power circuits shall be immediately communicated to MHT Operations through the RPR for coordination with the FAA, ATC, and any other relevant stakeholder.

### **14. PENALTIES**

- If airport rules, regulations, or the safety plan are not followed, the project is to be shut down and will not resume until the contractor complies and acknowledges he/she understands the rules/regulations.

- Badged personnel and drivers who deviate from the assigned haul routes or work areas are to have their airport access privileges revoked. Any work (MHT badged or under escort) who engages in any activity, other than that for which his/her access was granted, will be removed from the work area. Failure to submit to random security inspections will result in suspension of the MHT security I.D. badge and associated access privileges.
- If unauthorized access to the AOA or deviation from the assigned construction work area and haul route is observed, a call will be made immediately by the Contractor to the Airport Operations Personnel. If Airport Law Enforcement Officer is required, call the Airport Communications Center at 603.628.6019.

## 15. SPECIAL CONDITIONS

- ~~There are no anticipated problems with low visibility or snow removal resulting from the project. All construction activities are weather dependent. During snow emergencies or periods of low visibility, Airport Operations will have limited availability to provide escorts to access the airfield.~~
- In the event of an emergency involving an inbound aircraft in distress, the Contractor and RPR must be alerted of the situation and must comply with all instructions issued by the Airport Operator and/or Emergency Responders.
- In the event of an aircraft emergency or construction accident on the field, the Airport Operator will be notified immediately, and all work crews must meet at a pre-designated point, and all personnel will be accounted for.
- If a security breach occurs on the airport, the Airport Operator will inform the Contractor of any action required, and all workers will remain within the work site until the issue is resolved.
- If a potential security breach is noticed by any of the Contractor's staff, the RPR and Airport Operator will be notified immediately.
- In the event of a vehicle/pedestrian deviation by a member of the Contractor's staff, work will immediately cease, and all workers will be retrained regarding the airfield safety and operations. Upon investigation, the worker who caused the deviation may be penalized by being relieved of their duties for the day's work shift or for an extended period of time if so determined.

## 16. RUNWAY AND TAXIWAY VISUAL AIDS

- For all closures, a NOTAM will be issued, and the applicable taxiway edge lights will be covered. "No entry" signs, lighted "X's", lighted and flagged barricades, and taxiway closure markers will be placed as shown on the Safety and Phasing Plans and/or as direct by the Airport. Signs directing traffic will have panels removed and replaced with blank panels.
- Barricades will be used to delineate the boundaries of the work areas and the pavement areas open to aircraft and airport vehicle operations. Refer to section HAZARD MARKING AND LIGHTING of this document.

## **17. MARKING AND SIGNS FOR ACCESS ROUTES GENERAL**

- Construction signs that direct construction traffic shall be located at the work area egress/ingress points. All construction signs shall conform to standards of MUTCD, and AC 150/5340-18G and be approved by MHT Operations and the RPR.

## **18. HAZARD MARKING AND LIGHTING**

- Hazard marking and lighting prevents aircraft operators from breaching work areas and prevent construction crews and vehicles from inadvertently entering aircraft operation areas. At the start of each phase, construction barricades will be installed at the limits of the work area. The barricades will be outside of any active runway safety area. All barricade locations must be approved by the Airport Operator and/or RPR prior to the commencement of the Work. At the end of each workday the area shall be swept clean.
- Lighted Xs, barricades, lights, and signs are detailed on the referenced Construction Safety and Phasing Plan drawings. Barricades are to be interlocked with two lights per barricade and not more than 10ft between lights. The Contractor is responsible to maintain all lighted Xs, barricades, lights, and signs 24 hours/day.

## **19. WORK ZONE LIGHTING FOR NIGHTTIME CONSTRUCTION**

- Lighting equipment must adequately illuminate the work area meeting the requirements of AC 150/5370-10 for minimum illumination levels during nighttime paving.
- All support equipment, except haul trucks, must be equipped with artificial illumination to safely illuminate the immediate surrounding area.
- Light towers will be positioned and adjusted to aim away from the ATCT and active runway to prevent blinding effects. Shielding may be necessary.
- Light towers will be removed from the work area prior to being reopened to aircraft operations.

## **20. PROTECTION OF RUNWAY AND TAXIWAY SAFETY AREAS**

Authorized work near or within active runway and taxiway safety areas will be coordinated with the Airport escorts, Airport operations, and RPR.

### **a. Runway Safety Area (RSA)**

- The RSA locations are shown on the attached drawings.
- Open trenches or excavations in the RSA are not permitted to be left open. Excavations must be backfilled prior to recall. In the case of “pullback” work, if backfilling excavations before the runway must be opened is impracticable, cover the excavations appropriately. Covering for open trenches must be designed to allow the safe operation of the heaviest aircraft operating on the runway to cross the trench without damaging the aircraft.

### **b. Runway Object Free Area (ROFA)**

- The ROFA locations are shown on the attached drawings.

- Construction, including excavations, will be permitted in the ROFA during work in associated work areas. However, equipment must be removed from the ROFA when not in use, and materials will not be stockpiled in the ROFA.

**c. Taxiway Safety Area (TSA)**

- The TSA locations are shown on the attached drawings.
- There will be no work associated with this project inside the TSA while the taxiway is open for aircraft operations.
- Open trenches or excavations in the TSA are not permitted to be left open when the taxiway is open for aircraft operations. Trenches will be backfilled before the taxiway is opened.

**d. Taxiway Object Free Area (TOFA)**

- The TOFA locations are indicated on the drawings. Work in the TOFA is not allowed unless special provisions are provided in accordance with the AC 150/5370-2G.
- The Contractor shall notify the Airport 72 hours prior to commencing work in this area.

**e. Runway Obstacle Free Zone (OFZ)**

- For MHT, the ROFZ extends 200 feet beyond each runway end and is 400 feet wide. Refer to AC 150/5300-13 (latest edition) for the Inner Approach and Transitional OFZ dimensions.

## 21. OTHER LIMITATIONS ON CONSTRUCTION

**a. Prohibitions**

The Contractor will not perform any construction within the Runway Safety Area or Runway OFZ's while the Runway is open to aircraft operations.

**b. Restrictions**

Any equipment that is expected to exceed **twenty feet in height** will require filing of separate FAA Form 7460-1 by the contractor. It is anticipated that this project will have no blasting, welding or any other open flame generated.

The general construction, phasing and safety notes on the project drawings contain further notes and limitations on construction. The Contractor shall also adhere to the limitations set forth in the Contract Specifications.

## 22. ACRONYMS AND ABBREVIATIONS

AC	- Advisory Circular
ACSI	- Airport Certification Safety Inspector
AOA	- Airport Operations Area
ARFF	- Airport Rescue and Fire Fighting

<u>ATCT</u>	- <u>Air Traffic Control Tower</u>
ATO	- Air Traffic Office
CTAF	- Common Traffic Advisory Frequency
FAA	- Federal Aviation Administration
FOD	- Foreign Object Debris
HAZMAT	- Hazardous Materials
IMC	- Instrument Meteorological Conditions
LCA	- Localizer Critical Area
LOC	- Localizer
MHT	- Manchester-Boston Regional Airport
NAVAID	- Navigational Aid
NTP	- Notice to Proceed
OFA	- Object Free Area
OFZ	- Obstacle Free Zone
POV	- Privately Owned/Operated Vehicle
RPR	- Resident Project Representative
RSA	- Runway Safety Area
TOFA	- Taxiway Object Free Area

## 23. COMMENTS/REVISION LOG

Addendum No. 3 – various items revised throughout.

**END OF ITEM G-001**

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Instruments for measuring groove width and depth must have a range of at least 0.5 inch (12 mm) and a resolution of at least 0.005 inch (0.13 mm). Gauge blocks or gauges machined to standard grooves width, depth, and spacing may be used.

Instruments for measuring center-to-center spacing must have a range of at least 3 inches (8 cm) and a resolution of at least 0.02 inch (0.5 mm).

The RPR will measure grooves in five zones across the pavement width. Measurements will be made at least three times during each day's production. Measurements in all zones will be made for each cutting head on each piece of grooving equipment used for each day's production.

The five zones are as follows:

- |        |   |
|--------|---|
| Zone 1 | Centerline to 5 feet (1.5 m) left or right of the centerline. |
| Zone 2 | 5 feet (1.5 m) to 25 feet (7.5 m) left of the centerline.     |
| Zone 3 | 5 feet (1.5 m) 25 feet (7.5 m) right of the centerline.       |
| Zone 4 | 25 feet (7.5 m) to edge of grooving left of the centerline.   |
| Zone 5 | 25 feet (7.5 m) to edge of grooving right of the centerline.  |

At a random location within each zone, five consecutive grooves sawed by each cutting head on each piece of grooving equipment will be measured for width, depth, and spacing. The five consecutive measurements must be located about the middle blade of each cutting head  $\pm 4$  inches (100 mm). Measurements will be made along a line perpendicular to the grooves.

- Width or depth measurements less than 0.170 inch (4 mm) shall be considered less than 3/16 inch (5 mm).
- Width or depth measurements more than 0.330 inch (8 mm) shall be considered more than 5/16 inch (8 mm).
- Width or depth measurements more than 0.235 inch (6 mm) shall be considered more than 1/4 inch (6 mm).

Production must be adjusted when more than one groove on a cutting head fails to meet the standard depth, width, or spacing in more than one zone.

### **METHOD OF MEASUREMENT**

**621-4.1** The quantity of grooving for Runway 6 to be paid for shall be the number of square yards of grooving performed in accordance with the specifications and accepted by the RPR per paragraph 621-3.1.

**621-4.2** Grooving for Runway 24 shall be completed by the Contractor contracted to the project "Rehabilitate Runway 17-35" and shall be paid for by allowance. Measurement for the allowance shall be based on the actual time worked by the Contractor and any allowable material or equipment costs. The exact amount of reimbursement to the Contractor shall be indicated on the Contractor's invoice and will be the basis of measurement for the allowance without any additional mark-up by the Contractor. There shall be no separate measurement for the Contractor's cost to coordinate and administer the scheduling and it shall be considered incidental to the overall project.

### **BASIS OF PAYMENT**

**621-5.1** **Payment for saw-cut grooving on Runway 6.** Payment for saw-cut grooving on Runway 6 will be made at the contract unit price per square yard for saw-cut grooving. This price shall be full

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compensation for furnishing all materials, and for all preparation, delivering, and application of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

**621-5.1 Payment for saw-cut grooving on Runway 24. Payment to the “Rehabilitate Runway 17-35” Contractor for Runway 24 saw-cut grooving shall be the exact amount indicated on the Contractor’s invoice without mark-up. There shall be no separate payment to the Contractor to coordinate and administer the scheduling and these costs are considered incidental to the overall project.**

Payment will be made under:

Item P-621-1	Saw-Cut Grooves – <u>Runway 6</u>	per Square Yard
<u>Item P-621-2</u>	<u>Saw-Cut Grooves – Runway 24</u>	<u>per Allowance</u>

**REFERENCES**

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

Advisory Circulars (AC)

AC 150/5320-12	Measurement, Construction, and Maintenance of Skid Resistant Airport Pavement Surfaces
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**END OF ITEM P-621**



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**Item L-140 Runway Weather Information System**

**DESCRIPTION**

**140-1.1** This Section includes the installation of new passive pavement sensors and upgrades to the existing remote process units (RPU) for the Runway Weather Information System (RWIS) serving Runway 6-24. The existing system serving ~~the affected portion of~~ Runway 6-24 includes ~~one two~~ weather sensor RPU~~s~~ and multiple pavement sensors positioned along the runway. The system is specifically designed for monitoring and displaying pavement surface conditions, pavement temperature, freeze point temperature, chemical percent concentration, subsurface temperature, from the location(s) as shown in the contract plans. New passive in-pavement sensors shall be installed to monitor Runway surface status conditions including dry, wet, frost, chemical wet, and snow/ice warning.

**EQUIPMENT AND MATERIALS**

**140-2.1 Remote Processing Unit.** The existing remote process units (RPU) ~~is~~are manufactured by Vaisala.

- a. The system manufacturer shall remove obsolete components and install new components as required to update the system to their current RWS200 system. These upgrades shall be completed at the Runway 6 and Building RPUs only. The Building RPU (located at the ARFF/maintenance building) monitors sensors on Runway 24.
- b. New pavement sensors will be connected to the existing Runway 6 RPU. The contractor will hire Vaisala to connect and commission the new sensors.
- ~~b.c.~~ The upgrade of the Building RPU requires installation of a new roof mounted weather sensor. The weather sensor and cable will be furnished by the RWIS system manufacturer and installed by the contractor as shown on the plans.

**140-2.2 Passive Pavement Sensor**

a. The Contractor shall supply and install new passive pavement sensors as shown on the Project Plans and remove and dispose of existing passive pavement sensors. The passive sensor supplied shall be a single solid-state electronic device that is installed in the Runway pavement at the locations as shown on the plans. Exact sensor placement shall be as determined by the Project Engineer with guidance from the equipment supplier. The sensor shall come with a manufacturer's standard one year warranty.

b. The sensor shall be constructed of materials that have thermal characteristics similar to common pavement materials. The top of the sensor shall approximate the Runway pavement color and texture. It shall be installed with epoxy sealer so the top is flush with the surrounding Runway surface. The sensor shall be thermally passive, providing stable operation over a temperature range from -40°C to 60°C (-40°F to 140°F). Weather conditions, traffic, or ice control chemicals shall not degrade its performance. The sensor shall be supplied with 300 ft of attached 4/C, #24AWG, shielded Type II molded sensor cable that is waterproofed and sealed as an integral part of the assembly. Each sensor shall be capable of operating at extended cable lengths up to 5000 ft from the RPU by splicing to direct burial rated Type V sensor extension cable. The sensor shall electronically sample the following pavement parameters:

1. Surface temperature at the sensor head

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2. Dry pavement condition.
3. Wet pavement condition above 0°C (32°F).
4. Pavement status information.

**b.** In addition, the pavement sensors shall supply data for the RWIS to determine the following pavement surface conditions when sufficient water is present on the pavement, and atmospheric data from precipitation, RH, and air temperature sensors is available:

1. Water on the pavement at or below 0°C (32°F).
2. Snowy or icy pavement at or below 0°C (32°F).
3. Freezing point temperature of the water/ice-control-chemical solution present on the surface of the pavement sensor for selected ice-control-chemicals.
4. Depth of the water/ice-control-chemical solution present on the surface of the pavement sensor up to a depth of 12 mm (0.5 inches).
5. Percentage of ice particles present in the water/ice-control-chemical solution resident on the surface of the pavement sensor.

**c.** After bid opening and prior to Contract execution, the successful Contractor shall supply actual field test documentation that substantiates pavement sensor performance.

#### **140-2.3 Cable & Conductors**

- a.** Cable and conductors between the pavement sensors and the RPU must be constructed as described per the RWIS manufacturer's recommendations. Type V extension cables are existing to remain and the contractor shall hire Vaisala to splice the Type II molded sensor cable of the new sensors, to the existing Type V extension cables located in junction cans adjacent to the runway.

#### **140-2.4 Approved RWIS Manufacturers**

- a.** For compatibility with the existing pavement sensor system, all sensors shall be manufactured by Vaisala.

### **CONSTRUCTION METHODS**

#### **140-3.1 General**

**a.** The work being performed under this item of these Specifications must conform to the National Electrical Code. The electrical systems must be complete with all necessary accessories for the required results with the greatest assurance of protection to life and property.

**b.** The Plans indicate the extent and general arrangement of the RPU and sensors. If any departures from the plans are deemed necessary by the Contractor, details of such departures and the reasons therefore must be submitted in writing as soon as practicable to the Airport for approval. No such departures must be made without the prior written approval from the Airport.

**c.** The Contractor shall be responsible for providing escort for the system manufacturer's technicians during all activities required for the completion of the work described in this specification.

#### **140-3.2 Sensor Installation**

**a.** The Contractor shall install the RWIS sensors in accordance with the RWIS vendor's recommendations and the Contract Documents.

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**140-3.3 RWIS Equipment Warranty**

a. The equipment vendor shall provide a limited, on-site warranty covering all equipment for a 12-month period from the RWIS commissioning date.

**140-3.4 Cable & Conductors**

- a. Type V extension cables are existing to remain.
- b. Splicing of runway sensor cables shall be performed by the system manufacturer's technician during system commissioning.
- c. All conductors must be tagged in accordance with Section L-108 "Installation of Underground Cable for Airports".

**140-3.5 Testing**

- a. The Contractor must test the new sensors and upgraded RPU's as follows:
  - 1. Test the new weather sensor and sensor cabling as required by the sensor manufacturer.
  - 2. Test the RPU to perform all required functions in accordance with manufacturer's requirements. Note - testing includes all aspects of power input, surge protection, resistance to earth testing of grounding electrode, weather sensor input/output, and cellular communication to the remote hosting server.
- b. All testing must be to the satisfaction of the owner, as coordinated through Airport Operations.
- c. Tests must be coordinated with the field schedule and field conditions. Before testing, all necessary precautions must be taken to ensure the safety of personnel and equipment. All enclosures for conductors and equipment must be properly grounded.
- d. A log must be maintained for all tests. This log must be certified before completion of the job, both as to test value and date of test.
- e. Any faults in the work performed by this Contractor or in materials or equipment furnished by the Contractor must be corrected or replaced promptly by the Contractor at his own expense. Any faults in materials or equipment furnished by the Contractor which are the result of careless, incompetent, or improper workmanship must be repaired and the work retested.

**140-3.6 Commissioning**

a. After contractor completion of the equipment installation, a qualified technician from the equipment vendor shall perform all final connections to the equipment on site, after the installation is complete. Work shall also include final system checks, sensor alignments and calibration, software setup, and software configuration to provide a fully operational RWIS.

**140-3.7 System User Training**

a. The equipment vendor shall provide training on the operation of the web browser accessed user software. The equipment vendor shall provide on-site system user training to Airport personnel at a mutually agreeable time at the airport. Training shall cover the basic operation of the system and how to use the system information in agency operations. The vendor shall provide a set of training manuals, which detail the configuration and operation of the system.

**METHOD OF MEASUREMENT**

**140-4.1** Runway Pavement Surface Sensor will be measured for payment by the number of units installed

**Manchester • Boston Regional Airport  
Partial Rehabilitation of Runway 6-24**

in place, completed, and accepted, including furnishing all materials, all preparation and installation of these materials, excavation and backfill, testing and all labor, equipment, tools, and incidentals necessary to complete this item. Sensors shall include sufficient permanently molded in sensor cable to reach the closest junction can and the installation of this cable, including saw kerf, and sealant shall be included in the measurement for the sensor installation.

Measurement shall also include the removal and disposal of the existing pavement surface sensor, sensor cable in saw kerf, and sealant at each location.

**140-4.2** Work performed by Vaisala to complete Runway Weather Information System Upgrades and Commissioning shall be measured as part of the Contract Allowance for this item. This work shall include all materials, preparation, installation, labor, equipment, tools, travel costs, and other incidentals necessary to complete the system upgrades and commissioning activities as described in this specification. Rooftop weather sensor and sensor cable required for the upgrade of the Building RPU shall be measured as part of the Contract Allowance for this item.

**140-4.3** Installation of Rooftop Weather Sensor will be measured for payment on a lump sum basis. Measurement shall include the conduit, fittings, sensor pipe support, hardware, installation of RWIS manufacturer supplied cable and sensor, labor and incidentals installed within and attached to the ARFF/Maintenance Building perimeter to support rooftop weather sensor installation as shown on the Contract Drawings.

The Contractor's labor, equipment, and incidentals required to support the system manufacturer's upgrade and commissioning activities performed as part of the base bid scope of work shall not be measured for payment from the Contract Allowance but shall be considered incidental to the other items of this specification.

**BASIS OF PAYMENT**

**140-5.1** Payment will be made at the Contract price per unit for the installation of each pavement surface sensor installed by the Contractor and accepted by the RPR. This price will be full compensation for furnishing all materials listed in the measurement, for all preparation and installation of these materials, excavation and backfill, testing, terminations and commissioning, and all labor, equipment, tools, and incidentals necessary to complete this item.

**140-5.2** Payment for Runway Weather Information System Upgrades and Commissioning will be paid from the Contract Allowance for the completed and accepted RWIS Upgrades and successfully commissioned system, in place, and accepted by the RPR. The cost paid to the contractor shall be direct cost invoiced to the contractor by Vaisala without any markup. This price shall be full compensation for furnishing all materials, and for preparation, assembly installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete this item.

**140-5.3** Payment for Installation of Rooftop Weather Sensor will be made at the Contract lump sum price for the completed installation of the rooftop weather sensor, conduit, cable and incidentals installed by the Contractor and as accepted by the RPR. This price shall be full compensation for furnishing all materials and for all preparation and assembly of these materials, and for all labor, equipment, tools and incidentals necessary to complete this item.

Payment will be made under:

L-140-1            Runway Pavement Surface Sensor – per each

L-140-2            Runway Weather Information System Upgrades and Commissioning – per allowance


**L-140-3            Installation of Rooftop Weather Sensor – per lump sum**

**END OF SECTION L-140**



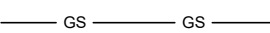
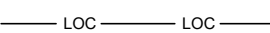
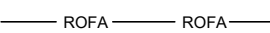
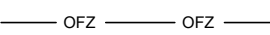
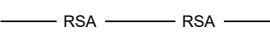

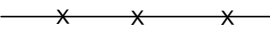
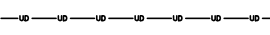


Jacobs - \\mnhil01\job\2022\E2X89212 - MHT RW 6-24 Partial Rehab\700 Drawings\Plans\G002 - Index of Drawings.dwg [G-002] December 14, 2022 - 4:30pm [ccommoim]

GENERAL PROJECT ABBREVIATIONS

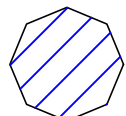
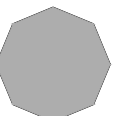
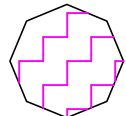
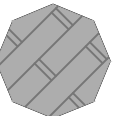

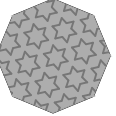

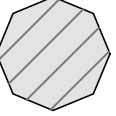
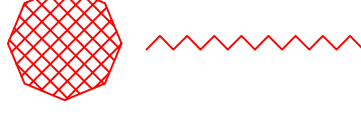
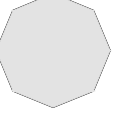

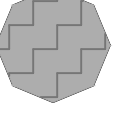


A	AMPERES	MISC	MISCELLANEOUS
AC	ASPHALT CONCRETE, ACRE	MON	MONUMENT
ADD ALT	ADDITIVE ALTERNATE	MULT	MULTIPLE
ALS	APPROACH LIGHTING SYSTEM	MSL	MEAN SEA LEVEL
AOA	AIRCRAFT OPERATIONS AREA	N	NORTH, NORTHING
APPROX	APPROXIMATELY	NIC	NOT IN CONTRACT
ATPB	ASPHALT TREATED PERMEABLE BASE	NO	NUMBER
AVI	AUTOMATED VEHICLE IDENTIFICATION	NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
BC	BEGINNING OF CURVE	NTS	NOT TO SCALE
BIT	BITUMINOUS	OC	ON CENTER
BM	BENCH MARK	OD	OUTSIDE DIAMETER
BRL	BUILDING RESTRICTION LIMIT	OFF	OFFSET
BVC	BEGINNING OF VERTICAL CURVE	PAPI	PRECISION APPROACH PATH INDICATOR
C	CONDUIT	PB	PULL BOX
CAB	CRUSHED AGGREGATE BASE	PC	POINT OF CURVATURE
CB	CATCH BASIN	PCC	POINT OF COMPOUND CURVATURE,
CBR	CALIFORNIA BEARING RATIO	PCCP	PORTLAND CEMENT CONCRETE
CDF	CONTROLLED DENSITY FILL	PI	POINT OF INTERSECTION
CF	CUBIC FEET	PL	PROPERTY LINE
CFS	CUBIC FEET PER SECOND	POC	POINT OF CURVE
CIP	CAST IRON PIPE	POT	POINT OF TANGENT
CL, 	CENTERLINE	PRC	POINT OF REVERSE CURVE
CO	CLEANOUT	PRVC	POINT OF REVERSE VERTICAL CURVE
CONC	CONCRETE	PT	POINT OF TANGENCY
CONST	CONSTRUCT, CONSTRUCTION	PVC	POLYVINYL CHLORIDE
CONT	GROUND CONTOUR	PVI	POINT OF VERTICAL INTERSECTION
COORD	COORDINATE	PVMT	PAVEMENT
CSP	CORRUGATED STEEL PIPE	PVT	POINT OF VERTICAL TANGENCY
CY	CUBIC YARD	PSI	POUNDS PER SQUARE INCH
DIA	DIAMETER	Q	RATE OF FLOW IN CFS
DWG	DRAWING	R	RADIUS
E	EAST, EASTING	RC	REINFORCED CONCRETE
EA	EACH	RCP	REINFORCED CONCRETE PIPE
EC	END OF CURVE	REF	REFERENCE
(E)	EXISTING	REIL	RUNWAY END IDENTIFIER LIGHTS
EL	ELEVATION	REINF	REINFORCED, REINFORCEMENT
ELEV	ELEVATION	RGRCP	RUBBER GASKET REINFORCED CONCRETE PIPE
ENG	ENGINEER, ENGINEERING	RP	RADIUS POINT
EOP	EDGE OF PAVEMENT	RPMP	REINFORCED PLASTIC MORTAR PIPE
ERCP	ELLIPTICAL REINFORCED CONCRETE PIPE	RPR	RESIDENT PROJECT REPRESENTATIVE
EV	ELECTRICAL VAULT	RPZ	RUNWAY PROTECTION ZONE
EVC	END OF VERTICAL CURVE	RSA	RUNWAY SAFETY AREA
EQ	EQUAL	RT	RIGHT
EX, EXIST	EXISTING	RVR	RUNWAY VISUAL RANGE
EXC	EXCAVATION	RWY, R/W	RUNWAY
EXP JT	EXPANSION JOINT	S	SLOPE
FAA	FEDERAL AVIATION ADMINISTRATION	SB	SUBBASE
FAR	FEDERAL AVIATION REGULATION	SC	SPIRAL TO CURVE
FG	FINISHED GRADE	SD	STORM DRAIN
FL	FLOW LINE	SEC	SECTION
FLR	FLOOR	SF	SQUARE FEET
FS	FINISHED SURFACE	SHLD	SHOULDER
GA	GENERAL AVIATION	SIDA	SECURITY IDENTIFICATION DISPLAY AREA
GB	GRADE BREAK	SPA	SPACES
GR	GRADE	SPEC	SPECIFICATIONS
GSE	GROUND SERVICE EQUIPMENT	SS	SANITARY SEWER
HGL	HYDRAULIC GRADE LINE	STA	STATION
HMA	HOT MIX ASPHALT	STD	STANDARD
HMAC	HOT MIX ASPHALT CONCRETE	SWPPP	STORM WATER POLLUTION PREVENTION PLAN
HP	HIGH POINT	SY	SQUARE YARD
HOR	HORIZONTAL	T, TAN	TANGENT TO CURVE
HYD	HYDRAULIC	TG	TOP OF GRATE ELEV
ID	INSIDE DIAMETER	TN	TRUE NORTH
IE	INVERT ELEVATION	TOPO	TOPOGRAPHY
JB	JUNCTION BOX	TOW	TOP OF WALL
JT	JOINT	TSA	TAXIWAY SAFETY AREA/TRANSPORTATION SECURITY ADMINISTRATION
L	LENGTH	TWY,TW	TAXIWAY
LF	LINEAR FEET	TYP	TYPICAL
LONG	LONGITUDINAL	VAR	VARIES, VARIABLE
LP	LOW POINT	VASI	VISUAL APPROACH SLOPE INDICATOR
LS	LUMP SUM	VC	VERTICAL CURVE
LT	LEFT	VER	VERIFY
MALS	MEDIUM INTENSITY APPROACH LIGHT SYSTEM	VERT	VERTICAL
MALSR	MEDIUM INTENSITY APPROACH LIGHT SYSTEM W/RAILS	VOL	VOLUME
MAX	MAXIMUM	VOR	VHF OMNIDIRECTIONAL RANGE
MES	MITERED END SECTION	W/	WITH
MH	MANHOLE		
MIN	MINIMUM		
MITL	MEDIUM INTENSITY TAXIWAY LIGHTS		

GENERAL PROJECT LEGEND

EXISTING

	GLIDE SLOPE CRITICAL AREA
	LOCALIZER CRITICAL AREA
	RUNWAY OBJECT FREE AREA
	PRECISION OBSTACLE FREE ZONE
	RUNWAY SAFETY AREA
	TAXIWAY SAFETY AREA
	FENCE LINE
	UNDERDRAIN
	BENCHMARK / CONTROL POINT LOCATION
	PAVEMENT CORE LOCATION

PROPOSED

	PAVEMENT MILLING (4" DEPTH) AND CRACK SEALING		4" HMA OVERLAY ONLY
	PAVEMENT MILLING (2" DEPTH) AND CRACK SEALING		4" HMA OVERLAY W/ GROOVING (BASE BID) AND SEAL COAT (ADD ALT 1)
	CRACK SEALING AND PATCHING		4" HMA OVERLAY W/ GROOVING AND SEAL COAT (BASE BID)
	CRACK SEALING (ADD. ALT. 1 ONLY)		SEAL COAT, PATCHING, AND CRACK REPAIR (ADD ALT 1)
	PAVEMENT MARKING REMOVAL		SEAL COAT, PATCHING, AND CRACK REPAIR (BASE BID)
	SMOOTH MILLED EDGE LIMITS		2" HMA OVERLAY ONLY
	REMOVE EXISTING PAVEMENT SENSOR OR LIGHTING FIXTURE/LIGHT BASE		
	REMOVE EXISTING CABLE/CONDUIT		

INDEX OF SHEETS		
PLAN NO.	SHEET	DRAWING TITLE
GENERAL PLANS		
1	G-001	TITLE SHEET
2	G-002	INDEX OF DRAWINGS, GENERAL PROJECT ABBREVIATIONS AND LEGEND
3	G-003	GENERAL NOTES
4	G-004	GENERAL PLAN
5	G-100	CONSTRUCTION SAFETY AND PHASING PLAN AND NOTES - OVERALL
6	G-101	PHASE A AND B CONSTRUCTION SAFETY AND PHASING PLAN AND NOTES
7	G-102	PHASE C AND D CONSTRUCTION SAFETY AND PHASING PLAN AND NOTES
8	G-201	CONSTRUCTION SAFETY AND PHASING DETAILS - SHEET 1 OF 2
9	G-202	CONSTRUCTION SAFETY AND PHASING DETAILS - SHEET 2 OF 2
CIVIL PLANS		
10	C-001	CIVIL KEY PLAN
11	C-101	EXISTING CONDITIONS AND SITE PREPARATION PLAN - SHEET 1 OF 5
12	C-102	EXISTING CONDITIONS AND SITE PREPARATION PLAN - SHEET 2 OF 5
13	C-103	EXISTING CONDITIONS AND SITE PREPARATION PLAN - SHEET 3 OF 5
14	C-104	EXISTING CONDITIONS AND SITE PREPARATION PLAN - SHEET 4 OF 5
15	C-105	EXISTING CONDITIONS AND SITE PREPARATION PLAN - SHEET 5 OF 5
16	C-201	GEOMETRY, GROOVING, AND PAVEMENT MARKING PLAN - SHEET 1 OF 5
17	C-202	GEOMETRY, GROOVING, AND PAVEMENT MARKING PLAN - SHEET 2 OF 5
18	C-203	GEOMETRY, GROOVING, AND PAVEMENT MARKING PLAN - SHEET 3 OF 5
19	C-204	GEOMETRY, GROOVING, AND PAVEMENT MARKING PLAN - SHEET 4 OF 5
20	C-205	GEOMETRY, GROOVING, AND PAVEMENT MARKING PLAN - SHEET 5 OF 5
21	C-401	TYPICAL SECTIONS AND PAVEMENT DETAILS - SHEET 1 OF 2
22	C-402	TYPICAL SECTIONS AND PAVEMENT DETAILS - SHEET 2 OF 2
23	C-403	PAVEMENT MARKING DETAILS - SHEET 1 OF 2
24	C-404	PAVEMENT MARKING DETAILS - SHEET 2 OF 2
ELECTRICAL PLANS		
25	E-001	ELECTRICAL GENERAL NOTES, LEGEND, AND FIXTURE SCHEDULE
26	E-002	ELECTRICAL GENERAL PLAN
27	E-101	ELECTRICAL PARTIAL PLAN - LIGHTING AT RW 6-24 AND TW K
28	E-102	ELECTRICAL PARTIAL PLANS - PAVEMENT SENSOR REPLACEMENTS
29	E-201	ELECTRICAL DETAILS - SHEET 1 OF 3
30	E-202	ELECTRICAL DETAILS - SHEET 2 OF 3
31	E-203	ELECTRICAL DETAILS - SHEET 3 OF 3
32	E-301	TEMPORARY LIGHTING AT TW B, H, & J - PHASE B & D
33	E-302	TEMPORARY LIGHTING AT TW A & Z, TW K, K1, & K2
34	E-303	TEMPORARY ELECTRICAL DETAILS
35	E-401	MAINTENANCE BUILDING WEATHER SENSOR MOUNTING

NOTE: C-300 "GRADING PLAN" SERIES SHEETS ARE IN PROGRESS AND AWAITING VERIFICATION SURVEY. GRADING PLANS WILL BE PROVIDED VIA ADDENDUM.

PROJECT DESIGNER:	NTS	LMO	LMO	JAM	JWG
SCALE:	DATE: NOVEMBER 2022	DESIGNED BY:	DRAWN BY:	CHECKED BY:	APPROVED:



PARTIAL REHABILITATION OF RUNWAY 6; RUNWAY 24; TAXIWAY K AND H INTERSECTION; AND TAXIWAY J

INDEX OF DRAWINGS, GENERAL PROJECT ABBREVIATIONS, AND LEGEND

REVISIONS	BY	LMO			
DESCRIPTION					
ADDENDUM #3					
DATE	12/14/22				
REV. NO.	1				
PROJ. NO.:	3-33-0011-TBD-2023				
JE FILE:	E2X89212				
DRAWING NO.					
G-002					
SHEET	2	OF	34	REV	

NOT FOR CONSTRUCTION



Jacobs - Vmnh101\j0012022\E2x89212 - MHT RW 6-24 Partial Rehab\700 Drawings\Plans\G003 - General Notes.dwg [G-003] December 15, 2022 - 1:02am [cconnoir]

PROJECT GENERAL NOTES:

THESE NOTES ARE INTENDED TO HIGHLIGHT THE REQUIREMENTS SET FORTH IN THE PROJECT SPECIFICATIONS. IN ALL CASES REQUIREMENTS OF THE PROJECT SPECIFICATIONS SHALL GOVERN.

WEEKLY AND DAILY SCHEDULES REQUIRED

- 1. THIS PROJECT IS LOCATED ADJACENT TO ACTIVE TAXIWAYS AND RUNWAYS, THEREFORE ALL CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED IN A MANNER ACCEPTABLE TO THE RESIDENT PROJECT REPRESENTATIVE (RPR), AIRPORT OPERATIONS AND THE FEDERAL AVIATION ADMINISTRATION (FAA) TO PROVIDE ACCEPTABLE LEVELS OF SAFETY FOR ALL AIRPORT OPERATIONS. PERIODIC MEETINGS WILL BE HELD TO COORDINATE THE ACTIVITIES OF THIS CONTRACT WITH OTHER AIRPORT OPERATIONS.
- 2. THE CONTRACTOR SHALL PREPARE AND SUBMIT A WEEKLY SCHEDULE OF OPERATIONS FOR THE FOLLOWING WORK WEEK. THE SCHEDULE SHALL BE GIVEN TO THE RPR AT THE END OF THE WORK WEEK PRECEDING THE WORK WEEK COVERED BY THE SCHEDULE. THE WEEKLY SCHEDULES ARE SUBJECT TO APPROVAL OF THE RPR. THE CONTRACTOR SHALL UPDATE THE RPR PRIOR TO THE START OF WORK EACH DAY OF CONSTRUCTION ACTIVITIES FOR THE NEXT 24 HOUR PERIOD.
- 3. THE CONTRACTOR SHALL SUBMIT A SAFETY PHASING PLAN UPON NOTIFICATION OF AWARD. THE CONTRACTOR'S SAFETY PLAN SHALL BE IN CONFORMANCE WITH THE CONSTRUCTION SAFETY AND PHASING PLAN INCLUDED IN THE PROJECT MANUAL. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN THIS MANUAL.

ENVIRONMENTAL PROTECTION

- 1. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS CONTROLLING POLLUTION OF THE ENVIRONMENT. THE CONTRACTOR SHALL IMPLEMENT ALL EROSION CONTROL MEASURES IN ACCORDANCE WITH THE NEW HAMPSHIRE STORMWATER MANUAL VOLUME 3 EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL EROSION CONTROL MEASURES AT NO EXTRA COST WHEN INSTRUCTED BY THE RPR AND COMPLYING WITH EPA 2022 CONSTRUCTION GENERAL PERMIT, IF APPLICABLE, DURING CONSTRUCTION.
- 2. HAUL ROUTES AND ROADS USED BY THE CONTRACTOR FOR ACCESS OR HAULING SHALL BE KEPT CLEAN AND ACCESSIBLE TO ALL OTHER AIRPORT TRAFFIC FOR THE ENTIRE DURATION OF THE PROJECT. HAUL TRUCKS AND DUMP TRUCKS MUST USE LOAD COVERS AND MUST BE LOADED BY THE CONTRACTOR SUCH THAT NO SPILLAGE OCCURS DURING TRANSIT ON THE STATE, MUNICIPAL, OR AIRPORT ROADWAYS, RUNWAYS, TAXIWAYS, AND APRONS. NO SEPARATE PAYMENT SHALL BE MADE FOR KEEPING THE HAUL ROUTES AND ROADS CLEAR AND ACCESSIBLE.
- 3. THE CONTRACTOR SHALL CONTROL DUST AND DEBRIS TO A LEVEL ACCEPTABLE TO THE RPR AND HAVE ON THE PROJECT SITE AT ALL TIMES ONE VACUUM SWEEPER, ONE WATERING TRUCK, AND OTHER EQUIPMENT NECESSARY TO CONTROL DUST AT ALL TIMES. ALL METHODS FOR CONTROLLING DUST SHALL BE SUBJECT TO THE RPR APPROVAL. DUST CONTROL SHALL BE STRICTLY MONITORED DUE TO ITS IMPACT ON AIRCRAFT SAFETY. FAILURE TO PROPERLY CONTROL DUST OR RESPOND TO ANY REQUEST TO DO SO WILL RESULT IN CONSTRUCTION ACTIVITIES BEING STOPPED.

CONTRACTOR'S MATERIAL STAGING AREA

- 1. THE CONTRACTOR SHALL USE THE AREA SHOWN ON THE PLANS FOR THE MATERIAL AND EQUIPMENT STAGING AREA. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL IMPROVEMENT OF THE DESIGNATED AREA, THAT IS NECESSARY FOR THE UTILIZATION OF THE AREA. THE CONTRACTOR SHALL BE PREPARED TO CONDUCT WEEKLY CLEANING OF THE STAGING AREA. THE CONTRACTOR SHALL CONTROL DUST IN THE STAGING AREA. THE CONTRACTOR IS RESPONSIBLE FOR RESTORING TO ORIGINAL CONDITION ANY AREAS USED FOR THE CONTRACTOR'S OPERATION AND CONTROLLING DUST AT NO ADDITIONAL COST TO THE OWNER. THERE WILL BE NO SEPARATE PAYMENT FOR THIS WORK. ALL WORK NECESSARY TO USE THE STAGING AREA SHALL BE DEEMED INCIDENTAL TO THE OVERALL PROJECT COST.
- 2. THE CONTRACTOR, WITH THE APPROVAL OF THE RPR AND AIRPORT OPERATIONS, SHALL ESTABLISH THE EXACT LIMITS OF THE CONTRACTOR'S STAGING AREAS AT THE LOCATIONS DESIGNATED ON THE CONTRACT DRAWINGS FOR MATERIAL STOCKPILING. ALL REQUIRED UTILITIES FOR THE CONTRACTOR'S STAGING AREA SHALL BE ARRANGED AND PROMPTLY PAID FOR BY THE CONTRACTOR DIRECTLY WITH THE APPROPRIATE UTILITY AGENCY. UTILITY ARRANGEMENTS SHALL BE SUBJECT TO THE APPROVAL OF THE RPR. NO SEPARATE PAYMENT SHALL BE MADE FOR ANY ITEM REQUIRED FOR THE CONTRACTOR TO ENCLOSE AND SET UP HIS OPERATIONAL AREAS. ADDITIONALLY, THE CONTRACTOR SHALL RESTORE THE SITES TO THE ORIGINAL CONDITIONS UPON COMPLETION OF THE CONTRACT WORK, TO THE SATISFACTION OF THE RPR AND AIRPORT OPERATIONS, AT NO ADDITIONAL COST TO THE OWNER.
- 3. ALL MATERIALS AND EQUIPMENT SHALL BE STORED AND PARKED, WHEN NOT IN USE, AT THE CONTRACTOR'S STORAGE AREAS SHOWN ON THE PLANS. TEMPORARY STOCKPILES SHALL BE CONTAINED WITH PERIMETER CONTROLS AND SEEDED, AS NEEDED.
- 4. STOCKPILED MATERIAL SHALL BE CONSTRAINED IN A MANNER TO PREVENT ITS MOVEMENT BY WIND, JET BLAST, OR PROPELLER WASH.
- 5. THE MAXIMUM ALLOWABLE HEIGHT OF CONSTRUCTION EQUIPMENT IN STAGING AREA IS 20' ABOVE GROUND SURFACE. THE CONTRACTOR SHALL OBTAIN PERMISSION FROM THE RPR FOR ANY EQUIPMENT THAT WILL EXCEED 20' IN HEIGHT AND IMPACT THE F.A.R. PART 77 SURFACE.

HAUL ROADS

- 1. THE CONTRACTOR'S ACCESS ROUTE TO THE PROJECT SITES LOCATED AT THE AIRPORT IS AS SHOWN ON SHEET G-100 CONSTRUCTION SAFETY AND PHASING PLAN AND NOTES - OVERALL.
- 2. ALL PAVED HAUL ROADS OR ACCESS ROADS SHALL BE KEPT CLEAN AT ALL TIMES TO PREVENT THE ACCUMULATION OF DIRT AND MUD AND THE GENERATION OF DUST BY VACUUMING, WASHING, WATERING OR OTHER METHODS DIRECTED BY THE AIRPORT OPERATIONS.
- 3. UNPAVED HAUL ROADS, IF ANY, SHALL BE MAINTAINED BY BLADING AND FILLING WHEN DIRECTED BY THE RPR. DUST SHALL BE CONTROLLED AT ALL TIMES.
- 4. ALL HAUL ROADS DISTURBED SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR BETTER BEFORE THE CONTRACT WILL BE CONSIDERED COMPLETE. ALL RESTORATION AND DUST CONTROL ON HAUL ROADS SHALL BE AT THE CONTRACTOR'S EXPENSE AND ARE CONSIDERED INCIDENTAL TO THE OVERALL PROJECT COST.

FLAGGERS

- 1. THE OWNER WILL PROVIDE ESCORTS ACROSS ACTIVE AIRPORT PAVEMENTS. CONTRACTOR RESPONSIBLE FOR PROVIDING ANY FLAGGERS REQUIRED FOR ENTERING OR EXITING ON PUBLIC ROADWAYS. NO ADDITIONAL PAYMENT WILL BE MADE FOR FLAGGERS RATHER IT SHALL BE CONSIDERED INCIDENTAL TO THE OVERALL PROJECT COST.

RADIO CONTROL

- 1. THE OWNER-PROVIDED ESCORTS WILL PROVIDE RADIO CONTROL AND OPERATION SAFETY OVERSIGHT. WHEN WORK AREAS ARE ADJACENT TO, WITHIN, OR REQUIRE TRAVERSING ACTIVE MOVEMENT AREAS (SUCH AS TAXIWAYS AND THE RUNWAY) THE CONTRACTOR SHALL REMAIN WITH THE OWNER-PROVIDED ESCORTS AT ALL TIMES. ONLY MHT OPERATIONS WILL COMMUNICATE DIRECTLY WITH THE ATCT.

UNDERGROUND UTILITIES, CABLES, AND EXISTING STRUCTURES

- 1. THE APPROXIMATE LOCATIONS OF KNOWN UTILITIES AND UNDERGROUND CABLES ARE SHOWN ON THE DRAWINGS. PRIOR TO COMMENCEMENT OF ANY EXCAVATION THE CONTRACTOR SHALL COORDINATE ALL WORK ON AND IN THE VICINITY OF THE UNDERGROUND UTILITIES AND CABLES WITH THE FOLLOWING AGENCIES AS APPROPRIATE.
  - 1.1. DIG SAFE: 811 OR (888) 344-7233
  - 1.2. CONSOLIDATED COMMUNICATIONS: (844) 968-7224
  - 1.3. COMCAST: (603) 889-6718
  - 1.4. NATIONAL GRID: (800) 233-5325
  - 1.5. EVERSOURCE: (800) 362-7764
  - 1.6. THE FEDERAL AVIATION ADMINISTRATION - TECH OPS: (603) 621-1762
  - 1.7. AIRPORT - OPERATIONS AND MAINTENANCE: (603) 624-6349
  - 1.8. TOWN OF LONDONDERRY - WATER AND SEWER DEPARTMENTS: (603) 624-6494
- 2. THE CONTRACTOR SHALL SUBMIT THE DIG SAFE REFERENCE NUMBER TO THE RPR AFTER EACH DIG SAFE REQUEST. DIG SAFE REFERENCE NUMBERS SHALL BE UPDATED EVERY 30 DAYS. THE CONTRACTOR SHALL BE AWARE OF ALL PERMITS AND THEIR ASSOCIATED EXPIRATION DATE. THE CONTRACTOR SHALL MAINTAIN ALL REQUIRED PERMITS THROUGHOUT THE CONSTRUCTION DURATION.
- 3. CONTRACTOR SHALL HIRE A PRIVATE UTILITY LOCATION SERVICE TO MARK OUT ANY UTILITIES NOT COVERED BY DIGSAFE.
- 4. WORK AROUND THE EXISTING UNDERGROUND UTILITIES SHALL BE PERFORMED IN A MANNER THAT WILL AVOID DAMAGES TO THE UTILITIES. PRIOR TO COMMENCING WITH WORK, THE CONTRACTOR SHALL ACCURATELY LOCATE OR GET THE APPROPRIATE UTILITY COMPANY TO LOCATE ABOVE AND BELOW GROUND UTILITIES WHICH MAY BE AFFECTED BY THE WORK. THE CONTRACTOR SHALL PROTECT ALL UTILITIES NOT DESIGNATED FOR REMOVAL, RELOCATION, OR REPLACEMENT IN THE COURSE OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE 72 HOURS OF ADVANCED NOTICE TO THE UTILITY OWNER, THE RPR, AND FAA PRIOR TO BEGINNING CONSTRUCTION IN THE VICINITY OF THE EXISTING UTILITY LINE.
- 5. PRIOR TO THE CLOSE OF WORK EACH DAY, THE CONTRACTOR SHALL VERIFY THAT ALL LIGHTING CIRCUITS IN THE WORK AREA ARE OPERATIONAL.
- 6. THE CONTRACTOR SHALL REPAIR AT HIS/HER OWN EXPENSE, ANY UNDERGROUND CABLES OR UTILITIES DAMAGED BY THE CONTRACTOR'S OPERATIONS INCLUDING ANY DAMAGE DONE BY DRIVING HIS/HER EQUIPMENT OVER EXISTING UNDERGROUND CABLES OR UTILITIES. THE REPAIR OF FAA CABLES SHALL BE INSPECTED AND APPROVED BY THE FAA.
- 7. THE CONTRACTOR SHALL PROTECT ALL NAVAIDS, EDGE LIGHTS, ELECTRICAL MANHOLES, JUNCTION CANS, DRAINAGE INLETS AND MANHOLES DURING CONSTRUCTION. ANY DAMAGE TO THE EXISTING STRUCTURES DURING CONSTRUCTION MUST BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE
- 8. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO COMMENCING WITH ANY FABRICATION, ORDERING OF MATERIAL, OR PERFORMING WORK. THE CONTRACTOR SHALL NOTIFY THE RPR IMMEDIATELY OF ANY CONDITIONS OR DIMENSIONS THAT WOULD HAMPER THE PERFORMANCE OF THE WORK, IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS.
- 9. INTERRUPTION TO EXISTING AIRFIELD UTILITIES SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND/OR AT THE DIRECTION OF THE RPR.

MAINTENANCE OF THE CONSTRUCTION SITE

- 1. THE CONTRACTOR SHALL MAINTAIN THE PROJECT SITE TO PREVENT ATTRACTION OF WILDLIFE. THE CONTRACTOR SHALL KEEP ALL TRASH RECEPTACLES CLOSED AND ELIMINATE PONDING OF WATER TO ELIMINATE ATTRACTING BIRDS AND OTHER WILDLIFE.
- 2. THE CONTRACTOR SHALL KEEP THE CONSTRUCTION SITE FREE OF PAPER, BOXES, AND OTHER DEBRIS, WHICH COULD BE BLOWN ONTO THE RUNWAY AND TAXIWAYS.
- 3. ALL AIRPORT PAVEMENTS SHALL BE KEPT CLEAR AND CLEAN AT ALL TIMES. ALL ROCKS, MUD, AND OTHER DEBRIS CARRIED ONTO THE AIRPORT PAVEMENT BY THE CONTRACTOR'S EQUIPMENT MUST BE REPORTED TO THE RPR OR TO AIRPORT OPERATIONS. THE AIRPORT OPERATIONS WILL THEN CLOSE THE AFFECTED AREA TO AIR TRAFFIC AND THE CONTRACTOR WILL IMMEDIATELY SWEEP THE AREA TO THE SATISFACTION OF AIRPORT OPERATIONS OR RPR.
- 4. THE CONTRACTOR SHALL MAINTAIN, AT THE CONSTRUCTION SITE, THE EQUIPMENT FOR THE APPLICATION OF WATER TO CONTROL DUST WITHIN THE CONSTRUCTION SITE AND ON HAUL ROADS. THE EQUIPMENT SHALL BE EQUIPPED WITH A SHUTOFF CONTROL VALVE WHICH CAN BE OPERATED FROM THE CAB BY THE OPERATOR. THE CONTRACTOR SHALL APPLY WATER FOR DUST CONTROL AS NECESSARY TO PREVENT DUST FROM LEAVING THE CONSTRUCTION SITE AND/OR HAUL ROADS AND BEING A HAZARD TO AIRCRAFT AND THE PUBLIC. THE RPR MAY DIRECT THE IMPLEMENTATION OF DUST CONTROL. THE COST OF ALL WATER AND OTHER DUST CONTROL MEASURES WILL NOT BE PAID FOR SEPARATELY, RATHER IT SHALL BE CONSIDERED INCIDENTAL TO THE OVERALL PROJECT COST.
- 5. THE CONTRACTOR SHALL MAINTAIN AT THE JOB SITE AT ALL TIMES WHILE THE

CONSTRUCTION UNDER THIS CONTRACT IS IN PROGRESS, A SELF-PROPELLED, SELF-CONTAINED SWEEPER WITH NOT LESS THAN A 10-FOOT BROOM WITH A 4 CUBIC YARD CAPACITY APPROVED BY THE RPR. THE SWEEPER SHALL OPERATE AS NECESSARY TO KEEP ACTIVE AIRCRAFT PAVEMENTS, ACCESS ROADS AND THE WORK AREAS CLEAN. AT THE CLOSE OF EACH WORKDAY, ALL ACTIVE AIRCRAFT PAVEMENTS AND THE AIRPORT PAVED ROADS USED OR SOILED BY THE CONTRACTOR SHALL BE SWEEP. ALL COSTS ASSOCIATED WITH THIS ITEM SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

- 6. THE CONTRACTOR SHALL ESTABLISH A SYSTEM OF VISUAL AIDS FOR MARKING AND DELINEATING THE LIMITS OF REQUIRED CLEARANCES ADJACENT TO ACTIVE TAXIWAYS, RUNWAYS, AND NAVIGATIONAL AIDS DURING CONSTRUCTION. THE SYSTEM SHALL BE EASILY DISTINGUISHABLE DURING BOTH DAY AND NIGHTTIME WORK. A DETAILED PLAN OF MATERIALS AND PROCEDURES THAT THE CONTRACTOR PROPOSES TO USE SHALL BE SUBMITTED TO THE RPR FOR APPROVAL PRIOR TO THE START OF ANY WORK UNDER THIS CONTRACT COMPLIANCE WITH THE APPROVED PLAN WILL BE STRICTLY ENFORCED. THIS PLAN, ALONG WITH ALL TEMPORARY VISUAL AIDS AS NOTED, SHALL BE IN ACCORDANCE WITH FAA ADVISORY CIRCULAR 150/5370-2G, OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION, DATED 12/13/17. THE RPR MAY REQUIRE CHANGES TO THE ESTABLISHED PLAN WHENEVER IT IS NECESSARY FOR THE PROTECTION OF AIRPORT OPERATIONS. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE SPECIFICATIONS FOR FURTHER INFORMATION REGARDING RESTRICTIONS AND PENALTIES.

DISPOSAL OF SURPLUS AND UNSUITABLE MATERIALS

- 1. UNLESS OTHERWISE STATED, ALL SURPLUS MATERIALS AND UNSUITABLE MATERIALS INCLUDING MILLINGS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND LEGALLY DISPOSED OF OFF AIRPORT PROPERTY. NO SEPARATE MEASUREMENT AND PAYMENT WILL BE MADE FOR THE DISPOSAL, BUT RATHER THE DISPOSAL SHALL BE INCIDENTAL TO THE ITEM WHICH PRODUCED THE SURPLUS MATERIAL.
- 2. ALL EQUIPMENT, MANPOWER, TRAFFIC CONTROL, SIGNS, BARRICADES, GATES AND OTHER ITEMS NECESSARY FOR THE SAFE AND EFFICIENT HAULING OF EXCESS MATERIALS IS THE RESPONSIBILITY OF THE CONTRACTOR AND INCIDENTAL TO THE COST OF THE ITEM WHICH GENERATED THE MATERIAL TO BE DISPOSED OF.
- 3. ALL SURPLUS LOAM SHALL BE TURNED OVER TO THE AIRPORT AT A STOCKPILE LOCATION ON AIRPORT PROPERTY. FINAL LOCATION ON AIRPORT PROPERTY OF STOCKPILE TO BE DETERMINED DURING CONSTRUCTION.
- 4. ALL TAXIWAY LIGHT FIXTURES AND SIGN FIXTURES TEMPORARILY REMOVED SHALL BE STORED AT THE AIRPORT MAINTENANCE FACILITY, TO BE REINSTALLED BY THE CONTRACTOR.
- 5. THE CONTRACTOR SHALL HAUL ALL EXCAVATED / DEMOLISHED MATERIALS AND MILLED ASPHALT MATERIALS OFF AIRPORT PROPERTY FOR LEGAL DISPOSAL. THE CONTRACTOR MAY STOCKPILE ONE WORK SHIFT'S WORTH OF DEMOLISHED ASPHALT MATERIALS AND EXCAVATED MATERIAL IN THE STAGING AREA AT A TIME. THE DEMOLISHED ASPHALT MATERIALS AND EXCAVATED MATERIALS MUST BE HAULED OFFSITE THE FOLLOWING DAY PRIOR TO THE NEXT WORK SHIFT COMMENCING. THERE SHALL NOT BE MORE THAN ONE WORK SHIFT'S WORTH OF DEMOLISHED ASPHALT MATERIAL AND EXCAVATED MATERIAL STOCKPILED IN THE STAGING AREA UNLESS OTHERWISE APPROVED BY THE RPR.

OPEN TRENCHES OR EXCAVATIONS

- 1. ALL CONSTRUCTION ACTIVITIES WITHIN OR ADJACENT TO RUNWAYS, TAXIWAYS, APRONS, PROTECTED SURFACES AND NAVIGABLE AIRSPACE SHALL COMPLY WITH CURRENT 14 CFR PART 139 AND 14 CFR PART 77 REQUIREMENTS, ADVISORY CIRCULAR A/C NO. 150/5370-2 (CURRENT VERSION) "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION", AND AIRPORT OPERATIONAL REQUIREMENTS.
- 2. OPEN TRENCHES, EXCAVATIONS AND STOCKPILED MATERIALS SHALL BE PROMINENTLY MARKED. THESE OBSTACLES SHALL BE PROMINENTLY LIGHTED DURING HOURS OF RESTRICTED VISIBILITY AND DARKNESS.

GENERAL PROJECT COORDINATION NOTES

- 1. UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE CONSTRUCTION DOCUMENTS, WORK WITHIN THE RUNWAY SAFETY AREA AND/OR TAXIWAY OBJECT FREE AREA SHALL REQUIRE A RUNWAY AND/OR TAXIWAY CLOSURE. THE CLOSURE REQUEST MUST BE MADE THROUGH THE RPR AND AIRPORT OPERATIONS A MINIMUM OF ONE WEEK IN ADVANCE OF THE PROPOSED CLOSURE. THE REQUEST SHALL INDICATE THE AREAS TO BE CLOSED, A SCHEDULE OF OPERATIONS, AND TIME REQUIRED FOR THE OPERATIONS WITHIN THE CLOSED AREA. ALL RUNWAY AND/OR TAXIWAY CLOSURE REQUESTS ARE CONTINGENT ON REVIEW AND APPROVAL BY THE RPR AND AIRPORT OPERATIONS. THE AIRPORT RESERVES THE RIGHT TO SHIFT ANY APPROVED SCHEDULED CLOSURE PERIODS TO ALLEVIATE AIRCRAFT CONGESTION AND WHEN WEATHER CONDITIONS DICTATE.
- 2. THE CONTRACTOR SHALL COOPERATE HIS OR HER EFFORTS WITH OTHER CONTRACTORS WORKING IN THE AREA. THIS COORDINATION SHALL INCLUDE, BUT NOT BE LIMITED TO, MAINTAINING THE NECESSARY CONSTRUCTION ACCESS ROUTES AND COORDINATING WORK SO THAT ALL CONTRACTS CONTINUE ON A TIMELY BASIS.
- 3. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS AND REGULATIONS THAT ARE PERTINENT TO THIS WORK. THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO OBTAIN AND PAY ALL COSTS ASSOCIATED WITH THE PERMITS AND LICENSES REQUIRED TO ACCOMPLISH THIS WORK. UNLESS NOTED ELSEWHERE, ALL COST ASSOCIATED WITH PERMITS AND LICENSES ARE INCIDENTAL TO THE WORK.
- 4. OPEN FLAME WELDING OR TORCH CUTTING OPERATIONS ARE PROHIBITED UNLESS THESE OPERATIONS HAVE BEEN AUTHORIZED BY THE AIRPORT AND ADEQUATE FIRE SAFETY PRECAUTIONS ARE PROVIDED. IF THESE ACTIVITIES ARE REQUIRED, THE CONTRACTOR MUST COORDINATE WITH AIRPORT OPERATIONS IN ADVANCE SO THAT THE LIMITATIONS AND REQUIREMENTS CAN BE IDENTIFIED AS WELL AS ANY ADDITIONAL AIRPORT PROCEDURES COMPLETED.
- 5. THE CONTRACTOR SHALL COMPLY WITH ALL CURRENT VEHICLE OPERATIONAL ORDERS AND INSTRUCTIONS PROVIDED BY THE FAA AND ATCT. THE ORDERS AND INSTRUCTIONS ARE CONTAINED IN THE CONSTRUCTION SAFETY AND PHASING PLAN (CSPP) IN THE PROJECT MANUAL. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE SURE ALL THE SUBCONTRACTORS, SUPPLIERS, VENDORS, ETC. RECEIVE AND COMPLY WITH THE REQUIREMENTS IN THESE PUBLICATIONS.

- 6. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL SUBMIT TO THE RPR A NAME AND PHONE NUMBER OF TWO INDIVIDUALS WHO WILL BE AVAILABLE ON A 24 HOUR CALL BASIS FOR EMERGENCY BARRICADE AND BARRICADE LIGHTING MAINTENANCE. THESE INDIVIDUALS SHALL PROVIDE MAINTENANCE AND REPAIR OF TEMPORARY ELECTRICAL SYSTEMS AND WIRING.

GENERAL PROJECT SECURITY NOTES

- 1. ALL PERSONS ENTERING THE SECURITY IDENTIFICATION DISPLAY AREA (SIDA) ARE REQUIRED TO DISPLAY AN IDENTIFICATION BADGE ISSUED BY THE AIRPORT OR TO BE ESCORTED AT ALL TIMES BY AN APPROVED ESCORT DISPLAYING AN AIRPORT-ISSUED IDENTIFICATION BADGE. THE SIDA IS DEFINED AS ALL AREAS INSIDE THE AIRPORT SECURITY FENCE.
  - 2. VEHICLES ENTERING THE AOA ARE SUBJECT TO SEARCH AND INSPECTION PRIOR TO ENTERING. THE PROCEDURES WILL BE OUTLINED BY THE RPR AND AIRPORT OPERATIONS, AND CONTRACTORS ARE EXPECTED TO FAMILIARIZE THEMSELVES WITH AND COMPLY WITH THESE PROCEDURES.
  - 3. VEHICLES ENTERING THE SIDA MUST DISPLAY ALL NECESSARY IDENTIFICATION AS OUTLINED IN FAA AC 150/5370-2G OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION. VEHICLE DRIVERS WITHOUT A VALID SIDA DRIVER'S BADGE SHALL BE ESCORTED AT ALL TIMES BY AN APPROVED ESCORT WITHIN THE SIDA.
  - 4. FULL-TIME COMPETENT AND RESPONSIBLE EMPLOYEES OF THE CONTRACTOR, SUCH AS SUPERINTENDENTS AND FOREMEN, SHALL OBTAIN AN AIRPORT SIDA BADGE. ADDITIONALLY, EMPLOYEES WHO WILL BE ONSITE FOR MORE THAN TWO CONTINUOUS WEEKS SHALL OBTAIN AN AIRPORT SIDA BADGE. THE SIDA BADGE REQUIRES FINGER PRINTING SCREENING AND A CRIMINAL HISTORY CHECK. THE BADGE APPLICATION PROCESS MAY TAKE UP TO FOURTEEN (14) DAYS, THE CONTRACTOR SHALL PLAN ACCORDINGLY.
  - 5. THE CONTRACTOR SHALL HAVE A MINIMUM OF 1/2 (50%) OF ON-SITE WORKERS, INCLUDING SUB-CONTRACTORS, SUBMIT TO THE BADGING PROCESS, UNLESS OTHERWISE APPROVED BY MHT OPERATIONS MANAGEMENT. BADGED INDIVIDUALS MUST DISPLAY THEIR AIRPORT ISSUED BADGES ON THEIR OUTERMOST GARMENT AT ALL TIMES WHILE ON THE AIRFIELD.
  - 6. THE COSTS ASSOCIATED WITH AIRPORT ISSUED SECURITY ACCESS BADGES (APPROX. \$100 EACH) ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL NOT BE PAID FOR BY THE OWNER.
  - 7. AT ALL TIMES WHILE ON THE AIRFIELD, NON-BADGED WORKERS MUST BE:
    - 1.1. WITHIN 100 FEET OF A BADGED WORKER
    - 1.2. WITHIN VISUAL CONTACT OF A BADGED WORKER
    - 1.3. ABLE TO RESPOND TO THE REQUESTS OF A BADGED WORKER
    - 1.4. ABLE TO COMMAND THE ATTENTION OF A BADGED WORKER.
- NON-BADGED WORKERS WILL RECEIVE TEMPORARY BADGES ON A DAILY BASIS. ANY NON-BADGED WORKERS WILL NOT BE ALLOWED ON THE AIRFIELD WITHOUT VALID PICTURE IDENTIFICATION ACCEPTABLE TO THE TSA (CURRENT AND VALID DRIVER'S LICENSE, PASSPORT, ETC.), AND SHALL REMAIN WITH A BADGED WORKER OR AIRPORT ESCORT AT ALL TIMES. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A LIST OF EMPLOYEES ON THE JOB SITE AND THEIR BADGE NUMBER. THE LIST SHALL INCLUDE SUBCONTRACTORS AND EMPLOYEES. THE LIST SHALL BE UPDATED AND SUBMITTED WEEKLY. UPON COMPLETION OF THE CONTRACT THE CONTRACTOR SHALL TURN ALL THE BADGES INTO THE OWNER FOR DISPOSAL.

PROJECT DESIGNER:

NTS

SCALE:

NOVEMBER 2022

DATE:

LMO

DESIGNED BY:

LMO

DRAWN BY:

JAM

CHECKED BY:

JWG

APPROVED:

MANCHESTER • BOSTON  
REGIONAL AIRPORT

PARTIAL REHABILITATION OF RUNWAY 6; RUNWAY 24;  
TAXIWAY K AND H INTERSECTION; AND TAXIWAY J

GENERAL NOTES

REVISIONS

REV. NO.

DESCRIPTION

DATE

BY

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ADDENDUM #3

12/14/22

LMO

PROJ. NO.: 3-33-0011-TBD-2023

JE FILE: E2X89212

DRAWING NO.

G-003

SHEET 3 OF 34

REV

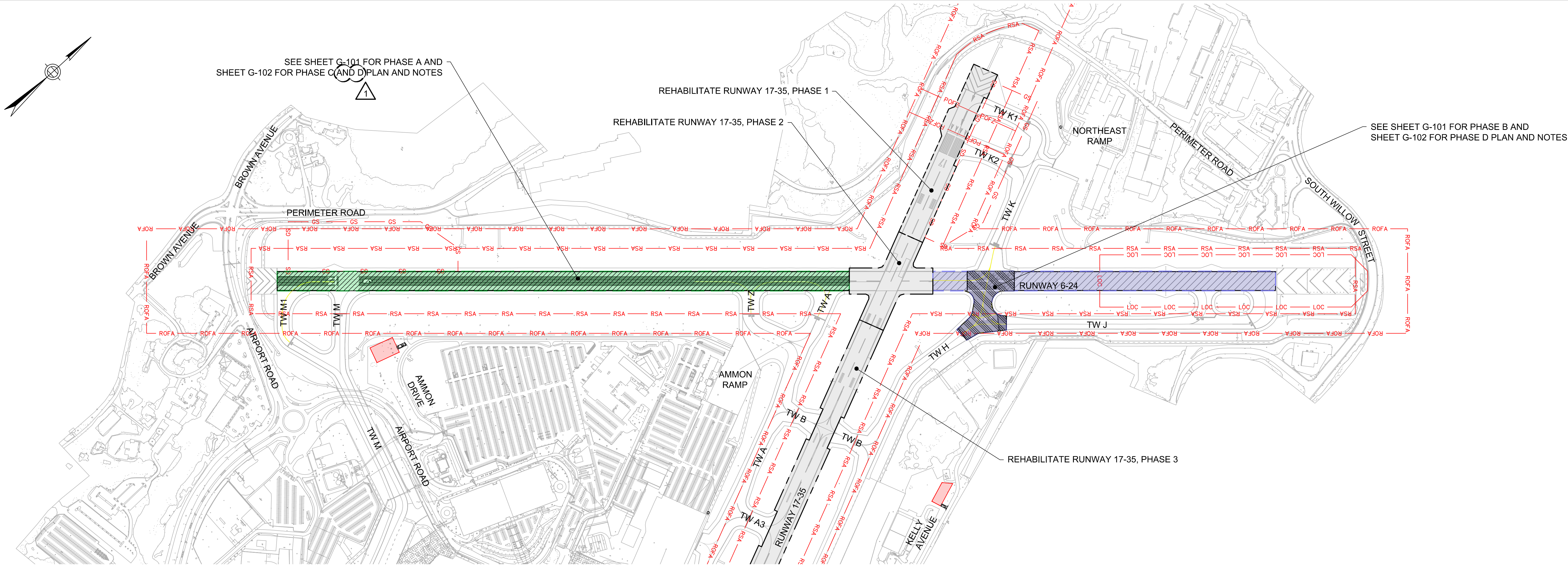
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Jacobs - \\mrh101\job\2022\E2X89212 - MHT RW 6-24 Partial Rehab\700 Drawings\Plans\G100 - Construction Safety and Phasing Plan and Notes.dwg [G-100] December 15, 2022 - 1:26am [ccoonlin]



CONSTRUCTION SAFETY AND PHASING PLAN - OVERALL

RW 17-35 PHASES	RW 6-24 PHASES	GENERAL PHASE CONSTRUCTION DESCRIPTION	DURATION CALENDAR DAYS	RUNWAY IMPACTS				CONSTRUCTION SCHEDULE - MONTH (BY WEEKS)																							
				RUNWAY 17 - 35		RUNWAY 6 - 24		APRIL				MAY				JUNE				JULY				AUG							
				STATUS	ILS	STATUS	ILS	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
	A	RUNWAY 6 END REHABILITATION	14	OPEN	ON	CLOSED	OFF																								
	B	RUNWAY 24 AND TAXIWAY K/H/J INTERSECTION REHABILITATION	10	OPEN	ON	CLOSED	OFF																								
RUNWAY 6-24 RE-OPENED																															
1		RUNWAY 17 & MALSR REHABILITATION	14	CLOSED	OFF	OPEN	ON																								
2	C	RUNWAY/RUNWAY INTERSECTION REHABILITATION; RUNWAY 6 GROOVING	7	PARTIALLY CLOSED RUNWAY	OFF	CLOSED	OFF																								
RUNWAY 6-24 RE-OPENED																															
3		RUNWAY 35 & ALSF REHABILITATION	62	CLOSED	OFF	OPEN	ON																								
RUNWAY 17-35 RE-OPENED																															
	<div><div>1</div>D</div>	<div><div>RUNWAY 6 SEAL COATING; RUNWAY 24 GROOVING; FINAL PAVEMENT MARKINGS; RUNWAY 24 SEAL COATING (ADD. ALT. #1)</div></div>	<div><div>1</div>7</div>	OPEN	ON	CLOSED	OFF	<div><div>1</div></div>																							

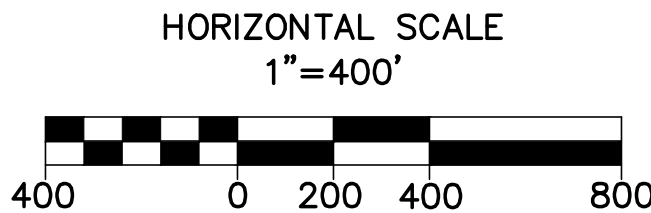
NOTE: REFER TO SHEET G-101 AND G-102 FOR INDIVIDUAL PHASE LOCATIONS AND DESCRIPTIONS.

RUNWAY SAFETY AREA (RSA) AND TAXIWAY OBJECT FREE AREA (TOFA) NOTES:

- THE RUNWAY SAFETY AREA (RSA) AND RUNWAY OBJECT FREE AREA (ROFA) ARE DEFINED SURFACES SURROUNDING THE RUNWAY. THE RSA WIDTH IS 500 FEET AND THE ROFA WIDTH IS 800 FEET, CENTERED ON THE RUNWAY CENTERLINE. THE RSA EXTENDS BEYOND THE END OF THE RUNWAY BY 600 FEET. WORK WITHIN THE RSA SHALL BE COMPLETED WHEN THE RUNWAY IS CLOSED.
- THE TAXIWAY OBJECT FREE AREA (TOFA) IS A DEFINED SURFACE SURROUNDING THE TAXIWAY. THE TOFA WIDTH IS 250 FEET, CENTERED ON THE TAXIWAY CENTERLINE. WORK WITHIN THE TOFA SHALL BE COMPLETED WHEN THE TAXIWAY IS CLOSED.
- AT THE END OF EACH WORK SHIFT, PRIOR TO ANY AIRPORT MOVEMENT AREA RE-OPENING TO AIRCRAFT, THE ROFA AND TOFA SHALL BE:
  - CLEARED AND GRADED AND HAVE NO RUTS, HUMPS, DEPRESSIONS, OR OTHER SURFACE VARIATIONS.
  - DRAINED BY GRADING OR OTHER TEMPORARY MEASURES TO PREVENT WATER ACCUMULATION.
  - CAPABLE, UNDER DRY CONDITIONS, OF SUPPORTING AIRCRAFT RESCUE AND FIRE FIGHTING (ARFF) EQUIPMENT, AND THE OCCASIONAL PASSAGE OF AN AIRCRAFT WITHOUT CAUSING STRUCTURAL DAMAGE TO THE AIRCRAFT.
  - FREE OF OBJECTS, EXCEPT FOR OBJECTS THAT NEED TO BE IN THE TOFA DUE TO THEIR FUNCTION. IN NO CASE SHALL ANY OBJECTS EXCEED 3 INCHES ABOVE GRADE.
  - ANY STRUCTURES AND/OR DROP-OFFS IN EXCESS OF 3" SHALL BE RAMPED PRIOR TO THE END OF EACH WORK SHIFT. TEMPORARY RAMPING SHALL BE GRADED A MAXIMUM OF MINUS 3%.

LEGEND

- RSA RUNWAY SAFETY AREA
- ROFA RUNWAY OBJECT FREE AREA
- LCA LOCALIZER CRITICAL AREA
- GSCA GLIDE SLOPE CRITICAL AREA
- CONTRACTOR STAGING AREA
- PARTIAL REHABILITATION OF RUNWAY 6-24 PHASING:
  - PHASE A
  - PHASE B
  - PHASE C
  - PHASE D
- REHABILITATE RUNWAY 17-35 PHASING:
  - PHASE 1
  - PHASE 2
  - PHASE 3



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MANCHESTER • BOSTON  
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PARTIAL REHABILITATION OF RUNWAY 6; RUNWAY 24;  
TAXIWAY K AND H INTERSECTION, AND TAXIWAY J

CONSTRUCTION SAFETY AND PHASING  
PLAN AND NOTES – OVERALL

SCALE: 1"=400'	DATE: NOVEMBER 2022	DESIGNED BY: LMO	DRAWN BY: LMO	CHECKED BY: JAM	APPROVED: JWG
REV. NO. 1	DATE 12/14/22	DESCRIPTION ADDENDUM #3	BY LMO		
PROJ. NO.: 3-33-0011-TBD-2023	JE FILE: E2X89212	DRAWING NO. G-100	SHEET 5 OF 34	REV	NOT FOR CONSTRUCTION



### LEGEND

- ## CONSTRUCTION SAFETY AND PHASING PLAN - PHASE B



SCHEDULE

1. THE CONTRACTOR MUST COMPLETE ALL WORK IN THE FOLLOWING PHASES:
  - **PHASE A - 14 CALENDAR DAYS. MAJOR WORK ELEMENTS IN THIS PHASE INCLUDE, BUT ARE NOT LIMITED TO:**
    - A. INSTALL BARRICADES, 'NO ENTRY' SIGNS, CONSTRUCTION SIGNS, LIGHTED RUNWAY CLOSURE MARKERS, AND TAXIWAY CLOSURE MARKERS AS SHOWN ON THIS SHEET
    - B. COVER LIGHTS, COVER GUIDANCE SIGNS, AND DISCONNECT LIGHT FIXTURES AS SHOWN ON E-300 SERIES OF DRAWINGS.
    - C. MILL EXISTING RUNWAY 6 PAVEMENT
    - D. SEAL CRACKS IN RUNWAY 6 PAVEMENT
    - E. CORE / INSTALL PAVEMENT SURFACE SENSORS
    - F. PAVE NEW RUNWAY 6 OVERLAY SURFACE COURSE
    - G. SAW AND SEAL REQUIRED PAVEMENT JOINTS IN RUNWAY 6 PAVEMENT
    - H. PAINT PAVEMENT MARKINGS ON RUNWAY 6
  - **PHASE B - 10 CALENDAR DAYS. MAJOR WORK ELEMENTS IN THIS PHASE INCLUDE, BUT ARE NOT LIMITED TO:**
    - A. INSTALL BARRICADES, 'NO ENTRY' SIGNS, CONSTRUCTION SIGNS, LIGHTED RUNWAY CLOSURE MARKERS, AND TAXIWAY CLOSURE MARKERS AS SHOWN ON THIS SHEET
    - B. COVER LIGHTS, COVER GUIDANCE SIGNS, AND DISCONNECT LIGHT FIXTURES AS SHOWN ON E-300 SERIES OF DRAWINGS.
    - C. MILL EXISTING RUNWAY 24 AND TAXIWAY K, H, AND J PAVEMENT
    - D. SEAL CRACKS IN RUNWAY 24 AND TAXIWAY K, H, AND J PAVEMENT
    - E. CORE / INSTALL LIGHT BASE CAN RISERS, BASE CAN DRAINAGE, AND EXISTING LIGHTS / GROUT AND SEAL
    - F. PAVE NEW RUNWAY 24 AND TAXIWAY K, H, AND J OVERLAY SURFACE COURSE
    - G. SAW AND SEAL REQUIRED PAVEMENT JOINTS IN RUNWAY 24 AND TAXIWAY K, H, AND J PAVEMENT
    - H. PAINT PAVEMENT MARKINGS ON RUNWAY 24 AND TAXIWAY K, H, AND J.

2. THE CONTRACTOR SHALL COMPLETE ALL WORK ASSOCIATED WITH EACH PHASE WITHIN THE CALENDAR DAYS PROVIDED FOR EACH PHASE. PHASE A AND B SHALL BE FINISHED BEFORE CONSTRUCTION OF RUNWAY 17-35 BEGINS (ESTIMATED START DATE OF MAY 1, 2023).
3. PHASES A AND B CANNOT BE CONCURRENT.

## IMPACTS TO OPERATIONS - PHASE A

1. MOVEMENT AREA CLOSURES:
  - RUNWAY 6-24
  - TAXIWAY M (NORTH OF THE WESTERN CORNER OF THE TERMINAL APRON)
  - TAXIWAY M1
  - TAXIWAY Z
  - TAXIWAY A (FROM TAXIWAY Z TO RUNWAY 6)

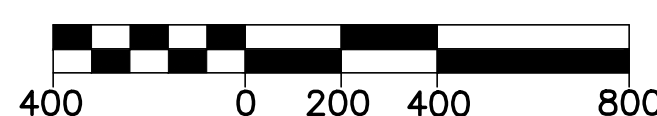
## IMPACTS TO OPERATIONS - PHASE B



1. MOVEMENT AREA CLOSURES:
  - RUNWAY 6-24
  - TAXIWAY M (NORTH OF THE WESTERN CORNER OF THE TERMINAL APRON)
  - TAXIWAY M1
  - TAXIWAY Z
  - TAXIWAY A (FROM TAXIWAY Z TO RUNWAY 6)
  - TAXIWAY H (NORTH OF TAXIWAY B)
  - TAXIWAY J
  - TAXIWAY K (SOUTH OF TAXIWAY K2)

### GENERAL NOTES

1. SEE SHEET G-004 FOR GENERAL SAFETY AND PHASING NOTES.
2. A 'NO ENTRY' SIGN MUST BE INSTALLED ON THE LOW PROFILE BARRICADES AT THE PAVEMENT LIMITS FOR THE CONSTRUCTION PHASE. REFER TO THE G-200 SERIES OF DRAWINGS FOR 'NO ENTRY' SIGN DETAIL AND INSTALLATION REQUIREMENTS.
3. WHILE THE CONSTRUCTION AREA IS CLOSED, THE BARRICADES AND 'NO ENTRY' SIGN MUST REMAIN IN POSITION IN THE PROPER LOCATION AT ALL TIMES 24 HOURS A DAY.
4. REFER TO RSA AND TOFA NOTES ON SHEET G-100 FOR THE MOVEMENT AREA REOPENING REQUIREMENTS.
5. ALL CONSTRUCTION BARRICADES, CONSTRUCTION SIGNS, AND PLACEMENT/MAINTENANCE OF LIGHTED RUNWAY CLOSURE MARKERS SHALL BE INCIDENTAL TO ITEM G-004-1 MAINTENANCE AND PROTECTION OF TRAFFIC.
6. THE CONTRACTOR MUST BLANK OUT EXISTING GUIDANCE SIGNS AND LIGHTS DURING THIS PHASE. REFER TO THE E-300 SERIES OF DRAWINGS FOR THE SIGNS AND LIGHTS TO BE BLANKED OUT AND THE REQUIREMENTS FOR THIS WORK. THIS WORK SHALL BE INCIDENTAL TO ITEM L-105-1 TEMPORARY LIGHTING.
7. MULTIPLE MOBILIZATIONS WILL BE REQUIRED FOR PAVEMENT MARKINGS. AT THE END OF PHASES A, B, AND C ONE COAT OF MARKINGS SHALL BE PAINTED FOR MARKINGS LOCATED WITHIN NEW PAVEMENT AREAS. THE FINAL COAT OF MARKINGS SHALL BE PAINTED AT THE END OF PHASE D (AFTER SEAL COATING) DUE TO A MINIMUM OF 30 DAYS REQUIRED FOR PAVEMENT CURING, FOR ALL MARKINGS SHOWN ON THE C-200 SERIES OF DRAWINGS (MARKINGS ON BOTH NEW AND EXISTING PAVEMENTS).

HORIZONTAL SCALE  
1"=400'

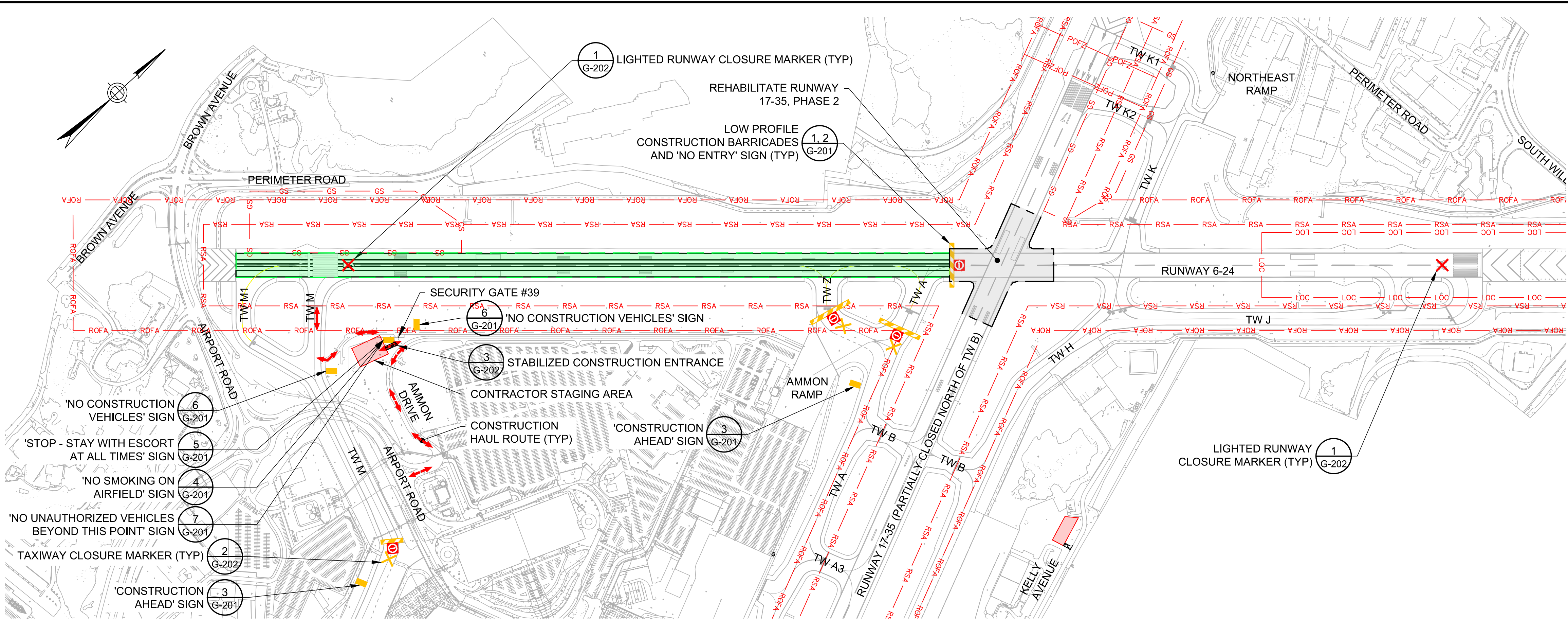


 <div>2 Executive Park Drive Suite 205 Bedford, NH 03110 Phone: (603) 886-7891 Fax: (603) 886-7785</div>			PROJECT DESIGNER:		
SCALE: 1"=40'			DESIGNED BY: LMO		
DATE: NOVEMBER 2022			DRAWN BY: LMO		
			CHECKED BY: JAM		
			APPROVED: JWG		
 <div>MANCHESTER • BOSTON REGIONAL AIRPORT</div>			PARTIAL REHABILITATION OF RUNWAY 6; RUNWAY 24; TAXIWAY K AND H INTERSECTION; AND TAXIWAY J		
			PHASE A AND B		
			CONSTRUCTION SAFETY AND PHASING PLAN AND NOTES		
REVIEWS					
REV. NO.	DATE	DESCRIPTION	BY		
1	12/14/22	ADDENDUM #3	LMO		
PROJ. NO.: 3-33-0011-TBD-2023					
JE FILE: E2X89212					
DRAWING NO.					
G-101					
SHEET 6 OF 34					
REV					

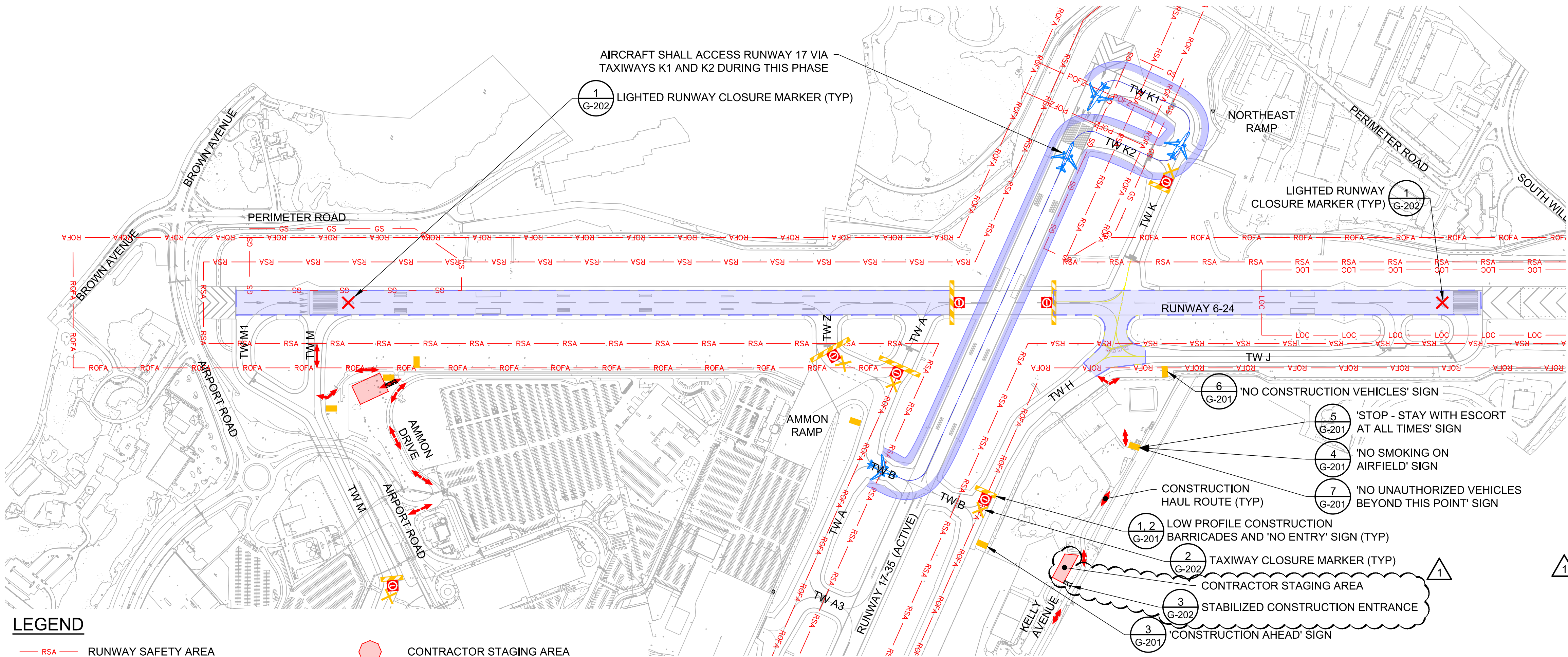
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Jacobs - \\mh1011\proj\2022\E2X89212 - MHT RW 6-24 Partial Rehab\700 Drawings\Plans\G100 - Construction Safety and Phasing Plan and Notes.dwg [G-102] December 15, 2022 - 1:17am [ccoonolm]



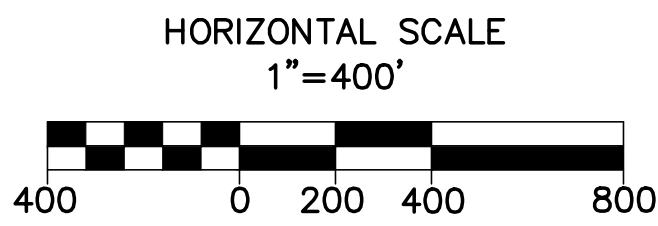
CONSTRUCTION SAFETY AND PHASING PLAN - PHASE C



CONSTRUCTION SAFETY AND PHASING PLAN - PHASE D

LEGEND

- |          |                                     |                                  |
|----------|-------------------------------------|----------------------------------|
| — RSA —  | RUNWAY SAFETY AREA                  | CONTRACTOR STAGING AREA          |
| — ROFA — | RUNWAY OBJECT FREE AREA             | PHASE C                          |
| — LOC —  | LOCALIZER CRITICAL AREA             | PHASE D                          |
| — GS —   | GLIDE SLOPE CRITICAL AREA           | PHASE 2                          |
|          | 'NO ENTRY' SIGN                     | LIGHTED RUNWAY CLOSURE MARKER    |
|          | LOW PROFILE CONSTRUCTION BARRICADES | TAXIWAY CLOSURE MARKER           |
|          | CONSTRUCTION SIGNAGE                | TAXI ROUTE                       |
|          | CONSTRUCTION HAUL ROUTE             | STABILIZED CONSTRUCTION ENTRANCE |



PHASE C AND D NOTES:

SCHEDULE

- THE CONTRACTOR MUST COMPLETE ALL WORK IN THE FOLLOWING PHASES:
  - PHASE C - 7 CALENDAR DAYS. THIS PHASE SHALL BEGIN AT LEAST 30 DAYS AFTER PHASE A AND SHALL COINCIDE WITH THE CLOSURE OF THE RUNWAY 17-35/6-24 INTERSECTION (PHASE 2 OF "REHABILITATE RUNWAY 17-35"). MAJOR WORK ELEMENTS IN THIS PHASE INCLUDE, BUT ARE NOT LIMITED TO:
    - INSTALL BARRICADES, 'NO ENTRY' SIGNS, CONSTRUCTION SIGNS, LIGHTED RUNWAY CLOSURE MARKERS, AND TAXIWAY CLOSURE MARKERS AS SHOWN ON THIS SHEET (SEE GENERAL NOTE 8)
    - COVER LIGHTS, COVER GUIDANCE SIGNS, AND DISCONNECT LIGHT FIXTURES AS SHOWN ON E-300 SERIES OF DRAWINGS (SEE GENERAL NOTE 8)
    - GROOVE NEW RUNWAY 6 PAVEMENT
    - SEAL PAVEMENT JOINTS AND CRACKS IN RUNWAY 6 PAVEMENT
    - SAW KERF AND SEAL PAVEMENT SENSOR CABLES
    - PAINT PAVEMENT MARKINGS ON RUNWAY 6 GROOVED AREAS
  - PHASE D - 7 CALENDAR DAYS. THIS PHASE SHALL BEGIN AFTER THE RUNWAY 17-35 RECONSTRUCTION IS COMPLETE. MAJOR WORK ELEMENTS IN THIS PHASE INCLUDE, BUT ARE NOT LIMITED TO:
    - INSTALL BARRICADES, 'NO ENTRY' SIGNS, CONSTRUCTION SIGNS, LIGHTED RUNWAY CLOSURE MARKERS, AND TAXIWAY CLOSURE MARKERS AS SHOWN ON THIS SHEET
    - COVER LIGHTS, COVER GUIDANCE SIGNS, AND DISCONNECT LIGHT FIXTURES AS SHOWN ON E-300 SERIES OF DRAWINGS
    - APPLY SEAL COAT ON RUNWAY 6
    - GROOVE NEW RUNWAY 24 PAVEMENT
    - ADD. ALT. 1 - SEAL CRACKS IN REMAINDER OF RUNWAY 24 PAVEMENT
    - ADD. ALT. 1 - APPLY SEAL COAT ON RUNWAY 24
    - PAINT FINAL PAVEMENT MARKINGS ON RUNWAY 6-24 AND TAXIWAY K, H, AND J

- THE CONTRACTOR SHALL COMPLETE ALL WORK ASSOCIATED WITH EACH PHASE WITHIN THE CALENDAR DAYS PROVIDED FOR EACH PHASE.
- PHASES C AND D CANNOT BE CONCURRENT.
- WORK ACTIVITIES MAY OCCUR 24 HOURS PER DAY. THE CONTRACTOR MUST COORDINATE ALL ASSOCIATED WORK WITHIN THE AIRPORT PROPERTY LIMITS WITH THE AIRPORT. THE CONTRACTOR MUST COORDINATE WITH AIRPORT OPERATIONS DURING HAULING ACTIVITIES.

IMPACTS TO OPERATIONS - PHASE C

- MOVEMENT AREA CLOSURES:
  - RUNWAY 6-24
  - TAXIWAY M (NORTH OF THE WESTERN CORNER OF THE TERMINAL APRON)
  - TAXIWAY M1
  - TAXIWAY Z
  - TAXIWAY A (FROM TAXIWAY Z TO RUNWAY 6)

IMPACTS TO OPERATIONS - PHASE D

- MOVEMENT AREA CLOSURES:
  - RUNWAY 6-24
  - TAXIWAY M (NORTH OF THE WESTERN CORNER OF THE TERMINAL APRON)
  - TAXIWAY M1
  - TAXIWAY Z
  - TAXIWAY A (FROM TAXIWAY Z TO RUNWAY 6)
  - TAXIWAY H (NORTH OF TAXIWAY B)
  - TAXIWAY J
  - TAXIWAY K (SOUTH OF TAXIWAY K2)
- AIRCRAFT SHALL ACCESS RUNWAY 17 FROM TAXIWAY B AND BACK-TAXI VIA TAXIWAYS K1 AND K2.

GENERAL NOTES

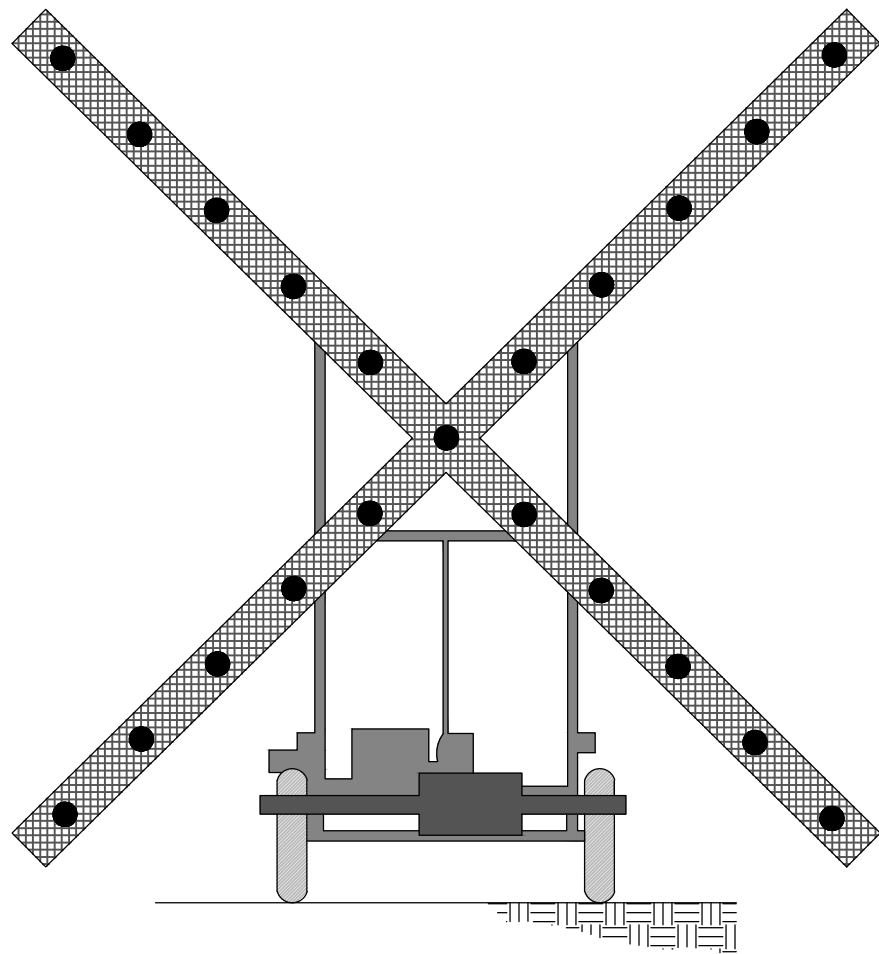
- SEE SHEET G-004 FOR GENERAL SAFETY AND PHASING NOTES.
- A 'NO ENTRY' SIGN MUST BE INSTALLED ON THE LOW PROFILE BARRICADES AT THE PAVEMENT LIMITS FOR THE CONSTRUCTION PHASE. REFER TO THE G-200 SERIES OF DRAWINGS FOR 'NO ENTRY' SIGN DETAIL AND INSTALLATION REQUIREMENTS.
- WHILE THE CONSTRUCTION AREA IS CLOSED, THE BARRICADES AND 'NO ENTRY' SIGN MUST REMAIN IN POSITION IN THE PROPER LOCATION AT ALL TIMES 24 HOURS A DAY.
- REFER TO RSA AND TOFA NOTES ON SHEET G-100 FOR THE MOVEMENT AREA REOPENING REQUIREMENTS.
- ALL CONSTRUCTION BARRICADES, CONSTRUCTION SIGNS, AND LIGHTED RUNWAY CLOSURE MARKERS SHALL BE INCIDENTAL TO ITEM G-004-1 MAINTENANCE AND PROTECTION OF TRAFFIC.
- THE CONTRACTOR MUST BLANK OUT EXISTING GUIDANCE SIGNS AND LIGHTS DURING THIS PHASE. REFER TO THE E-300 SERIES OF DRAWINGS FOR THE SIGNS AND LIGHTS TO BE BLANKED OUT AND THE REQUIREMENTS FOR THIS WORK. THIS WORK SHALL BE INCIDENTAL TO ITEM L-105-1 TEMPORARY LIGHTING.
- MULTIPLE MOBILIZATIONS WILL BE REQUIRED FOR PAVEMENT MARKINGS. AT THE END OF PHASES A, B, AND C, ONE COAT OF MARKINGS SHALL BE PAINTED FOR MARKINGS LOCATED WITHIN NEW PAVEMENT AREAS. THE FINAL COAT OF MARKINGS SHALL BE PAINTED AT THE END OF PHASE D (AFTER SEAL COATING) DUE TO A MINIMUM OF 30 DAYS REQUIRED FOR PAVEMENT CURING. FOR ALL MARKINGS SHOWN ON THE C-200 SERIES OF DRAWINGS (MARKINGS ON BOTH NEW AND EXISTING PAVEMENTS).
- DURING PHASE C, THE CONTRACTOR SHALL COORDINATE BARRICADES, SIGNS, CLOSURE MARKERS, LIGHT/GUIDANCE SIGN COVERINGS, AND LIGHT FIXTURE DISCONNECTION WITH THE "REHABILITATE RUNWAY 17-35" PROJECT CONTRACTOR. IF PHASE C SAFETY AND PHASING ITEMS ARE ALREADY INSTALLED UNDER "REHABILITATE RUNWAY 17-35" PHASE 2, THE CONTRACTOR IS NOT REQUIRED TO INSTALL DUPLICATE ITEMS.

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SCALE: 1"=400'	DATE: NOVEMBER 2022	DESIGNED BY: LMO	DRAWN BY: LMO
		CHECKED BY: JAM	APPROVED: JWG
MANCHESTER • BOSTON REGIONAL AIRPORT		PHASE C AND D CONSTRUCTION SAFETY AND PHASING PLAN AND NOTES	
PARTIAL REHABILITATION OF RUNWAY 6; RUNWAY 24; TAXIWAY K AND H INTERSECTION; AND TAXIWAY J			
BY: LMO			
DATE: 12/14/22			
REV. NO. 1			
PROJ. NO.: 3-33-0011-TBD-2023		DRAWING NO. G-102	
JE FILE: E2X89212		SHEET 7 OF 34	

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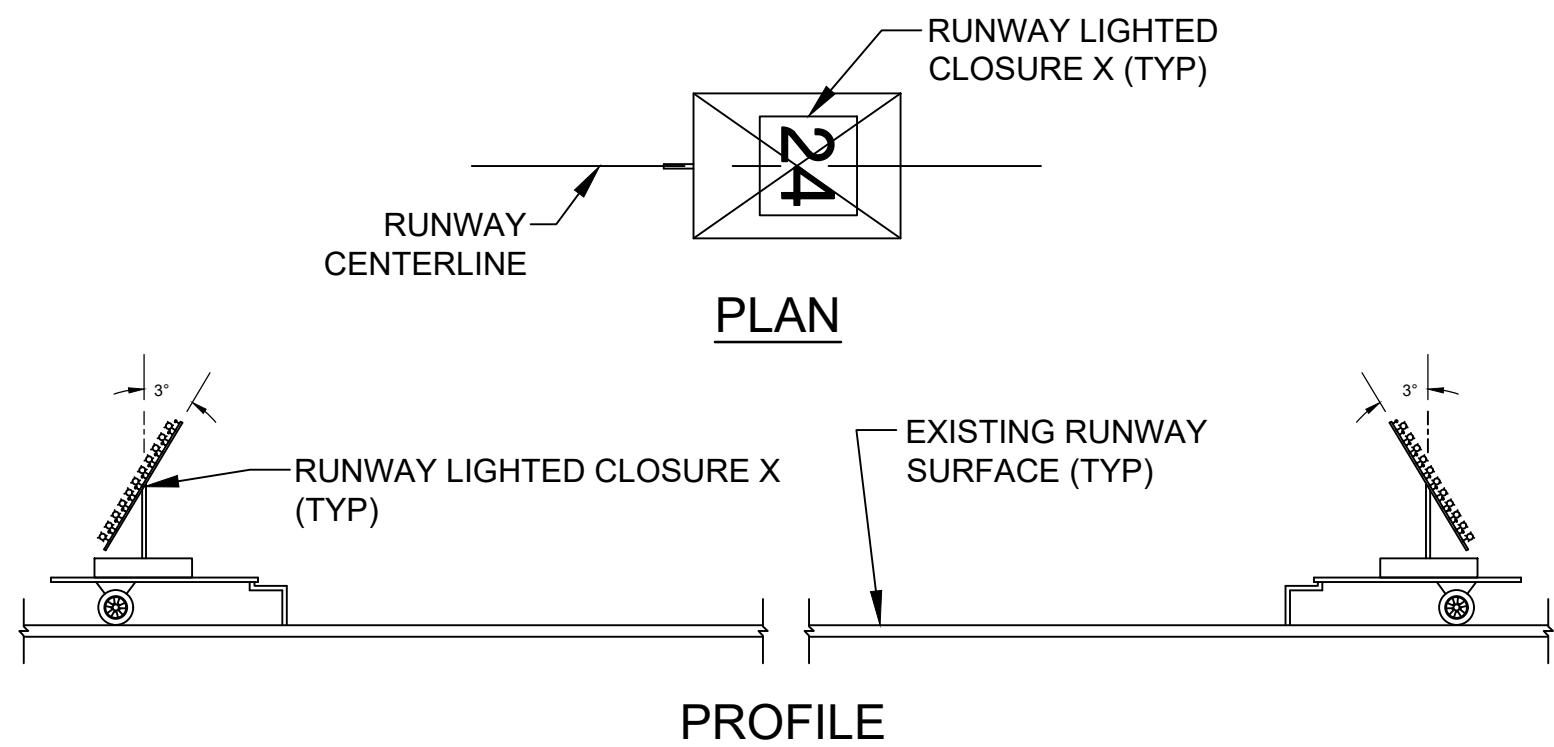


Jacobs - \\mrh101\job\2022\E2X89212 - MHT RW 6-24 Partial Rehab\700 Drawings\Plans\G201\_G203 - CSPP Details.dwg [G-202] December 14, 2022 - 3:53pm [econnoim]

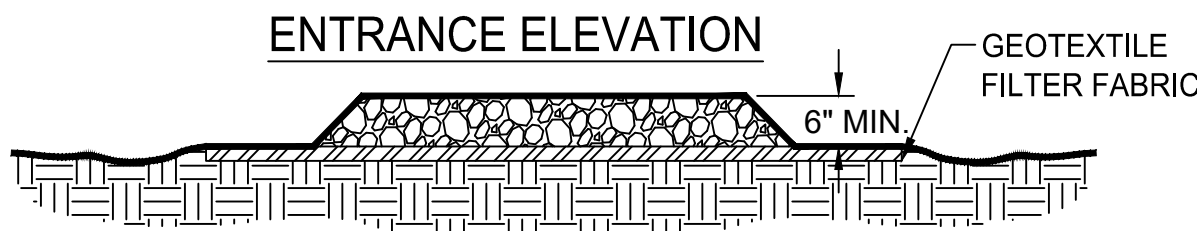
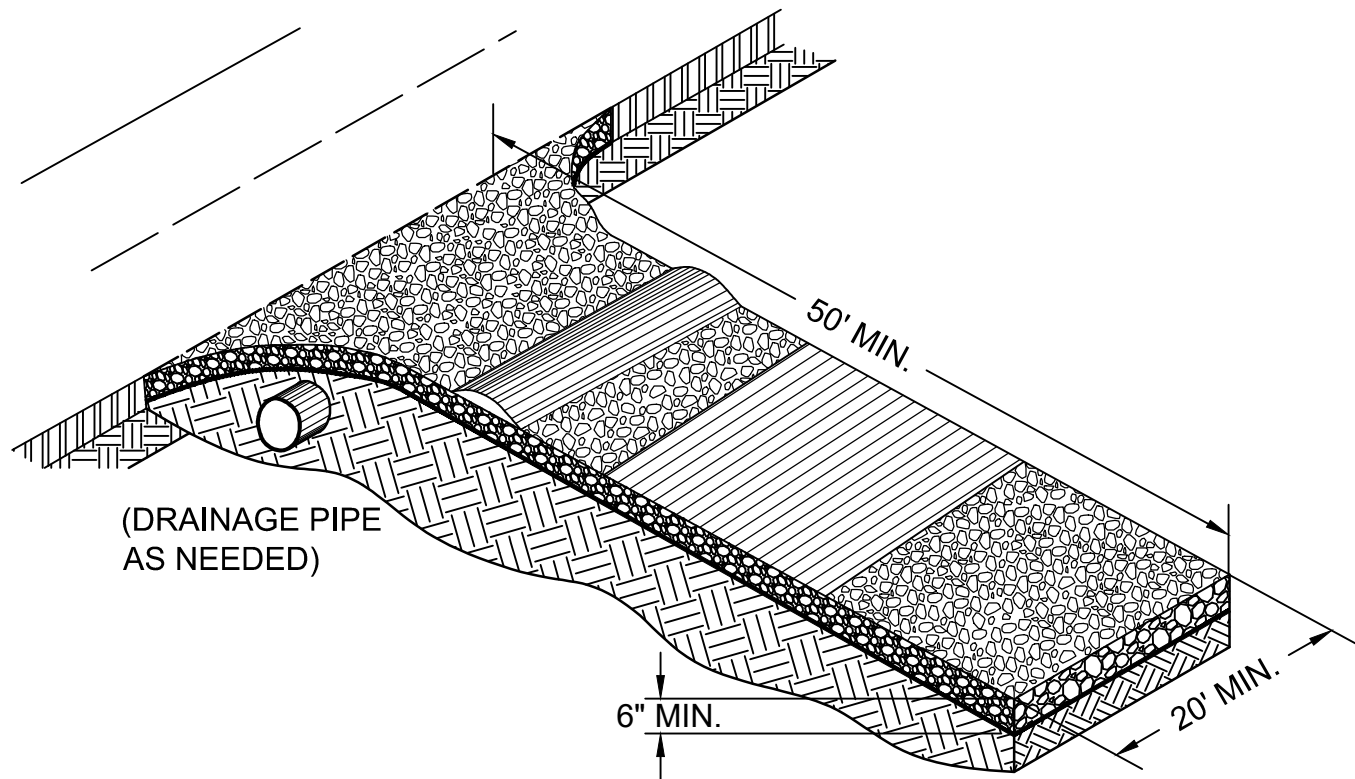


**LIGHTED RUNWAY CLOSURE MARKER NOTES:**

1. THE AIRPORT WILL PROVIDE THE TWO LIGHTED X'S FOR USE ON THE PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE MARKERS FOR THE DURATION OF THE PROJECT INCLUDING, BUT NOT LIMITED TO, PROVIDING FUEL, OIL, OIL CHANGES, ETC. THE CONTRACTOR SHALL ALSO ASSUME RESPONSIBILITY FOR THE TRANSPORTATION AND STORAGE OF THE LIGHTED RUNWAY CLOSURE MARKERS FOR THE DURATION OF THE PROJECT.
2. MARKERS SHALL BE PLACED ON BOTH ENDS OF THE RUNWAY DURING EACH CLOSURE AND SHALL COVER THE RUNWAY NUMERALS, AS SHOWN BELOW AND IN ACCORDANCE WITH FAA AC 150/5370-2G.
3. MARKERS SHALL BE PLACED IMMEDIATELY WHEN THE RUNWAY IS CLOSED BY THE AIRPORT UNDER ESCORT. THE CONTRACTOR SHALL REMOVE THE MARKERS WHEN DIRECTED BY THE RPR OR AIRPORT OPERATIONS, PRIOR TO REOPENING THE RUNWAY.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FUEL COSTS AND BATTERY OPERATIONS AND HAVE ADDITIONAL FUEL AVAILABLE TO ENSURE NO INTERRUPTION IN PERFORMANCE. THE CONTRACTOR SHALL CHECK THE FUEL LEVEL EVERY DAY AND ADD FUEL AS NECESSARY.
5. ALL COSTS ASSOCIATED WITH SETTING UP, TRANSPORTING, AND MAINTAINING THE RUNWAY CLOSURE MARKERS SHALL BE INCLUDED IN THE LUMP SUM UNIT PRICE FOR ITEM G-004-1.



**1 LIGHTED RUNWAY CLOSURE MARKER DETAIL**  
N.T.S.

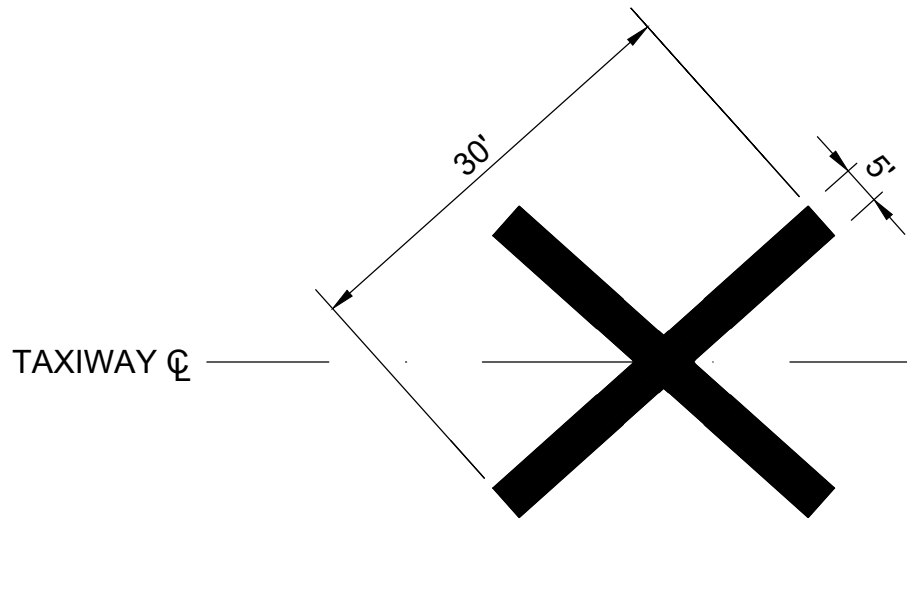


**STABILIZED CONSTRUCTION ENTRANCE NOTES:**

1. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
2. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
3. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6", AND BE PLACED ON GEOTEXTILE FILTER FABRIC TO PROTECT UNDERLYING SURFACE.
4. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
5. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
6. CONTRACTOR TO PROVIDE A SEDIMENT TRAP ON THE DOWN GRADIENT SIDE OF THE CONSTRUCTION ENTRANCE. THE SEDIMENT TRAP MUST MEET THE REQUIREMENTS OF THE NHDES AND ASSOCIATED DETAILS.
7. COST OF FURNISHING AND MAINTAINING THIS ITEM SHALL BE INCLUDED IN THE CONTRACTORS BID UNIT COST FOR ITEM M-001-1.

**3 STABILIZED CONSTRUCTION ENTRANCE DETAIL**  
N.T.S.

EDGE OF RUNWAY

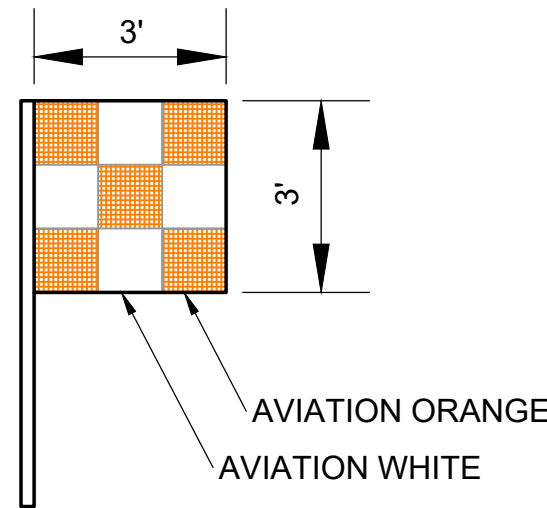


TAXIWAY C

**TAXIWAY CLOSURE MARKER NOTES:**

1. TAXIWAY CLOSURE MARKERS SHALL BE YELLOW IN COLOR AND CONSTRUCTED OF THE FOLLOWING MATERIALS: FABRIC, COLORED PLASTIC, OR SIMILAR MATERIALS. THEY SHALL BE PROPERLY CONFIGURED AND APPROPRIATELY SECURED TO PREVENT MOVEMENT BY PROP WASH, JET BLAST, OR OTHER WIND CURRENTS.
2. ACTUAL POSITION, LOCATION, AND ORIENTATION OF CLOSURE MARKERS SHALL BE APPROVED BY AIRPORT OPERATIONS AND THE RPR.
3. COST OF FURNISHING AND MAINTAINING THIS ITEM SHALL BE INCLUDED IN THE CONTRACTOR'S BID UNIT COST FOR ITEM G-004-1.

**2 TAXIWAY CLOSURE MARKER DETAIL**  
N.T.S.



**VEHICLE FLAG NOTES:**

1. COST OF FURNISHING AND MAINTAINING THIS ITEM SHALL BE INCLUDED IN THE CONTRACTORS BID UNIT COST FOR ITEM G-004-1.

**4 VEHICLE FLAG DETAIL**  
N.T.S.

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SCALE:	NTS
DATE:	NOVEMBER 2022
DESIGNED BY:	LMO
DRAWN BY:	LMO
CHECKED BY:	JAM
APPROVED:	JWG

MANCHESTER • BOSTON REGIONAL AIRPORT	PARTIAL REHABILITATION OF RUNWAY 6; RUNWAY 24; TAXIWAY K AND H INTERSECTION; AND TAXIWAY J	CONSTRUCTION SAFETY AND PHASING DETAILS – SHEET 2 OF 2
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REVISIONS	BY	LMO			
DESCRIPTION					
ADDENDUM #3					
DATE	12/14/22				
REV. NO.	1				

PROJ. NO.: 3-33-0011-TBD-2023  
JE FILE: E2X89212

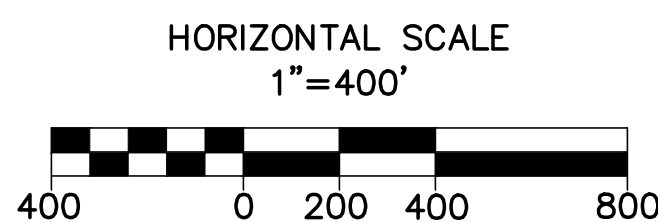
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**G-202**  
SHEET 9 OF 34

NOT FOR CONSTRUCTION





1. SEE DRAWING E-001 FOR ELECTRICAL GENERAL NOTES AND LEGEND.
2. SEE C-1XX SERIES OF DRAWINGS FOR DEMOLITION PLANS.
3. SEE G-1XX SERIES OF DRAWINGS FOR PHASING PLANS.
4. SEE E-1XX SERIES OF DRAWINGS FOR ELECTRICAL PLANS.
5. SEE E-2XX SERIES OF DRAWINGS FOR ELECTRICAL DETAILS.
6. SEE E-3XX SERIES OF DRAWINGS FOR TEMPORARY LIGHTING REQUIREMENTS.
7. THE CONTRACTOR SHALL LOCK OUT/TAG OUT ALL AFFECTED CIRCUITS IN THE AIRFIELD LIGHTING VAULT PRIOR TO PERFORMING WORK.
8. THE CONTRACTOR SHALL LOCK OUT/TAG OUT THE FOLLOWING CIRCUITS DURING ALL WORK REQUIRING THE CLOSURE OF RUNWAY 6-24:
  - RW 6-24 EDGE
  - RW 6-24 CENTERLINE
  - RW 6-24 RGL
  - TW M EDGE AND CENTERLINE



**NOT FOR CONSTRUCTION**

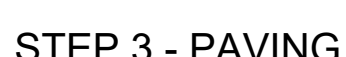




1. IF NECESSARY UTILIZE 2-PIECE BEVELED SPACER RING TO ENSURE SNOW PLOW RING SITS LEVEL IN ALL DIRECTIONS.
2. LIGHT FIXTURE MOUNTING BOLTS SHALL BE 3/8" DIA RED FLUOROPOLYMER COATED, GRADE 5 CARBON STEEL, 137,000 YIELD STRENGTH, TENSILE STRENGTH OF 143,000 IN ACCORDANCE WITH AC 150/5345-42 LATEST EDITION, AND FAA ENGINEERING BRIEF (EB) NO. 83A.
3. INSTALL BOLTS ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. TORQUE BOLTS TO 330 IN. LBS. IN ACCORDANCE WITH FAA ENGINEERING BRIEF (EB) NO. 83A.
4. DO NOT USE ANTI-SIEZE COMPOUND WITH COATED BOLTS.
5. INSTALL P-606 FROM TOP OF LOWER BASE EXTENSION TO TOP OF SPACER RINGS, PRIOR TO INSTALLING SNOW PLOW RING. ALIGN SNOW PLOW RING AND SECURELY SET PINS INTO P-606.



OFFSET AND CENTERLINE  
LIGHT BOLT CIRCLE ORIENTATION  
NOT TO SCALE



1. ISOLATION TRANSFORMERS, WIRING, CONNECTORS, AND CABLE TAGS ARE NOT REQUIRED AT LOCATIONS WHERE BASE CANS ARE TO BE LEFT WITHOUT FIXTURES INSTALLED. AT EXISTING LIGHT LOCATIONS WHERE BASE CANS ARE INDICATED TO BE REPLACED ON THE PLANS, REINSTALL THE EXISTING EQUIPMENT AS SHOWN.
2. NOT USED.
3. NOT USED.
4. CONCRETE AROUND BASE CAN AND CONDUIT. PLACE CONCRETE ANCHOR USING CARE THAT NEITHER JIG NOR LIGHT BASE ALIGNMENT IS DISTURBED (TYP.). FOR EXPEDIENCY, CONTRACTOR MAY USE HIGH EARLY CONCRETE AT NO ADDITIONAL COST TO THE PROJECT.
6. COUNTERPOISE MUST BE INSTALLED A MINIMUM OF 4" ABOVE CONDUIT. CONNECT COUNTERPOISE TO EXTERIOR GROUND LUG. BOND TO REBAR CAGE.
7. THE CAN SHALL BE INSTALLED SUCH THAT THE LIGHT BEAM (CENTER OF LIGHT BASE) IS ALIGNED AS DESCRIBED PER AC 150/5340-30, PARAGRAPH 11.1. THE LIGHT BEAM MUST BE ALIGNED AS DESCRIBED IN THE LIGHTING SYSTEM MANUAL WITH A TOLERANCE  $\pm 1$  DEGREE. THE LIGHTING FIXTURE MUST BE LEVEL, AND THE TOP OF THE SNOW RING EDGE MUST BE BETWEEN +0 INCH AND -1/16 INCH FROM THE PAVEMENT TOP.
8. THE CAN SHALL BE INSTALLED IN SUCH A MANNER THAT THE MOUNTING HEIGHT SHALL BE IN ACCORDANCE WITH AC 150/5340-30, PARAGRAPH 11.2 ELEVATION OF THE BASE WITH RESPECT TO THE TAXIWAY OR RUNWAY SURFACE AND AZIMUTH WITH RESPECT TO THE EDGE LIGHTS ARE TWO PARAMETERS THAT MUST BE MET. IT IS ABSOLUTELY NECESSARY THAT THE ELEVATION OF THE LIGHT BASE TOP FLANGE BE AT LEAST THE THICKNESS OF THE LIGHT FITTING PLUS THE THICKNESS OF TYPICAL PAVING TOLERANCES OF  $\pm 1/2$  INCH (13 MM) BELOW THE PAVEMENT FINISHED SURFACE. IF LESS THAN THAT REMAINS AFTER PAVING, THE LIGHTING FIXTURE WILL BE UNACCEPTABLY HIGH. IF MORE THAN  $3/4$  INCH (19 MM) IS LEFT, FLAT SPACER RINGS CAN BE USED TO BRING THE LIGHTING FIXTURES UP TO THE CORRECT ELEVATION. IN ORDER TO PRESERVE THE BASE INTEGRITY AND PROPER BOLT TORQUE, A MAXIMUM OF TWO SPACER RINGS MAY BE STACKED TOGETHER.
9. THE LIGHT BASE CAN SHALL HAVE AN INTEGRAL ANCHOR RING TO DISSIPATE AIRCRAFT/LARGE VEHICULAR WHEEL LOADS.
10. END OF SNOW PLOW RING MUST BE SET  $\frac{1}{8}$ " BELOW PAVEMENT IN ALL DIRECTIONS. SEE FIXTURE MOUNTING DETAIL, THIS DRAWING.
11. IF NECESSARY UTILIZE 2-PIECE BEVELED SPACER RING TO ENSURE SNOW RING FITS LEVEL IN ALL DIRECTIONS
12. PROVIDE  $3/8$ " DIA. STAINLESS STEEL BOLTS AND HARDWARE FOR CONNECTION OF BASE EXTENSION TO BASE CAN. BOLT LENGTH SHALL ALLOW FOR  $3/4$ " PROTRUSION BELOW BASE CAN BOTTOM SECTION TOP FLANGE. APPLY ANTI-SEIZE COMPOUND (LOCTITE LB8023 OR EQUAL) TO ALL STAINLESS STEEL BOLTS.

NOT TO SCALE

SHEET 29 OF 34

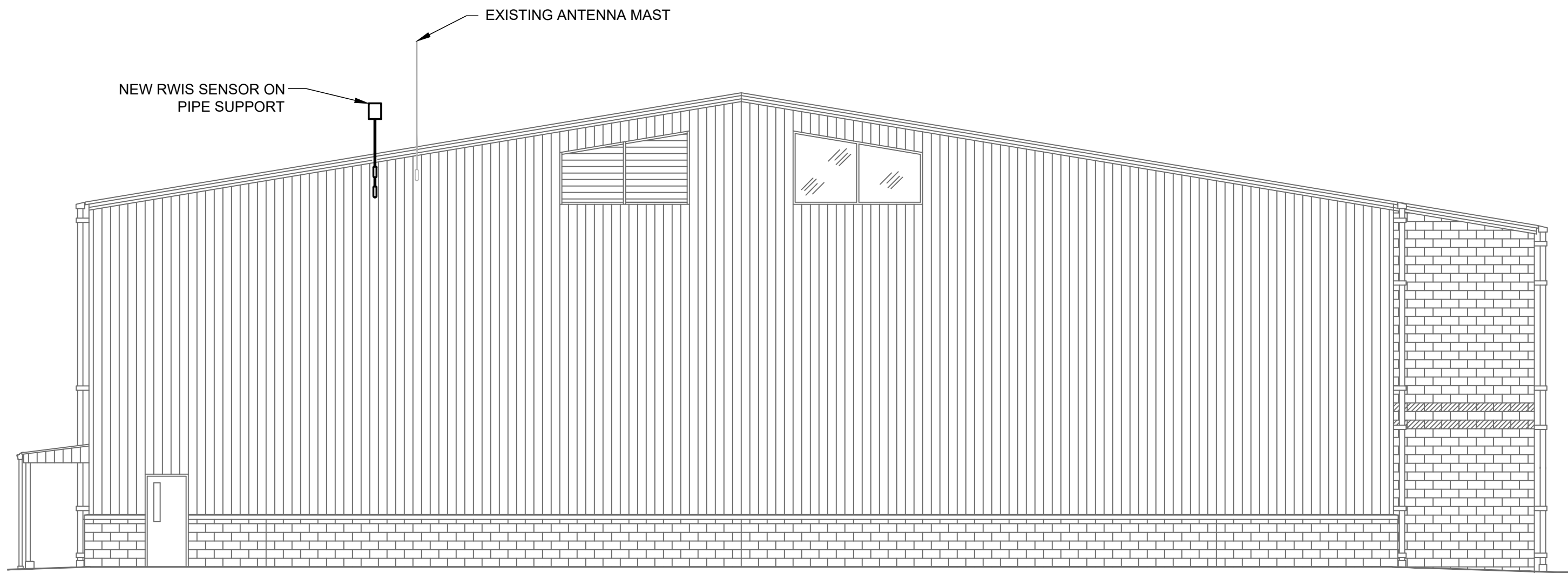
SHEET 29 OF 34

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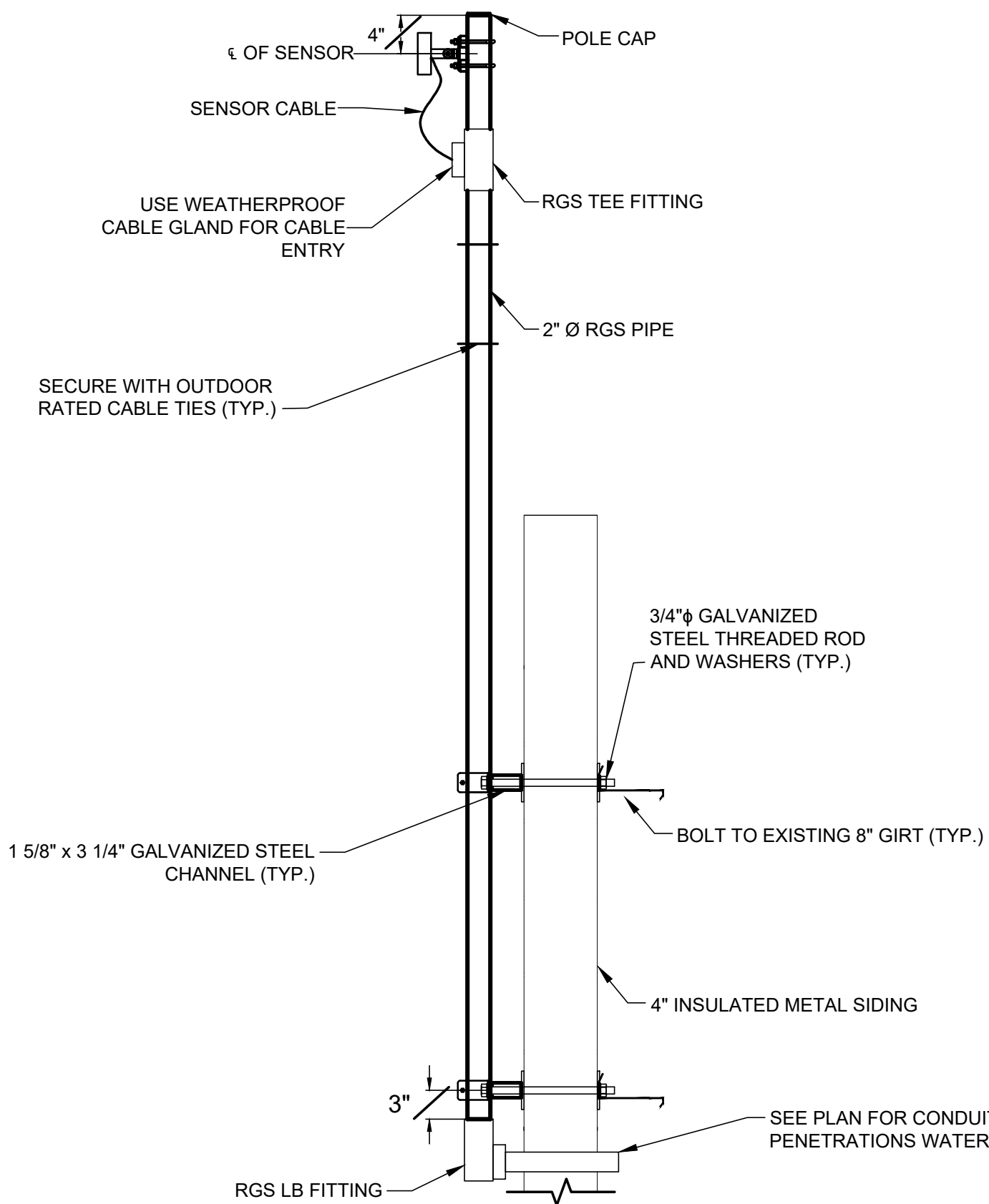
Jacobs - A:\2022\E2X89212 - MHT RW 6-24 Partial Rehab\700 Drawings\Plans\E201 - Electrical Details.dwg [E-201] December 13, 2022 - 4:07pm [panasub]



Jacobs - A:\2022\E2X89212 - MHT RW 6-24 Partial Rehab\700 Drawings\PlaneE401 - Maintenance Building Weather Sensor Mounting.dwg [E:401] December 13, 2022 - 4:09pm [panaeub]

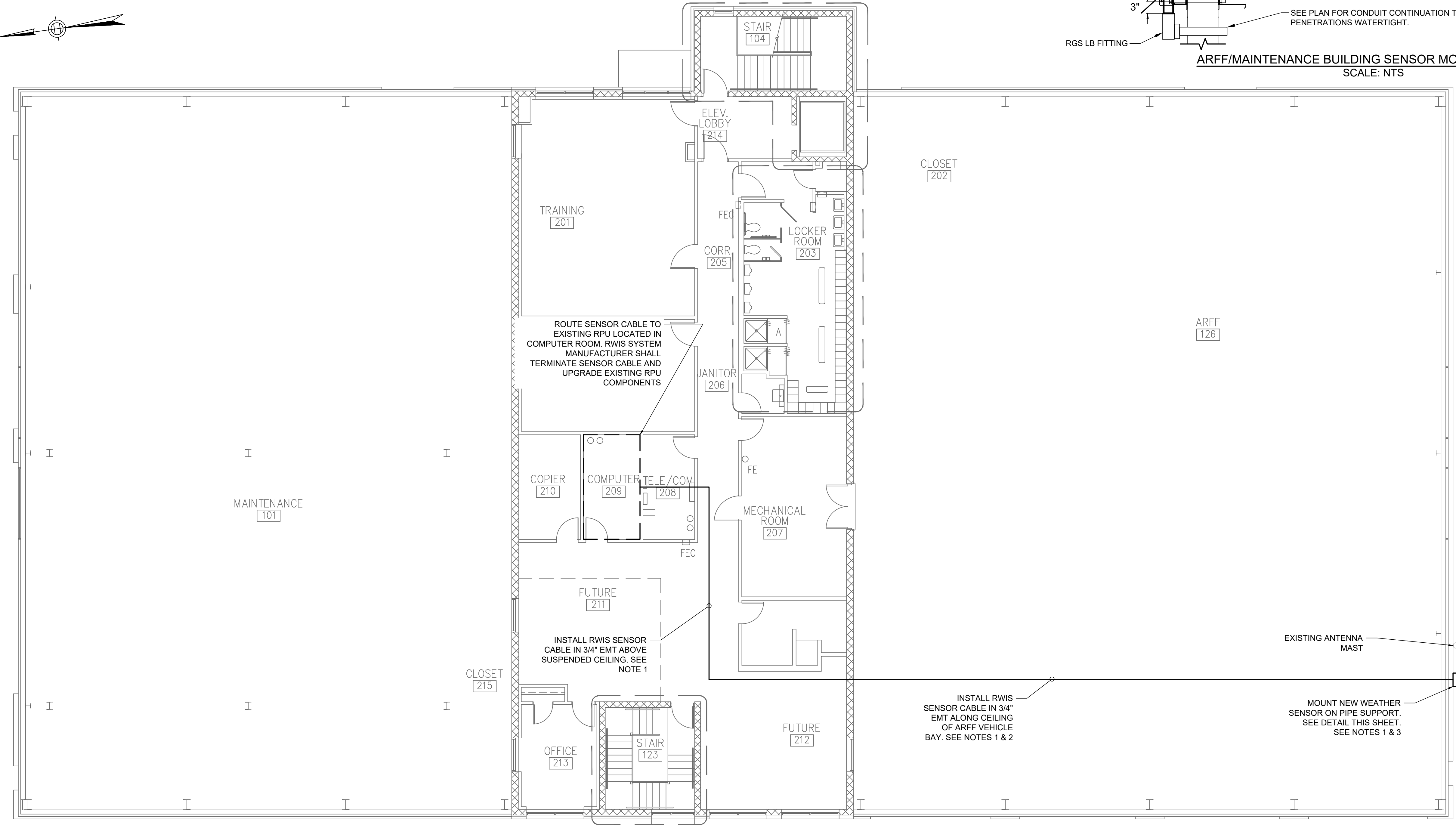


ARFF/MAINTENANCE BUILDING SOUTH WALL EXTERIOR ELEVATION  
SCALE: 1/8" = 1'-0"



- NOTES:**
1. CONFIRM EXACT MOUNTING HEIGHT AND MOUNTING HARDWARE PROVISIONS WITH SENSOR MANUFACTURER PRIOR TO INSTALLATION.

ARFF/MAINTENANCE BUILDING SENSOR MOUNTING DETAIL  
SCALE: NTS



ARFF/MAINTENANCE BUILDING PLAN  
SCALE: 1/8" = 1'-0"

- NOTES:**
1. NEW SENSOR AND SENSOR CABLE TO BE FURNISHED BY RWIS MANUFACTURER AS PART OF THE CONTRACT ALLOWANCE FOR RWIS UPGRADES.
  2. COORDINATE EXACT ROUTING OF SENSOR CABLE THROUGH VEHICLE BAY WITH EXISTING CEILING INSTALLED UTILITIES.
  3. COORDINATE EXACT LOCATION OF WEATHER SENSOR WITH RWIS MANUFACTURER AND AIRPORT MAINTENANCE DEPARTMENT.

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SCALE: AS SHOWN	DATE: NOVEMBER 2022	DESIGNED BY: BTP	DRAWN BY: BTP	CHECKED BY: JAM	APPROVED: JPH
MANCHESTER • BOSTON REGIONAL AIRPORT		PARTIAL REHABILITATION OF RUNWAY 6; RUNWAY 24; TAXIWAY K AND H INTERSECTION, AND TAXIWAY J		MAINTENANCE BUILDING WEATHER SENSOR MOUNTING	
REVISIONS	BY	DATE	REV. NO.		
DESCRIPTION	BTP	12/01/22	1		
ADDENDUM #3					
PROJ. NO.: 3-33-0011-TBD-2023					
JE FILE: E2X89212					
DRAWING NO.					
<b>E-401</b>					
SHEET 35 OF 34					

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