

**MANCHESTER-BOSTON REGIONAL AIRPORT
RUNWAY INCURSION MITIGATION PROJECTS
TAXIWAYS 'A1' & 'A2' HOLD LINE RECONFIGURATION AND
TAXIWAY 'H' RECONFIGURATION TO TAXIWAY 'K'**

ADDENDUM NO. 2

DATE: March 29, 2021
TO: ALL BIDDERS
FROM: McFarland-Johnson, Inc.
53 Regional Drive
Concord, NH 03301
PROJECT: Manchester-Boston Regional Airport
Manchester, New Hampshire
Runway Mitigation Projects

This Addendum forms part of and modifies Bidding and Contract Documents for the project named above, March 2021. The Bidder is to acknowledge receipt of this Addendum on the Bid Proposal Documents to be in compliance with the bidding requirements.

Where any original item called for in the Project Manual or indicated on the Drawings is supplemented hereby, the supplemental requirements shall be considered as added hereto.

Where any original item is amended, voided, or superseded hereby, the other provisions of such items not specifically amended, voided, or superseded shall remain in effect.

PROJECT DOCUMENTS

Addendum Item 2.01

BID PROPOSAL

REPLACE the Bid Form Pages as follows:

DELETE: Bid Proposal Bid Form – Page BP-5 of 24 through Page BP-24 of 24

INSERT: Bid Proposal Bid Form-Addendum #1 – Page BP-5 of 24 through Page BP-24 of 24

Addendum Item 2.02

Taxiway 'H' Reconfiguration to Taxiway 'K' - Construction Safety and Phasing Plan (CSPP)

REPLACE the following pages of the Taxiway 'H' Reconfiguration to Taxiway 'K' - CSPP:

DELETE: "CSPP" Narrative – Page 1 of 24 through Page 24 of 24

INSERT: "CSPP-Addendum #1" Narrative – Page 1 of 24 through Page 24 of 24

AND

DELETE: Appendix B PHASING PLAN - “CSPP” Sheet CS-04 entitled “*Construction Safety and Phase Plan – Phase 2A*”

INSERT: Appendix B PHASING PLAN - “CSPP-Addendum #1” Sheet CS-04 entitled “*Construction Safety and Phase Plan – Phase 2A*”

PLANS

Addendum Item 2.03

REPLACE the following Sheet as follows:

DELETE: Taxiway ‘H’ Reconfiguration to Taxiway ‘K’ (Schedule B & C) Plans – Sheet CS-04 entitled “*Construction Safety and Phase Plan – Phase 2A*”

INSERT: Taxiway ‘H’ Reconfiguration to Taxiway ‘K’ (Schedule B & C) Plans – Sheet CS-04 entitled “*Construction Safety and Phase Plan – Phase 2A*” with Revision Date 03/29/21

Addendum Item 2.04

REPLACE the following Sheet as follows:

DELETE: Taxiway ‘H’ Reconfiguration to Taxiway ‘K’ (Schedule B & C) Plans – Sheet EP-03 entitled “*Electrical Plan (3 of 3)*”

INSERT: Taxiway ‘H’ Reconfiguration to Taxiway ‘K’ (Schedule B & C) Plans – Sheet EP-03 entitled “*Electrical Plan (3 of 3)*” with Revision Date 03/29/21

Addendum Item 2.05

REPLACE the following Sheet as follows:

DELETE: Taxiway ‘H’ Reconfiguration to Taxiway ‘K’ (Schedule B & C) Plans – Sheet EP-06 entitled “*Electrical Details (3 of 5)*”

INSERT: Taxiway ‘H’ Reconfiguration to Taxiway ‘K’ (Schedule B & C) Plans – Sheet EP-06 entitled “*Electrical Details (3 of 5)*” with Revision Date 03/29/21

QUESTIONS AND CLARIFICATIONS

NONE

END OF ADDENDUM NO. 2

BID PROPOSAL

for

***RUNWAY INCURSION MITIGATION PROJECTS
TAXIWAYS 'A1' & 'A2' HOLD LINE RECONFIGURATION
AND
TAXIWAY 'H' RECONFIGURATION TO TAXIWAY 'K'***

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:

Schedule A: Taxiways 'A1' & 'A2' Hold Line Reconfiguration: Thirty (30) calendar days.

Schedules B & C: Taxiways 'H' Reconfiguration to Taxiway 'K': Ninety-Five (95) calendar days.

Bidder further agrees to pay to the Owner, as liquidated damages:

For Schedule A time duration, the sum of **six hundred dollars (\$600.00)** 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.

For Schedules B & C time duration, the sum of **two thousand five hundred dollars (\$2,500.00)** 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.

Bidder acknowledges receipt of the addenda shown on the attached form entitled:

ACKNOWLEDGMENT OF ADDENDA.

Bidder agrees to perform all the work described in the specifications, shown on the plans or directed, for the following unit prices:

****The name of the bidder must be exactly the same as the name under which the bidder was pre-qualified with the City of Manchester.***

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

NOTE: The line items listed in both Schedules B & C shall use the same unit price. If unbalanced between the schedules, the lower unit price shall govern.

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 - RUNWAY INCURSION MITIGATION PROJECT
SCHEDULE A: TAXIWAYS 'A1' & 'A2' HOLD LINE RECONFIGURATION
BID FORM

ITEM NO.	ESTIMATED QUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
C-105-1	1 LS	MOBILIZATION (LIMIT 10%) _____ Dollars and _____ Cents				
M-100-1	1 ALL	ALLOWANCE – GATE GUARDS Ten Thousand Dollars and Zero Cents	\$10,000	00	\$10,000	00
M-200-1	1 LS	MAINTENANCE AND PROTECTION OF TRAFFIC _____ Dollars and _____ Cents				
M-300-1	1 ALL	ALLOWANCE – MODIFICATIONS TO ALCMS EQUIPMENT Fifteen Thousand Dollars and Zero Cents	\$15,000	00	\$15,000	00
P-101-5.2	1,100 SY	COLD MILLING (2"-4.5") _____ Dollars and _____ Cents				
P-152-4.1	155 CY	UNCLASSIFIED EXCAVATION _____ Dollars and _____ Cents				
P-209-5.1	125 CY	CRUSHED AGGREGATE BASE COURSE _____ Dollars and _____ Cents				
P-403-8.1	220 TON	ASPHALT MIXTURE SURFACE COURSE _____ Dollars and _____ Cents				
P-603-5.1	130 GAL	EMULSIFIED ASPHALT TACK COAT _____ Dollars and _____ Cents				

Manchester-Boston Regional Airport - RUNWAY INCURSION MITIGATION PROJECT
SCHEDULE A: TAXIWAYS 'A1' & 'A2' HOLD LINE RECONFIGURATION
BID FORM

ITEM NO.	ESTIMATED QUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
P-605-5.1	1,300 LF	JOINT SEALING FILLER _____ Dollars and _____ Cents				
P-608-8.1	215 SY	ASPHALT SURFACE TREATMENT _____ Dollars and _____ Cents				
P-620-5.1a	1,900 SF	SURFACE PREPARATION _____ Dollars and _____ Cents				
P-620-5.2b	5,100 SF	MARKING _____ Dollars and _____ Cents				
P-620-5.3c	190 LBS	REFLECTIVE MEDIA _____ Dollars and _____ Cents				
T-901-5.1	1 (1000 SF)	SEEDING _____ Dollars and _____ Cents				
T-905-5.2	6 CY	TOPOIL (FURNISHED FROM OFF THE SITE) _____ Dollars and _____ Cents				
T-908-5.1	100 SY	MULCHING _____ Dollars and _____ Cents				
L-108-5.1	2,600 LF	#8 AWG, 5KV, L-824, TYPE C CABLE INSTALLED IN TRENCH, DUCT BANK, OR CONDUIT _____ Dollars and _____ Cents				

Manchester-Boston Regional Airport - RUNWAY INCURSION MITIGATION PROJECT
SCHEDULE A: TAXIWAYS 'A1' & 'A2' HOLD LINE RECONFIGURATION
BID FORM

ITEM NO.	ESTIMATED QUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
L-108-5.2	500 LF	#6 AWG, SOLID, BARE COPPER COUNTERPOISE WIRE, INSTALLED ABOVE THE DUCT BANK OR CONDUIT, INCLUDING CONNECTIONS/TERMINALS _____ Dollars and _____ Cents				
L-110-5.1	310 LF	CONCRETE ENCASED ELECTRICAL CONDUIT – 1 WAY - 2-INCH _____ Dollars and _____ Cents				
L-110-5.2	190 LF	NON-ENCASED ELECTRICAL CONDUIT – 1 WAY - 2-INCH _____ Dollars and _____ Cents				
L-110-5.3	1,900 LF	REMOVAL OF EXISTING CABLE IN ELECTRICAL CONDUIT/DUCT _____ Dollars and _____ Cents				
L-125-5.1	19 EA	L-852G(L) IN-PAVEMENT RUNWAY GUARD LIGHT _____ Dollars and _____ Cents				
L-125-5.2	4 EA	RELOCATE EXISTING ELEVATED L-804(L) RUNWAY GUARD LIGHT _____ Dollars and _____ Cents				
L-125-5.3	12 EA	RELOCATE EXISTING AIRFIELD GUIDANCE SIGN PANELS _____ Dollars and _____ Cents				

Manchester-Boston Regional Airport - RUNWAY INCURSION MITIGATION PROJECT SCHEDULE A: TAXIWAYS 'A1' & 'A2' HOLD LINE RECONFIGURATION BID FORM						
ITEM NO.	ESTIMATED QUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
L-125-5.4	2 EA	REMOVE AIRFIELD GUIDANCE SIGN & FOUNDATION _____ Dollars and _____ Cents				
L-125-5.5	18 EA	REMOVE EXISTING L-852G(L) IN-PAVEMENT RUNWAY GUARD LIGHT _____ Dollars and _____ Cents				
L-125-5.6	1 EA	RELOCATE EXISTING L-852C(L) IN-PAVEMENT TAXIWAY CENTERLINE LIGHT _____ Dollars and _____ Cents				
L-125-5.7	1 EA	INSTALL NEW L-867 TYPE 1A, SIZE B LIGHT BASE JUNCTION CAN _____ Dollars and _____ Cents				

SCHEDULE A SUBTOTAL (Pages BP-7 to BP-10)

(Transfer the Subtotal Amount to Page BP-21)

\$ _____

Manchester-Boston Regional Airport – Runway Incursion Mitigation Projects
SCHEDULE B - TAXIWAY ‘H’ RECONFIGURATION TO TAXIWAY ‘K’
BID FORM

ITEM NO.	ESTIMATED QUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
C-105-6.1	1 LS	MOBILIZATION (LIMIT 3%) ____ Dollars and ____ Cents				
M-001-1	1 ALL	ALLOWANCE – GATE GUARDS <u>Thirty-five Thousand</u> Dollars and <u>Zero</u> Cents	\$35,000	00	\$35,000	00
M-200-1	1 LS	MAINTENANCE & PROTECTION OF TRAFFIC ____ Dollars and ____ Cents				
M-300-1	1 ALL	ALLOWANCE – ALCMS MODIFICATIONS <u>Eighty-five Thousand</u> Dollars and <u>Zero</u> Cents	\$85,000	00	\$85,000	00
M-400-1	1 LS	RECORD DOCUMENTS ____ Dollars and ____ Cents				
M-400-2	1 LS	FIELD DATA COLLECTION FOR GIS SURVEY CONVERSION ____ Dollars and ____ Cents				
M-500-4.1	1 LS	ENGINEER FIELD OFFICE ____ Dollars and ____ Cents				
M-600-1	1 LS	CONSTRUCTION ACCESS MODIFICATIONS ____ Dollars and ____ Cents				
M-600-2	240 TONS	VEHICLE SERVICE ROAD ASPHALT PAVEMENT ____ Dollars and ____ Cents				

Manchester-Boston Regional Airport – Runway Incursion Mitigation Projects
SCHEDULE B - TAXIWAY ‘H’ RECONFIGURATION TO TAXIWAY ‘K’
BID FORM

ITEM NO.	ESTIMATED QUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
M-700-1	1 ALL	ALLOWANCE FOR FAA AND MHT CABLE REPLACEMENT <u>Sixty Thousand</u> Dollars and <u>Zero</u> Cents	\$60,000	00	\$60,000	00
C-100	1 LS	CONTRATOR QUALITY CONTROL PROGRAM _____ Dollars and _____ Cents				
C-102-5.1	14 EA	INSTALLATION AND REMOVAL OF INLET PROTECTION FILTER BAGS _____ Dollars and _____ Cents				
C-102-5.2	1,500 LF	INSTALLATION AND REMOVAL OF EROSION CONTROL LOGS _____ Dollars and _____ Cents				
C-102-5.3	1 LS	INSTALLATION AND REMOVAL OF STABILIZED CONSTRUCTION ENTRANCE _____ Dollars and _____ Cents				
C-102-5.4	2,600 SY	INSTALLATION OF EROSION CONTROL BLANKET _____ Dollars and _____ Cents				
P-101-5.1	44,800 SY	PAVEMENT REMOVAL _____ Dollars and _____ Cents				
P-101-5.2	2,000 LF	JOINT AND CRACK REPAIR _____ Dollars and _____ Cents				

Manchester-Boston Regional Airport – Runway Incursion Mitigation Projects
SCHEDULE B - TAXIWAY ‘H’ RECONFIGURATION TO TAXIWAY ‘K’
BID FORM

ITEM NO.	ESTIMATED QUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
P-101-5.6	2,450 SY	COLD MILLING _____ Dollars and _____ Cents				
P-101-5.7A	1,100 LF	REMOVAL OF PIPE _____ Dollars and _____ Cents				
P-101-5.7B	3 EA	REMOVAL OF DRAIN INLET/MANHOLE _____ Dollars and _____ Cents				
P-101-5.7C	6 EA	REMOVAL OF ELECTRIC MANHOLE/HANDHOLE _____ Dollars and _____ Cents				
P-101-5.7D	2,500 LF	REMOVAL OF CABLING (IN CONDUIT TO REMAIN) _____ Dollars and _____ Cents				
P-152-4.1	49,000 CY	UNCLASSIFIED EXCAVATION _____ Dollars and _____ Cents				
P-152-4.2	2,500 CY	UNSUITABLE EXCAVATION _____ Dollars and _____ Cents				
P-154-5.1	27,400 CY	SUBBASE COURSE _____ Dollars and _____ Cents				
P-209-5.1	8,100 CY	CRUSHED AGGREGATE BASE COURSE _____ Dollars and _____ Cents				
P-401-8.1	8,000 TON	ASPHALT SURFACE COURSE _____ Dollars and _____ Cents				

Manchester-Boston Regional Airport – Runway Incursion Mitigation Projects
SCHEDULE B - TAXIWAY ‘H’ RECONFIGURATION TO TAXIWAY ‘K’
BID FORM

ITEM NO.	ESTIMATED QUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
P-403-8.1	13,200 TON	ASPHALT BASE COURSE/SHOULDER PAVEMENT _____ Dollars and _____ Cents				
P-603-5.1	7,500 GAL	EMULSIFIED ASPHALT TACK COAT _____ Dollars and _____ Cents				
P-605-5.1	1,820 LF	JOINT SEALING FILLER _____ Dollars and _____ Cents				
P-620-5.1a	1,800 SF	SURFACE PREPARATION _____ Dollars and _____ Cents				
P-620-5.2b	35,000 SF	MARKINGS _____ Dollars and _____ Cents				
P-620-5.3c	1,000 LBS	REFLECTIVE MEDIA _____ Dollars and _____ Cents				
P-620-5.4d	400 SF	TEMPORARY RUNWAY AND TAXIWAY MARKING _____ Dollars and _____ Cents				
F-162-5.1	75 LF	CHAIN-LINK FENCE _____ Dollars and _____ Cents				
F-162-5.2b	1 EA	VEHICLE GATES _____ Dollars and _____ Cents				

Manchester-Boston Regional Airport – Runway Incursion Mitigation Projects
SCHEDULE B - TAXIWAY ‘H’ RECONFIGURATION TO TAXIWAY ‘K’
BID FORM

ITEM NO.	ESTIMATED QUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
D-701-5.1A	500 LF	4-INCH SDR 35 PVC PIPE _____ Dollars and _____ Cents				
D-701-5.1B	8 LF	12-INCH CLASS V REINFORCED CONCRETE PIPE _____ Dollars and _____ Cents				
D-701-5.1C	270 LF	15-INCH CLASS V REINFORCED CONCRETE PIPE _____ Dollars and _____ Cents				
D-701-5.1D	350 LF	18-INCH CLASS V REINFORCED CONCRETE PIPE _____ Dollars and _____ Cents				
D-705-5.4	4,700 LF	6-INCH PIPE DOUBLE-WALL HIGH DENSITY POLYETHYLENE (SMOOTH INTERIOR/CORRUGATED EXTERIOR) _____ Dollars and _____ Cents				
D-751-5.2	1 EA	CATCH BASINS _____ Dollars and _____ Cents				
D-751-5.3	1 EA	ADJUST STRUCTURE RIM/GRATE ELEVATION _____ Dollars and _____ Cents				
D-751-5.4	1 EA	CONCRETE HEADWALL _____ Dollars and _____ Cents				

Manchester-Boston Regional Airport – Runway Incursion Mitigation Projects
SCHEDULE B - TAXIWAY ‘H’ RECONFIGURATION TO TAXIWAY ‘K’
BID FORM

ITEM NO.	ESTIMATED QUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
T-901-5.1	250 (1000 SF)	SEEDING _____ Dollars and _____ Cents				
T-905-5.1	1,700 CY	TOPSOIL (OBTAINED ON SITE OR FROM STOCKPILE) _____ Dollars and _____ Cents				
T-905-5.2	330 CY	TOPSOIL (FURNISHED FROM OFF THE SITE) _____ Dollars and _____ Cents				
T-908-5.1	27,570 SY	MULCHING _____ Dollars and _____ Cents				
L-107-5.1	1 EA	TYPE L-806 STYLE I-B, SIZE 1 WIND CONE _____ Dollars and _____ Cents				
L-108-5.1	49,600 LF	No. 8 AWG, 5 KV, L-824, TYPE C CABLE INSTALLED IN DUCT BANK OR CONDUIT _____ Dollars and _____ Cents				
L-108-5.2	11,660 LF	#6 AWG, SOLID, BARE COPPER COUNTERPOISE WIRE, INSTALLED ABOVE THE DUCT BANK OR CONDUIT, INCLUDING CONNECTIONS/TERMINATIONS _____ Dollars and _____ Cents				

Manchester-Boston Regional Airport – Runway Incursion Mitigation Projects
SCHEDULE B - TAXIWAY ‘H’ RECONFIGURATION TO TAXIWAY ‘K’
BID FORM

ITEM NO.	ESTIMATED QUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
L-109-7.4A	1 UNIT	INSTALLATION OF EQUIPMENT WITHIN EXISTING VAULT, 15 kW L- 829 CCR – TW K CENTERLINE _____ Dollars and _____ Cents				
L-109-7.4B	1 UNIT	INSTALLATION OF EQUIPMENT WITHIN EXISTING VAULT, 10 kW L- 829 CCR – TW K EDGE _____ Dollars and _____ Cents				
L-110-5.1	9,900 LF	CONCRETE ENCASED ELECTRICAL CONDUIT – 1 WAY - 2-INCH _____ Dollars and _____ Cents				
L-110-5.2A	470 LF	CONCRETE ENCASED ELECTRICAL DUCT BANK – 2-WAY - 4-INCH _____ Dollars and _____ Cents				
L-110-5.2B	1,060 LF	CONCRETE ENCASED ELECTRICAL DUCT BANK – 4-WAY - 4-INCH _____ Dollars and _____ Cents				
L-110-5.3	700 LF	NON-ENCASED ELECTRICAL CONDUIT – 1 WAY - 2-INCH _____ Dollars and _____ Cents				
L-110-5.4	7,200 LF	REMOVAL OF CONCRETE ENCASED OR NON-ENCASED ELECTRICAL CONDUIT/DUCT & CABLE _____ Dollars and _____ Cents				

Manchester-Boston Regional Airport – Runway Incursion Mitigation Projects
SCHEDULE B - TAXIWAY ‘H’ RECONFIGURATION TO TAXIWAY ‘K’
BID FORM

ITEM NO.	ESTIMATED QUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
L-115-5.3	7 EA	EXISTING ELECTRICAL MANHOLE/JUNCTION STRUCTURE ELEVATION ADJUSTMENT _____ Dollars and _____ Cents				
L-115-5.4	7 EA	ELECTRICAL HANDHOLE (4’ x 4’ PRECAST CONCRETE) _____ Dollars and _____ Cents				
L-125-5.1	97 EA	NEW L-861T ELEVATED TAXIWAY EDGE LIGHT _____ Dollars and _____ Cents				
L-125-5.2	35 EA	NEW L-852C(L) IN-PAVEMENT TAXIWAY CENTERLINE LIGHT _____ Dollars and _____ Cents				
L-125-5.3	31 EA	NEW L-852K(L) IN-PAVEMENT TAXIWAY CENTERLINE LIGHT _____ Dollars and _____ Cents				
L-125-5.4	36 EA	NEW L-852G(L) IN-PAVEMENT RUNWAY GUARD LIGHT _____ Dollars and _____ Cents				
L-125-5.5	6 EA	NEW L-804(L) ELEVATED RUNWAY GUARD LIGHT _____ Dollars and _____ Cents				
L-125-5.6A	3 EA	NEW L-850C IN-PAVEMENT RUNWAY EDGE LIGHT _____ Dollars and _____ Cents				

Manchester-Boston Regional Airport – Runway Incursion Mitigation Projects
SCHEDULE B - TAXIWAY ‘H’ RECONFIGURATION TO TAXIWAY ‘K’
BID FORM

ITEM NO.	ESTIMATED QUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
L-125-5.6B	1 EA	REPLACE L-850C IN-PAVEMENT RUNWAY EDGE LIGHT ON EXISTING BASE CAN _____ Dollars and _____ Cents				
L-125-5.7A	2 EA	NEW AIRFIELD GUIDANCE SIGN – 1 MODULE _____ Dollars and _____ Cents				
L-125-5.7B	5 EA	NEW AIRFIELD GUIDANCE SIGN – 2 MODULE _____ Dollars and _____ Cents				
L-125-5.7C	7 EA	NEW AIRFIELD GUIDANCE SIGN – 3 MODULE _____ Dollars and _____ Cents				
L-125-5.8	1 EA	REPLACE AIRFIELD GUIDANCE SIGN PANEL _____ Dollars and _____ Cents				
L-125-5.9	10 EA	REMOVE AIRFIELD GUIDANCE SIGN & FOUNDATION _____ Dollars and _____ Cents				
L-125-5.10	75 EA	REMOVE ELEVATED RUNWAY/TAXIWAY EDGE LIGHT _____ Dollars and _____ Cents				
L-125-5.11	4 EA	REMOVE ELEVATED RUNWAY GUARD LIGHT _____ Dollars and _____ Cents				

Manchester-Boston Regional Airport – Runway Incursion Mitigation Projects SCHEDULE B - TAXIWAY ‘H’ RECONFIGURATION TO TAXIWAY ‘K’ BID FORM						
ITEM NO.	ESTIMATED QUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
L-125-5.12	43 EA	REMOVE IN-PAVEMENT RUNWAY GUARD LIGHT _____ Dollars and _____ Cents				
L-125-5.13	8 EA	REMOVE, STORE AND REINSTALL EXISTING ELEVATED RUNWAY END/THRESHOLD LIGHT _____ Dollars and _____ Cents				
L-125-5.14	4 EA	REMOVE, STORE AND REINSTALL EXISTING FAA IN-PAVEMENT RUNWAY THRESHOLD LIGHT _____ Dollars and _____ Cents				

SCHEDULE B SUBTOTAL (Pages BP-11 to BP-20) \$ _____
 (Transfer the Subtotal Amount to Page BP-22)

Manchester-Boston Regional Airport – Runway Incursion Mitigation Projects SCHEDULE C - TAXIWAY ‘H’ RECONFIGURATION TO TAXIWAY ‘K’ RUNWAY 6-24 PAVEMENT MAINTENANCE BID FORM						
ITEM NO.	ESTIMATED QUANTITY/ UNIT	DESCRIPTION AND UNIT PRICE (IN WORDS)	FIGURES			
			UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
P-101-5.6	1,150 SY	COLD MILLING _____ Dollars and _____ Cents				
P-403-8.1	300 TON	ASPHALT BASE COURSE/SHOULDER PAVEMENT _____ Dollars and _____ Cents				
P-603-5.1	170 GALS	EMULSIFIED ASPHALT TACK COAT _____ Dollars and _____ Cents				
P-605-5.1	1,800 LF	JOINT SEALING FILLER _____ Dollars and _____ Cents				

SCHEDULE C SUBTOTAL (Page BP-21)
 (Transfer the Subtotal Amount to Page BP-22)

\$ _____

SCHEDULE A: SUBTOTAL AMOUNT*(FROM PAGE BP-10)*

\$ _____

SCHEDULE B: SUBTOTAL AMOUNT*(FROM PAGE BP-20)*

\$ _____

SCHEDULE C: SUBTOTAL AMOUNT*(FROM PAGE BP-21)*

\$ _____

BID SUMMARY

TOTAL BID: _____ **dollars**
(amount in words)

(\$ _____).
(amount in figures)

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 (in ascending order), 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 a period of one-hundred eighty (180) calendar days after 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 attached within fifteen (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

BID 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)

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AIRPORT DESCRIPTION / AIRCRAFT OPERATIONS

Manchester Boston Regional Airport (MHT) located in Manchester and Londonderry, New Hampshire is a Part 139 commercial service airport with regularly scheduled passenger service, terminal building and air traffic control tower manned 24 hours per day.

MHT has a normal airport reference code (ARC) of D-IV. The airport has two paved runways: 17/35 and 6/24.

Runway 17/35 dimensions are 9250' x 150'. Runway 6/24 dimensions are 7650' x 150'. Navigational aids for the runways are as follows:

Runway 17:

4-light PAPI - Right
MALSR Approach lights
ILS/DME

Runway 35:

4-light PAPI - Left
ALSF2 Approach Lights
ILS/ DME

Runway 6:

4-light PAPI - Left
REILs
ILS

Runway 24:

4-light PAPI - Left
REILs

The airport also has a VOR located towards the south of the airfield. This project is not within any portion of the VOR critical area.

PROJECT DESCRIPTION

The Manchester-Boston Regional Airport (MHT) is proposing a taxiway reconfiguration project on the airfield adjacent to the Runway 17 End of Runway 17-35. The proposed project involves the reconfiguration of the northern portion of Taxiway H and Taxiway L pavements to mitigate the existing Federal Aviation Administration's (FAA) identified Hot Spot location (Hot Spot 1). Hot Spot 1 has nonstandard geometry and a wider than normal expanse of pavement that causes many safety issues and heightened risk of runway incursions. These issues will be mitigated by reconfiguring the existing taxiway layouts which will include reconfiguring a new pavement geometric layout and removals of existing pavements. The project will also involve Airfield Lighting Control and Monitoring System updates with graphic changes for the proposed layout modifications, new airfield lighting and signage systems for the new configuration, and drainage improvements. Scope of work items will include, but not be limited to: milling and removal of existing pavement, installation of new pavement to replace milled sections, new pavement sections for widening and new pavement areas, removal of existing elevated and in-pavement runway guard lights, installation of new elevated and in-pavement runway guard lights, removal of existing taxiway edge lights, installation of new taxiway edge lights, installation of new taxiway centerline lights, removal of existing guidance signs, installation of new runway guidance signs and foundations, replacement of existing guidance sign panels for existing guidance sign for new taxiway designation, new pavement markings, and turf restoration for disturbed areas.

1. COORDINATION

Date	Attendees	Description
June 2020	Design Engineer, MHT Staff, & FAA	Design Scoping Meeting
October 2020 to February 2021	Design Engineer, MHT Staff, & FAA	Design Coordination
January 2021	Design Engineer, MHT Staff & Tenants	Design Coordination
January to March 2021	Design Engineer, MHT Staff, & FAA	NAVAID Impact Coord.

Preconstruction Conference:

- Construction Safety and Phasing Plan (CSPP) & Safety Plan Compliance Document (SPCD) to be reviewed and discussed.
- Key Attendees: Airport Management representatives
MHT Operations & Maintenance representatives
Design Engineer Representative
Contractor Superintendent
Subcontractor representative(s)
FAA MHT Service Sector Center (SSC) (Tech Ops) Representative(s)
FAA MHT ATCT Representative(s)
FAA Airports Project Manager

During Construction:

Daily Coordination Meeting will be held prior to starting work each day

- Standing Discussion Item will be the day's activities and safety of the project site
- Key Attendees: MHT Operations and Maintenance Shift Manager
Resident Project Representative
Contractor Superintendent
Subcontractor representative(s), as applicable

Prior to the start of construction activities, the Contractor shall be required to provide a complete schedule for the project. Should the overall schedule change during the course of construction, the overall schedule will be updated and distributed to stakeholders.

2. PHASING**PHASE 1 - Temporary Site and Taxiway L Access Modifications**

Work Area 1 Limits: Work Area 1 consists of the south edge of the existing Taxiway L and Northeast Apron and the adjacent shoulder area having a closure of a portion of Taxiway H (North) from Runway 6-24 to approximately the midpoint of Taxiway L extended westerly across Taxiway H (North). Work area limits also to include the new project construction access from Perimeter Road onto the Vehicle Service Road with a new temporary access road with a temporary security gate and fence.

Duration: Three (3) calendar day from the Notice to Proceed date.

Work Hours: 6 AM – 6 PM, Monday to Friday, unless otherwise approved by Owner & Resident Project Representative (RPR).

Primary work to be performed in this Work Area 1:

- Remove existing Taxiway L edge light fixtures and plate the base cans.
- Removed the existing Taxiway L taxiway edge markings.
- Install new temporary Taxiway L taxiway centerline for access to Northeast Ramp
- Install Runway Safety Area markers for all phases
- Install temporary gate and perimeter TSA fence for temporary construction access point
- Install temporary access haul road from Perimeter Road to Vehicle Service Road

PHASE 2 - North End of Taxiway H (North) Reconfiguration to TW K, K1 & K2

Work Area 2 Limits: Work Area 2 consists of the portion of existing Taxiway H (North) between the edge of the Runway 17-35 Runway Safety Area at the Runway 17 End to the north edge of the temporary Taxiway L access Taxiway Object Free Area (TOFA) and extended across existing Taxiway H (North) for the installation of the reconfigured Taxiways K, L, K1 and K2.

Duration: Fifty-two (52) consecutive calendar days from the completion of Phase 1 work.

Work Hours: 6 AM – 6 PM, Monday to Friday, unless otherwise approved by Owner & Resident Project Representative (RPR).

Primary work to be performed in this Work Area 2:

- Maintenance and protection of all temporary airfield traffic control devices and safety items, including all FAA facilities
- Removal and disposal of existing elevated and in-pavement runway guard lights, conduit and cabling
- Removal and disposal of existing elevated taxiway edge lights, conduit and cabling
- Removal and disposal of existing guidance sign, sign foundation and cabling within Work Area
- Installation of new elevated and in-pavement runway guard lights with required conduit and cabling
- Installation of new in-pavement centerline lights with required conduit and cabling
- Installation of new elevated taxiway edge lights with required conduit and cabling
- Installation of new guidance signs with required conduit and cabling
- Installation of new duct banks
- Replacement of FAA communication cables
- Installation of electrical vault equipment
- Excavation and installation of subbase, aggregate base course and pavement for new pavement sections
- Marking of centerline and enhanced centerline markings, taxiway edge lines, and surface painted hold position signs
- Grading and drainage improvements with proper installation and maintenance of all sedimentation and erosion control best management practice devices
- Restoration of growth for all disturbed turf areas

Work Area 2A Limits: Work Area 2A consists of the portion of existing Taxiway H (North) and grassed infield area within Runway 17-35 Runway Safety Area near the Runway 17 End for the installation of the reconfigured Taxiways K1 and K2. ***Runway 17-35 will be fully closed during Work Area 2A.***

Duration: Fifteen (15) consecutive calendar days within Phase 2 duration.

Work Hours: 24 Hours per Day for Work Area 2A duration.

Primary work to be performed in Work Area 2A:

- Maintenance and protection of all temporary airfield traffic control devices and safety items, including all FAA facilities
- Removal and disposal of existing elevated taxiway edge lights, conduit and cabling
- Removal and disposal of existing guidance sign, sign foundation and cabling within Work Area
- Installation of new in-pavement centerline lights with required conduit and cabling
- Installation of new elevated taxiway edge lights with required conduit and cabling
- Installation of new guidance signs with required conduit and cabling
- Excavation and installation of subbase, aggregate base course and pavement for new pavement

sections

- Marking of centerline markings, taxiway edge lines, and surface painted hold position signs
- Grading and drainage improvements with proper installation and maintenance of all sedimentation and erosion control best management practice devices
- Restoration of growth for all disturbed turf areas

PHASE 3 - South End of Taxiway H (North) Reconfiguration to TW K

Work Area 3 Limits: Work Area 3 consists of the portion of the existing Taxiway H (North) between the edge of the Runway 6-24 Runway Safety Area and the south edge of the temporary Taxiway L Taxiway Object Free Area (TOFA) for the installation of the reconfigured Taxiways K and L.

Duration: Thirty-five (35) consecutive calendar days from the completion of Phase 2 work.

Work Hours: 6 AM – 6 PM, Monday to Friday, unless otherwise approved by Owner & Resident Project Representative (RPR).

Primary work to be performed in this Work Area 3:

- Maintenance and protection of all temporary airfield traffic control devices and safety items, including all FAA facilities
- Removal and disposal of existing elevated taxiway edge lights, conduit and cabling
- Removal and disposal of existing guidance sign, sign foundation and cabling within Work Area
- Installation of new in-pavement centerline lights with required conduit and cabling
- Installation of new elevated taxiway edge lights with required conduit and cabling
- Installation of new guidance signs with required conduit and cabling
- Installation of electrical vault equipment
- Installation of Airport Lighting Control and Management System (ALCMS) modifications
- Excavation and installation of subbase, aggregate base course and pavement for new pavement sections
- Marking of centerline and enhanced centerline markings, taxiway edge lines, and surface painted hold position signs
- Grading and drainage improvements with proper installation and maintenance of all sedimentation and erosion control best management practice devices
- Restoration of growth for all disturbed turf areas

Work Area 3A Limits: Work Area 3A consists of work within the limits of the proposed Taxiway K located within the Runway 6-24 RSA (approximately 250 feet from the Runway 6-24 centerline).

Duration: Fifteen (15) consecutive calendar days within Phase 3 duration.

Work Hours: 24 Hours per Day within Phase 3 duration.

Primary work to be performed in Work Area 3A:

- Maintenance and protection of all temporary airfield traffic control devices and safety items, including all FAA facilities
- Removal and disposal of existing elevated taxiway edge lights, conduit and cabling
- Removal and disposal of existing guidance sign, sign foundation and cabling within Work Area
- Installation of new in-pavement centerline lights with required conduit and cabling
- Installation of new elevated taxiway edge lights with required conduit and cabling
- Installation of new guidance signs with required conduit and cabling
- Replacement of panels on existing guidance signs for new Taxiway K designation on Taxiway H

- Milling of existing pavement and installation of new pavement in milled areas
- Excavation and installation of subbase, aggregate base course and pavement for new pavement sections
- Marking of centerline markings, taxiway edge lines, and surface painted hold position signs
- Grading and drainage improvements with proper installation and maintenance of all sedimentation and erosion control best management practice devices
- Restoration of growth for all disturbed turf areas
- Runway 6-24 Pavement Repairs with milling, tack coat, pavement and saw & seal joints

PHASE 4 – “Home Run” Electric Cable Installation

Work Area 4 Limits: Limits of the “home run” cabling is the existing electrical duct bank from the primary work areas to the electrical vault. The electrical duct bank is typically located outside the edge of the Runway Safety Areas (RSAs) for Runway 6-24 and Runway 17-35, except for the crossing locations of Runway 6-24 and crosses Taxiway H near the electrical vault. All work will be subject to a 15-minute recall for pull back during work hours for work occurring in the RSA or the Taxiway Object Free Area (TOFA).

Duration: Five (5) calendar days (non-consecutive) anytime within the overall Project time duration and as scheduled with the Owner and Resident Project Representative (RPR) to minimize impacts to airport traffic.

Work Hours: 6 AM – 6 PM, Monday to Friday, unless otherwise approved by Owner & RPR.

Primary work to be performed in Work Area 4:

- Removal of existing electrical cabling and installing new replacement cabling from primary project limits to the electrical vault for existing circuit to be reused
- Installation of new electrical cabling from primary project limits to the electrical vault for new circuits

Sequence of Work

Estimated Start Date: Late Summer 2021/Spring 2022, but subject to revision based on grant issuance

Estimated Completion Date: Summer 2022

The Construction Schedule will allot the following amount time for each phase and subphase:

- **Phase 1: Three (3) Consecutive Calendar Days**
- **Phase 2: Fifty-two (52) Consecutive Calendar Days** after completion of Phase 1
 - Phase 2A: Fifteen (15) Consecutive Calendar Days within Phase 2
- **Phase 3: Thirty-five (35) Consecutive Calendar Days** after completion of Phase 2
 - Phase 3A: Fifteen (15) Consecutive Calendar Days within Phase 3
- **Phase 4: Five (5) Calendar Days**, schedule within Applicable Phase and *add the days to the Total Project Duration*

Total Duration: Ninety-five (95) Calendar Days (Phases 1 - 4)

3. AREAS AND OPERATIONS AFFECTED BY CONSTRUCTION:

The affected areas and aircraft operations for this project are shown on the Safety and Phasing Plans located in Appendix B of this CSPP. All of the work will be performed “Airside” within the Airport Operations

Area (AOA). All work locations within the AOA Movement Area will require coordination and advanced notification in accordance with Section 1 - *Coordination*. As noted above in Section 2 – *Phasing*, the work in both phases will have runway closures for Runways 17-35 and 6-24 for Work Areas 2A and 3A respectively, as well as Phase 4 work areas for “Home Run” cabling installations having a 15-minute recall during work hours. Phase 4 will also have a restriction that all “parked” equipment and vehicles are to remain outside of any Runway Safety Area or Taxiway Object Free Areas. As shown in the phasing in Section 2 – *Phasing*, access for the Northeast Ramp aircraft operations will occur at all times during construction.

Refer to Section 11 - *Underground Utilities* for underground utilities impacted by the construction.

The four (4) phases of this project are outlined above in Section 2 – *Phasing*. As noted above, all of the work in Phase 1 must be completed prior to the start of work in Phase 2 and all of the work for Phase 2 must also be completed prior to the start of work in Phase 3.

Contained within the tables below are anticipated operational impacts to Airport Operations during the course of the project. Contractor is required to coordinate with Airport Operations prior to impacting operations on the Airport.

PROJECT	Taxiway H Runway Incursion Mitigation	
PHASE	Phase 1: Temporary Site and Taxiway L Access Modifications	
SCOPE OF WORK	<u>Work Associated with the modifications to provide:</u> 1. Temporary access for the Site for a Haul Route from Landside 2. Temporary access for TW L to RW 17-35 during Phase 2 Three (3) consecutive calendar day for Phase 1 Duration.	
OPERATIONAL REQUIREMENTS	Normal (Existing)	Phase 1 (Anticipated)
RW 17-35 ARC	D-IV	D-IV
RW 17 Declared Distances	TORA: 9,250 & TODA: 9,250 ASDA: 9,250 & LDA: 8,914	TORA: 9,250 & TODA: 9,250 ASDA: 9,250 & LDA: 8,914
RW 17 Approach Procedures	ILS or LOC/DME, RNAV(GPS), RNAV(RNP)	ILS or LOC/DME, RNAV(GPS), RNAV(RNP)
RW 17 NAVAIDs	MALSR / TDZL / PAPI(4PR) / ILS/DME – Class IE	MALSR / TDZL / PAPI(4PR) / ILS/DME – Class IE
RW 35 Declared Distances	TORA: 9,250 & TODA: 9,250 ASDA: 8,500 & LDA: 7,650	TORA: 9,250 & TODA: 9,250 ASDA: 8,500 & LDA: 7,650
RW 35 Approach Procedures	ILS or LOC, ILS (SA Cat I), ILS (Cat II or III), RNAV(GPS), RNAV(RNP), VOR	ILS or LOC, ILS (SA Cat I), ILS (Cat II or III), RNAV(GPS), RNAV(RNP), VOR
RW 35 NAVAIDs	ALSF2 / TDZL / PAPI(4PL) / ILS/DME – Class III E	ALSF2 / TDZL / PAPI(4PL) / ILS/DME – Class III E
RW 6-24 ARC	D-IV	D-IV
RW 6 Declared Distances	TORA: 7,650 & TODA: 7,650 ASDA: 7,650 & LDA: 7,208	TORA: 7,650 & TODA: 7,650 ASDA: 7,650 & LDA: 7,208
RW 6 Approach Procedures	ILS or LOC, RNAV(GPS)	ILS or LOC, RNAV(GPS)
RW 6 NAVAIDs	REIL, PAPI(P4L), ILS – Class IT	REIL, PAPI(P4L), ILS – Class IT
RW 24 Declared Distances	TORA: 7,650 & TODA: 7,650 ASDA: 6,850 & LDA: 6,850	TORA: 7,650 & TODA: 7,650 ASDA: 6,850 & LDA: 6,850
RW 24 Approach Procedures	RNAV(GPS)	RNAV(GPS)
RW 24 NAVAIDs	REIL, PAPI(P4L)	REIL, PAPI(P4L)
Taxiway J ADG	IV	IV
Taxiway H ADG	IV	IV
Taxiway H (North) ADG	IV	Restricted to ADG II Aircraft from Northeast Apron to RW 17 End Only
ACTC (hours open)	24 Hours	24 Hours
ARFF Index	C	C
Special Conditions	RW 17-35 & RW 6-24 OPEN No Restrictions	RW 17-35 & RW 6-24 OPEN No Restrictions
	Northeast Apron Access No Restrictions	Northeast Apron Access TW H (North) to RW 17 End Only

PROJECT	Taxiway H Runway Incursion Mitigation	
PHASE	Phase 2 – Work Area 2: Taxiway (North) Reconfiguration Northern Portion Outside RSA	
SCOPE OF WORK	<p>Work Associated with the Taxiway H (North) reconfiguration for:</p> <p>1. Northern Section of TW H (North) Reconfiguration for new TW K, K1, and K2 and TW L Reconfiguration into Northeast Apron outside of RW 17-35 Runway Safety Area</p> <p>Fifty-two (52) consecutive calendar days for Phase 2 Duration.</p>	
OPERATIONAL REQUIREMENTS	Normal (Existing)	Phase 2 (Anticipated)
RW 17-35 ARC	D-IV	D-IV
RW 17 Declared Distances	TORA: 9,250 & TODA: 9,250 ASDA: 9,250 & LDA: 8,914	TORA: 9,250 & TODA: 9,250 ASDA: 9,250 & LDA: 8,914
RW 17 Approach Procedures	ILS or LOC/DME, RNAV(GPS), RNAV(RNP)	LOC/DME, RNAV(GPS), RNAV(RNP)
RW 17 NAVAIDs	MALSR / TDZL / PAPI(4PR) / ILS/DME – Class IE	MALSR / TDZL / PAPI(4PR) /
RW 35 Declared Distances	TORA: 9,250 & TODA: 9,250 ASDA: 8,500 & LDA: 7,650	TORA: 9,250 & TODA: 9,250 ASDA: 8,500 & LDA: 7,650
RW 35 Approach Procedures	ILS or LOC, ILS (SA Cat I), ILS (Cat II or III), RNAV(GPS), RNAV(RNP), VOR	ILS or LOC RNAV(GPS), RNAV(RNP), VOR
RW 35 NAVAIDs	ALSF2 / TDZL / PAPI(4PL) / ILS/DME – Class IIIIE	ALSF2 / TDZL / PAPI(4PL) / ILS/DME – Class IIIIE
RW 6-24 ARC	D-IV	D-IV
RW 6 Declared Distances	TORA: 7,650 & TODA: 7,650 ASDA: 7,650 & LDA: 7,208	TORA: 7,650 & TODA: 7,650 ASDA: 7,650 & LDA: 7,208
RW 6 Approach Procedures	ILS or LOC, RNAV(GPS)	ILS or LOC, RNAV(GPS)
RW 6 NAVAIDs	REIL, PAPI(P4L), ILS – Class IT	REIL, PAPI(P4L), ILS – Class IT
RW 24 Declared Distances	TORA: 7,650 & TODA: 7,650 ASDA: 6,850 & LDA: 6,850	TORA: 7,650 & TODA: 7,650 ASDA: 6,850 & LDA: 6,850
RW 24 Approach Procedures	RNAV(GPS)	RNAV(GPS)
RW 24 NAVAIDs	REIL, PAPI(P4L)	REIL, PAPI(P4L)
Taxiway J ADG	IV	IV
Taxiway H ADG	IV	IV
Taxiway H (North) ADG	IV	Restricted to ADG II Aircraft from Northeast Apron to RW 6-24 Only
ACTC (hours open)	24 Hours	24 Hours
ARFF Index	C	C
Special Conditions	RW 6-24 OPEN No Restrictions	RW 6-24 OPEN No Restrictions
	RW 17 OPEN No Restrictions	RW 17 OPEN Restricted Arrivals - No ILS Glide Slope Back Taxi req'd for Full Length Takeoff
	RW 35 OPEN	RW 35 – No Cat II or III Anticipated
	Northeast Apron Access No Restrictions	Northeast Apron Access TW H (North) to RW 6-24 Only

PROJECT	Taxiway H Runway Incursion Mitigation	
PHASE	Phase 2 – Work Area 2A: Taxiway (North) Reconfiguration Northern Portion within RSA	
SCOPE OF WORK	<p>Work Associated with the Taxiway H (North) reconfiguration for:</p> <p>1. Northern Section of TW H (North) Reconfiguration for new TW K, K1, and K2 within the Runway 17-35 Safety Area</p> <p>Fifteen (15) consecutive calendar days within Phase 2 Duration.</p>	
OPERATIONAL REQUIREMENTS	Normal (Existing)	Phase 2A (Anticipated)
RW 17-35 ARC	D-IV	CLOSED
RW 17 Declared Distances	TORA: 9,250 & TODA: 9,250 ASDA: 9,250 & LDA: 8,914	CLOSED
RW 17 Approach Procedures	ILS or LOC/DME, RNAV(GPS), RNAV(RNP)	CLOSED
RW 17 NAVAIDs	MALSR / TDZL / PAPI(4PR) / ILS/DME – Class IE	CLOSED
RW 35 Declared Distances	TORA: 9,250 & TODA: 9,250 ASDA: 8,500 & LDA: 7,650	CLOSED
RW 35 Approach Procedures	ILS or LOC, ILS (SA Cat I), ILS (Cat II or III), RNAV(GPS), RNAV(RNP), VOR	CLOSED
RW 35 NAVAIDs	ALS2 / TDZL / PAPI(4PL) / ILS/DME – Class IIIE	CLOSED
RW 6-24 ARC	D-IV	D-IV
RW 6 Declared Distances	TORA: 7,650 & TODA: 7,650 ASDA: 7,650 & LDA: 7,208	TORA: 7,650 & TODA: 7,650 ASDA: 7,650 & LDA: 7,208
RW 6 Approach Procedures	ILS or LOC, RNAV(GPS)	ILS or LOC, RNAV(GPS)
RW 6 NAVAIDs	REIL, PAPI(P4L), ILS – Class IT	REIL, PAPI(P4L), ILS – Class IT
RW 24 Declared Distances	TORA: 7,650 & TODA: 7,650 ASDA: 6,850 & LDA: 6,850	TORA: 7,650 & TODA: 7,650 ASDA: 6,850 & LDA: 6,850
RW 24 Approach Procedures	RNAV(GPS)	RNAV(GPS)
RW 24 NAVAIDs	REIL, PAPI(P4L)	REIL, PAPI(P4L)
Taxiway J ADG	IV	IV
Taxiway H ADG	IV	IV
Taxiway H (North) ADG	IV	Restricted to ADG II Aircraft From Northeast Apron to RW 6-24 Only
ACTC (hours open)	24 Hours	24 Hours
ARFF Index	C	C
Special Conditions	RW 6-24 OPEN No Restrictions	RW 6-24 OPEN No Restrictions
	RW 17 OPEN No Restrictions	RW 17 CLOSED
	RW 35 OPEN No Restrictions	RW 35 CLOSED
	Northeast Apron Access No Restrictions	Northeast Apron Access TW H (North) to RW 6-24 Only

PROJECT	Taxiway H Runway Incursion Mitigation	
PHASE	Phase 3 – Work Area 3: Taxiway (North) Reconfiguration Southern Portion Outside RSA	
SCOPE OF WORK	Work Associated with the Taxiway H (North) reconfiguration for: 1. Southern Section of TW H (North) Reconfiguration for new TW K and TW L Reconfiguration into Northeast Apron Thirty-five (35) consecutive calendar days for Phase 3 Duration.	
OPERATIONAL REQUIREMENTS	Normal (Existing)	Phase 3 (Anticipated)
RW 17-35 ARC	D-IV	D-IV
RW 17 Declared Distances	TORA: 9,250 & TODA: 9,250 ASDA: 9,250 & LDA: 8,914	TORA: 9,250 & TODA: 9,250 ASDA: 9,250 & LDA: 8,914
RW 17 Approach Procedures	ILS or LOC/DME, RNAV(GPS), RNAV(RNP)	LOC/DME, RNAV(GPS), RNAV(RNP)
RW 17 NAVAIDs	MALSR / TDZL / PAPI(4PR) / ILS/DME – Class IE	MALSR / TDZL / PAPI(4PR) /
RW 35 Declared Distances	TORA: 9,250 & TODA: 9,250 ASDA: 8,500 & LDA: 7,650	TORA: 9,250 & TODA: 9,250 ASDA: 8,500 & LDA: 7,650
RW 35 Approach Procedures	ILS or LOC, ILS (SA Cat I), ILS (Cat II or III), RNAV(GPS), RNAV(RNP), VOR	ILS or LOC, RNAV(GPS), RNAV(RNP), VOR
RW 35 NAVAIDs	ALSF2 / TDZL / PAPI(4PL) / ILS/DME – Class IIIE	ALSF2 / TDZL / PAPI(4PL)
RW 6-24 ARC	D-IV	D-IV
RW 6 Declared Distances	TORA: 7,650 & TODA: 7,650 ASDA: 7,650 & LDA: 7,208	TORA: 7,650 & TODA: 7,650 ASDA: 7,650 & LDA: 7,208
RW 6 Approach Procedures	ILS or LOC, RNAV(GPS)	ILS or LOC, RNAV(GPS)
RW 6 NAVAIDs	REIL, PAPI(P4L), ILS – Class IT	REIL, PAPI(P4L), ILS – Class IT
RW 24 Declared Distances	TORA: 7,650 & TODA: 7,650 ASDA: 6,850 & LDA: 6,850	TORA: 7,650 & TODA: 7,650 ASDA: 6,850 & LDA: 6,850
RW 24 Approach Procedures	RNAV(GPS)	RNAV(GPS)
RW 24 NAVAIDs	REIL, PAPI(P4L)	REIL, PAPI(P4L)
Taxiway J ADG	IV	IV
Taxiway H ADG	IV	IV
Taxiway H (North) ADG	IV	Restricted to ADG II Aircraft From Northeast Apron to RW 17 End Only
ACTC (hours open)	24 Hours	24 Hours
ARFF Index	C	C
Special Conditions	RW 6-24 OPEN No Restrictions	RW 6-24 OPEN No Restrictions
	RW 17 OPEN No Restrictions	RW 17 OPEN Arrival Restrictions – No ILS Glide Slope Unless having an approved Flight Check Back Taxi req'd for Full Length Takeoff
	RW 35 OPEN No Restrictions	RW 35 OPEN Restricted Arrival Procedures Flight Check for RW 35 LOC Req'd before putting RW 35 into service
	Northeast Apron Access No Restrictions	Northeast Apron Access New TW K/K1 to RW 17 End Only

PROJECT	Taxiway H Runway Incursion Mitigation	
PHASE	Phase 3 – Work Area 3A: Taxiway (North) Reconfiguration Southern Portion Within RW 6-24 RSA	
SCOPE OF WORK	<p>Work Associated with the Taxiway H (North) reconfiguration for:</p> <p>1. Southern Section of TW H (North) Reconfiguration for new TW K within Runway 6-24 Runway Safety Area</p> <p>Fifteen (15) consecutive calendar days within Phase 3 Duration.</p>	
OPERATIONAL REQUIREMENTS	Normal (Existing)	Phase 3A (Anticipated)
RW 17-35 ARC	D-IV	D-IV
RW 17 Declared Distances	TORA: 9,250 & TODA: 9,250 ASDA: 9,250 & LDA: 8,914	TORA: 9,250 & TODA: 9,250 ASDA: 9,250 & LDA: 8,914
RW 17 Approach Procedures	ILS or LOC/DME, RNAV(GPS), RNAV(RNP)	LOC/DME, RNAV(GPS), RNAV(RNP)
RW 17 NAVAIDs	MALSR / TDZL / PAPI(4PR) / ILS/DME – Class IE	MALSR / TDZL / PAPI(4PR)
RW 35 Declared Distances	TORA: 9,250 & TODA: 9,250 ASDA: 8,500 & LDA: 7,650	TORA: 9,250 & TODA: 9,250 ASDA: 8,500 & LDA: 7,650
RW 35 Approach Procedures	ILS or LOC, ILS (SA Cat I), ILS (Cat II or III), RNAV(GPS), RNAV(RNP), VOR	ILS or LOC, ILS (SA Cat I), ILS (Cat II or III), RNAV(GPS), RNAV(RNP), VOR
RW 35 NAVAIDs	ALSF2 / TDZL / PAPI(4PL) / ILS/DME – Class IIIE	ALSF2 / TDZL / PAPI(4PL) / ILS/DME – Class IIIE
RW 6-24 ARC	D-IV	CLOSED
RW 6 Declared Distances	TORA: 7,650 & TODA: 7,650 ASDA: 7,650 & LDA: 7,208	CLOSED
RW 6 Approach Procedures	ILS or LOC, RNAV(GPS)	CLOSED
RW 6 NAVAIDs	REIL, PAPI(P4L), ILS – Class IT	CLOSED
RW 24 Declared Distances	TORA: 7,650 & TODA: 7,650 ASDA: 6,850 & LDA: 6,850	CLOSED
RW 24 Approach Procedures	RNAV(GPS)	CLOSED
RW 24 NAVAIDs	REIL, PAPI(P4L)	CLOSED
Taxiway J ADG	IV	IV
Taxiway H ADG	IV	IV
Taxiway H (North) ADG	IV	Restricted to ADG II Aircraft from Northeast Apron to RW 17 End Only
ACTC (hours open)	24 Hours	24 Hours
ARFF Index	C	C
Special Conditions	RW 6-24 OPEN No Restrictions	RW 6-24 CLOSED
	RW 17 OPEN No Restrictions	RW 17 OPEN Arrival Restrictions – No ILS Glide Slope Unless having an approved Flight Check Back Taxi req'd for Full Length Takeoff
	RW 35 OPEN No Restrictions	RW 35 OPEN Restricted Arrival Procedures Flight Check for RW 35 LOC may be req'd before putting RW 35 back into service
	Northeast Apron Access No Restrictions	Northeast Apron Access New TW K/K1 to RW 17 End Only

PROJECT	Taxiway H Runway Incursion Mitigation	
PHASE	Phase 4 – Work Area 4: Home Run Electrical Cable Installation	
SCOPE OF WORK	<u>Work Associated with the modifications to provide:</u> 1. Removal and replacement of existing circuit home run cabling 2. Installation of new lighting home run cabling Five (5) calendar days for Phase 4 – Schedule during Applicable Phase during Overall Project Duration	
OPERATIONAL REQUIREMENTS	Normal (Existing)	Phase 4 (Anticipated)
RW 17-35 ARC	D-IV	D-IV
RW 17 Declared Distances	TORA: 9,250 & TODA: 9,250 ASDA: 9,250 & LDA: 8,914	Refer to Phase when work is performed within
RW 17 Approach Procedures	ILS or LOC/DME, RNAV(GPS), RNAV(RNP)	Refer to Phase when work is performed within
RW 17 NAVAIDs	MALSR / TDZL / PAPI(4PR) / ILS/DME – Class IE	Refer to Phase when work is performed within
RW 35 Declared Distances	TORA: 9,250 & TODA: 9,250 ASDA: 8,500 & LDA: 7,650	Refer to Phase when work is performed within
RW 35 Approach Procedures	ILS or LOC, ILS (SA Cat I), ILS (Cat II or III), RNAV(GPS), RNAV(RNP), VOR	Refer to Phase when work is performed within
RW 35 NAVAIDs	ALSF2 / TDZL / PAPI(4PL) / ILS/DME – Class IIIE	Refer to Phase when work is performed within
RW 6-24 ARC	D-IV	D-IV
RW 6 Declared Distances	TORA: 7,650 & TODA: 7,650 ASDA: 7,650 & LDA: 7,208	Refer to Phase when work is performed within
RW 6 Approach Procedures	ILS or LOC, RNAV(GPS)	Refer to Phase when work is performed within
RW 6 NAVAIDs	REIL, PAPI(P4L), ILS – Class IT	Refer to Phase when work is performed within
RW 24 Declared Distances	TORA: 7,650 & TODA: 7,650 ASDA: 6,850 & LDA: 6,850	Refer to Phase when work is performed within
RW 24 Approach Procedures	RNAV(GPS)	Refer to Phase when work is performed within
RW 24 NAVAIDs	REIL, PAPI(P4L)	Refer to Phase when work is performed within
Taxiway J ADG	IV	IV
Taxiway H ADG	IV	IV
Taxiway H (North) ADG	IV	ADG II Aircraft and Access dependent based on Phase when Work is concurrently performed within
ACTC (hours open)	24 Hours	24 Hours
ARFF Index	C	C
Special Conditions	RW 17-35 & RW 6-24 OPEN No Restrictions	RW 17-35 & RW 6-24 Restrictions based on Phase when Work is Concurrently Performed within
	Northeast Apron Access No Restrictions	Northeast Apron Access Restrictions based on Phase when Work is Concurrently Performed within

4. NAVIGATIONAL AID (NAVAID) PROTECTION:

- a. Prior to commencing any construction activities or operating equipment near a NAVAID, the Contractor shall coordinate through the Resident Project Representative, with the FAA Technical Operations, to evaluate the effect of construction activity for the project duration and the required distance and direction from the NAVAID.
- b. The Contractor is solely responsible for locating all existing NAVAID electrical feeds and other utilities within the project limits. Prior to initiation of any construction in the field, the Contractor shall provide a written notice (return receipt requested) to each of the impacted utility companies (including the FAA) and MHT Operations, as applicable. The Contractor shall provide the MHT Operations and Maintenance, the Resident Project Representative, and each of the utility companies (including the FAA) with a copy of the receipt of said written notification. This requirement is in addition to any other state laws regarding public notification prior to excavation.
- c. There shall be no construction activities, equipment operation, materials/equipment storage, or vehicle parking near any NAVAIDS, unless otherwise allowed by the Contract Documents. All construction activities and materials/equipment stored near a NAVAID must not obstruct access to the equipment and instruments for maintenance by Airport Staff/FAA personnel. NAVAIDS require special consideration since construction activities may interfere with signals essential to air navigation. There will be construction activities within the Runway 17 Instrument Landing System (ILS) Glide Slope Antennae Critical Area and the Runway 35 ILS Localizer Critical Area.
- d. The Contractor will not be permitted within the critical areas of active NAVAIDS, unless allowed by the Contract Documents. The stockpiling of construction material, as well as the movement and parking of construction equipment, shall not be permitted in areas where materials or equipment may interfere with line of sight from the FAA ATCT or with electronic emissions devices. Interference from construction equipment and activities may require NAVAID shutdown or adjustment of instrument approach minimums for low visibility operations. If these conditions are required, a NOTAM will be needed per Section 9 – *Notification of Construction Activities*.
- e. **Facility Outage Coordination:** Strategic Event Coordination (SEC) is required if construction operations require FAA equipment to be removed from service, such as NAVAID/VISAD (i.e., ILS, VOR, MALSR, etc.) for 24 hours or greater in duration, or interruptions that may generate Traffic Management Initiatives. If the proponent of the NAVAID is the Sponsor (MHT), and FAA will not be directly involved, then the proponent shall plan accordingly to ensure adequate advance notice, in addition to the 30 days, is provided to the FAA Planning & Requirements Section in order for SEC process to be initiated.
- f. **FAA Flight Check:** It is anticipated that the RW 17 ILS Glide Slope Antennae will require a FAA Flight Check prior to being able to be put back into service. An FAA Flight Check may also be required due to the disturbance in the RW 35 ILS Localizer Critical Area and will be based on a determination by FAA NavAids. The timing of any flight check will be scheduled based on the progression of the work and will be coordinated directly with FAA.

Anticipated potential SEC notifications required are as outlined below:

1. **Runway 35 Approach Impacts:** The FAA-owned NAVAIDS for Runway 35 approaches WILL need to be shut down or inactive during the work hours of Phase 2A as noted above in Section 3 – *Areas and Operations Affected by Construction*. The FAA RW 35 ILS Localizer effectiveness will be impacted due to its location in proximity to the construction and effecting the operational procedures and will restrict instrument landings for the Runway 35 Approach. A SEC notification will be required. Additionally, NOTAMS will need to be issued as outlined above in paragraph d. An FAA Flight Check will be required before putting the FAA RW 35 ILS localizer back into service. SEC notification anticipated as part of the design. These NAVAIDS include:

- **RWY 35 ALSF2** (Not in Work Zone)
- **RWY 35 ILS (Glideslope)** (Not in Work Zone)
- **RWY 35 ILS (Localizer)** (Not in Work Zone)
- **RW 35 PAPI** (Not in Work Zone)

2. **Runway 17 Approach Impacts:** The FAA-owned NAVAIDs for Runway 17 approaches **WILL** need to be shut down or inactive during Phase 2, **2A** and possibly during Phase 3 as noted above in Section 3 – *Areas and Operations Affected by Construction*. The primary FAA NAVAID effected by the construction will be the RW 17 ILS Glide Slope Antennae operations and restricting instrument landings for the Runway 17 Approach. Due to the proposed taxiway reconfigurations and grading, the RW 17 ILS Glide Slope Antennae Critical Area grading will be modified and will be unavailable during that construction work. These modifications will require an FAA Flight Check and recalibration of the RW 17 ILS Glide Slope Antennae after the completion of the construction activities for Phase 2. SEC notification anticipated as part of the design. These NAVAIDS include:

- RWY 17 MALSR
- RWY 17 ILS (Glideslope)
- RWY 17 ILS (Localizer) (Not in Work Zone)
- RW 17 PAPI (Not in Work Zone)
- RW 17 RVR (Not in Work Zone)

3. **Runway 6-24 Impacts:** The FAA-owned NAVAIDs for Runways 6 and 24 approaches **WILL** need to be shut down or inactive during Phase **3A** as noted above in Section 3 – *Areas and Operations Affected by Construction*. All of the MHT-owned NAVAIDS and FAA-owned NAVAIDS for Runway 6 -24 will be shutdown or inactive during the construction of Phase 3A. SEC notification anticipated as part of the design.

These NAVAIDS include

- RW 6 REIL (Not in Work Zone)
- RW 6 PAPI (Not in Work Zone)
- RWY 6 ILS (Glideslope & Localizer) (Not in Work Zone)
- RW 24 PAPI (Not in Work Zone)
- RW 24 REIL (Not in Work Zone)
- RW 24 RVR (Not in Work Zone)

5. CONTRACTOR ACCESS:

Stockpile Locations:

- a. The Contractor shall stockpile all material in the Contractor Stockpile Area as shown on the phasing plan located in Appendix B.
- b. The Contractor shall inspect all construction storage areas as often as necessary to be aware of conditions and promptly take all steps needed to prevent/remedy any unsafe or potentially unsafe conditions/activities discovered.
- c. Stockpiled material at the construction site shall be prominently marked with orange flags and lighted by light units during hours of restricted visibility and/or darkness. Orange flags shall be no less than twenty (20) inches square for day marking. The Contractor shall use wire stiffener to hold the flag in an extended position. The lights used shall be steady burning red lights at least ten (10) candelas or flashing yellow lights of at least four (4) candelas. Flags and lights shall be mounted so they are not a hazard and sufficiently close together to clearly delineate the area.
- d. Stockpiled material shall be constrained in a manner to prevent movement resulting from wind conditions.

Site Access:

- a. Refer to the phasing plan in Appendix B for site access points and haul routes.

Ingress and Egress Procedures:

- a. The MHT Operations and Maintenance will unlock and lock airport gates needed for access at the beginning and end of all shifts.
- b. The Contractor shall control all construction access through the airport perimeter gates. The gates shall be locked at all times unless continuously manned by security personnel employed by the Contractor. Haul routes and staging areas, including employee parking for this project are to be as shown on the phasing plan.
- c. Contractor's vehicles will not be allowed access to portions of the Airport other than the work and staging areas. All construction employee vehicles will be parked in the designated staging area. Privately-owned vehicles will not be allowed on the airfield. The Contractor will be permitted to store equipment needed for the immediate work on hand within the work area as approved by the MHT Operations and Maintenance or Resident Project Representative. All equipment will be parked in the staging area at the close of work each day and whenever it is not in use. All equipment booms shall be lowered at the close of each day's work or when stored.
- d. Each Contractor's motorized vehicle operating on airport property shall be equipped with an operating amber flashing beacon displayed in full view above the vehicle. The contractor's construction equipment shall have a checkered flag. The 3' x 3' flag shall be made of 1'x 1' international orange and white squares. The flag should be placed at the highest point on the vehicle to allow for an unobstructed view of the flag. Any vehicles not meeting these criteria will be denied access to the work zones until the problem is rectified. Any vehicle operating on the movement areas during hours of darkness or reduced visibility must be equipped with a flashing beacon, the color of which is in accordance with local or state codes.
- e. In addition, all Contractors vehicles shall have the company identification plainly visible on both sides of the vehicle in order to identify the vehicle. They may be applied either by using tape or a water-soluble paint to facilitate removal. Magnetic signs are also acceptable. Any vehicles transporting fuel or other potentially harmful substances shall be equipped with a spill control plan and required decontamination equipment as required by Federal, State and local regulations.

Radio Communications:

- a. The Air Traffic Control Tower (ATCT) will communicate with and update pilots as required.
- b. Radio escorts will be provided by MHT Operations and Maintenance and will communicate with ATCT when necessary. A representative for the Engineer of Record will also act as the Resident Project Representative (RPR) for the project. The RPR and the Contractor will not communicate with ATCT at any time.
- c. The RPR and Contractor superintendent will monitor air traffic ground control frequency of 121.9 MHz at all times to maintain situational awareness. See Section 13 – *Special Conditions*.

Granite Frequency:

- i. Granite Channel (1): General airport operations, building maintenance and emergency frequency.
- ii. Granite Channel (2): Backup frequency.
- iii. Granite Channel (3): Airport law enforcement unit communications.
- iv. Granite Channel (4): Airport operations and maintenance, construction coordination, and security communications.

Granite Frequency - Call Signs:

- i. Airport Communications Center: Granite 100

- ii. Airport Emergency contact: Granite 100
- iii. Security gate guard: Company, followed by gate number
- iv. Contractor site superintendent: Company, followed by predetermined call sign/number.
- v. Airport operations representative(s): Coordinate daily on site.

The ATCT will have direct communication with the MHT Operations and Maintenance personnel providing the contractor escorts and having operational safety oversight. This communication will take place on the MHT ground frequency.

Airport Security

All personnel with regular job duties and responsibilities within the Airport Operations Area (AOA), 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. Superintendents shall also be required to have driver training.

All authorized visitors and short-term workers will be issued a white 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 work day. The Contractor's MHT badged supervisor(s) are required to coordinate AOA escort assignments with MHT Operations and Maintenance. 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 and within control 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.

The Temporary Secure Access Gate on Perimeter Road as shown in the Contract Documents will be manned by an MHT Airport-approved Security Guard for contractor access to the site. The following procedures will be followed for contractor access:

- a. MHT Airport-approved Security Guard will have an approved means of communication (i.e. "granite" radio contact) with his/her supervisors, the Contractor, MHT Operations and Maintenance personnel, and Airport Communications in the event of an emergency.
- b. Vehicle inspections will take place on the public side of the security fence prior to the gate being opened.
- c. 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 MHT Airport-approved Security Guard and turned over to MHT Operations and Maintenance at the close of each work day.
- d. During periods of minimal activity, the Secure Access Gate shall be secured or have the MHT Airport-approved Security Guard's vehicle parked across the gate opening such that a vehicle cannot pass through the gate opening. Gates will be secured by MHT Operations and Maintenance at the beginning and ending of each work day.

6. WILDLIFE MANAGEMENT

The Airport will mitigate wildlife hazards during construction as follows:

Trash:

- a. The Contractor shall keep the construction site free of paper, boxes, litter, and other debris which could be blown onto the runways and taxiways and aircraft operating areas. All trash must be disposed of in an appropriate manner off site.

Wildlife Sightings:

- a. The RPR and/or Superintendent will immediately notify MHT Operations and Maintenance Management by phone of wildlife sighted on the airfield.
- b. See Section 9 – *Notification of Construction Activities*, for notification procedures.

7. FOD MANAGEMENT:

The Airport will manage foreign object debris (FOD) control during construction as follows:

Housekeeping:

- a. All construction personnel will secure any items that may be carried by wind onto the Air Operations Area (AOA). See Section 5 – *Contractor Access*, regarding stockpile locations.

Airfield:

- a. All construction vehicle drivers will enter AOA paved areas from local streets only; construction vehicles will not transverse from non-paved surfaces to AOA paved surfaces. See Section 5 – *Contractor Access* and Appendix B for access routes.
- b. The Contractor will immediately sweep or otherwise remove any FOD located on an AOA paved surface. See Section 10 – *Inspection Requirements*.
- c. The Contractor shall furnish and retain, at the construction site, 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 that 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 and as directed by the RPR.

8. HAZMAT MANAGEMENT:

The Airport will manage hazard material transported during construction as follows:

Fuel or Hydraulic Fluid Spills:

- a. All Contractors' vehicles shall have hazmat placards plainly visible on both sides of the vehicle. Any vehicles transporting potentially harmful substances shall be equipped with a spill control plan and required decontamination equipment as required by Federal, State and local regulations.
- b. The Contractor will immediately notify the Airport Communications Center by phone of all spills. See Section 9 – *Notification of Construction Activities*, for notification procedures.

Fueling:

- a. All construction vehicles will be fueled in the staging area.

Other HAZMAT:

- a. No other hazardous material is expected to be transported on-site during construction.

9. NOTIFICATION OF CONSTRUCTION ACTIVITIES:

Contact List and Emergency Notification:

The Contact List of Airport and Consultant personnel and emergency contacts is located in Appendix A. Contractor contacts will be included in the SPCD.

The Contractor shall be required to submit a tentative schedule as described in Section 1 – *Coordination*. The schedule shall be given to the Airport prior to 72 hours in advance of the commencement of work. A 72-hour lead time is required by the Airport and FAA to issue a proper Notice to Airmen (NOTAM) of the pending construction activities.

To facilitate the specific requirements and intent of this section, the Contractor shall prepare a schedule of operations for the project. The schedule shall be subject to the approval of the MHT Operations and Maintenance or RPR and shall include as a minimum, the following:

Major work items to be accomplished.

- a. Subcontractors to be on site.
- b. Number of personnel to be on site.
- c. Type and quantity of equipment to be on site.
- d. Areas of the site where construction is scheduled.
- e. Any anticipated closing of facilities that will be required.
- f. Any anticipated power outages and/or system to be inoperable including anticipated length of downtime in hours.
- g. Other information requested by MHT Operations and Maintenance, Airport Management or the RPR.

The primary contact for construction activities will be MHT Operations and Maintenance since they are acting as the RPR. The contacts for the Airport will be as assigned by Airport Management.

All emergencies shall be directed to 911 or the Airport Communications Center at (603) 628-6222.

FAA Notification:

- The Airport Representatives will submit a 7460 case for construction equipment.
- The Airport will notify MHT SSC officials (see *Contact List*, Appendix A) as required by Section 4 – *Navigational Aid (NAVAID) Protection*, and Section 11 – *Underground Utilities*.

Airport User Notification:

- MHT Operations and Maintenance or Airport Management has been in contact with affected parties throughout the project.
- Airport Operations will notify the airport users of the proposed construction activities via telephone, flyer, or email.

NOTAMs:

- MHT Operations Management will issue all NOTAMs through the eNOTAM system, except as noted below.
- The FAA will issue all FAA facility related and Flight Procedure related NOTAMs.

Morning Safety Meetings

- As noted in Section 1 – *Coordination*, safety and coordination meetings will be held every morning prior to beginning construction operations for the day. The meeting will be located on the construction site and attended by MHT Operations and Maintenance, the RPR and the Construction Superintendent. The primary purpose is to discuss construction operations for

the day and any safety issues that need resolution.

10. INSPECTION REQUIREMENTS:

Airport Requirements:

- a. MHT Operations and Maintenance will inspect all closed paved surfaces prior to opening to air traffic operations.
- b. The entire work area should be inspected for foreign object debris (FOD) periodically throughout the workday and at the end of each day's work. Refer to Section 7 – *Foreign Object Debris (FOD) Management*, for corrective measures.
- c. If emergency maintenance is required after work hours, refer to Section 9 – *Notification of Construction Activities* and Appendix A for primary contact procedures and information.
- d. As soon as the work is completed, the area shall be cleaned and made available for inspection.
- e. The MHT Operations and Maintenance shall inspect all work areas prior to reopening the Taxiway and associated areas to aircraft operations.
- f. The MHT Operations and Maintenance and Airport Management will conduct a final inspection.

Resident Project Representative (RPR) Requirements:

- a. The RPR will be the field point of contact for all concerns during construction. The RPR will notify all appropriate parties relating to the concern.
- b. The RPR will conduct routine inspections of the worksite(s) at the end of all daily work shifts and at the request of MHT Operations and Maintenance Management.
- c. The RPR and the Engineer of Record will attend the final inspection.

Contractor Requirements:

- a. The Contractor Superintendent will conduct routine inspections of the worksite(s) to ensure compliance with the CSPP and SPCD.
- b. The Contractor Superintendent will attend the RPR's daily inspections and the final inspection.

11. UNDERGROUND UTILITIES

FAA and Airport Utilities

- a. Locations of utilities and underground cables shown are based on record documents and field survey. The accuracy of the utility locations is not guaranteed. Prior to commencement of any excavation, the Contractor shall verify the utility locations. The Contractor will coordinate all work on and in the vicinity of the underground utilities and cables with the RPR and MHT Operations and Maintenance.

Municipal Utilities:

- a. As applicable, the Contractor Superintendent will contact Dig Safe to delineate all municipal utilities a minimum of seven (7) days prior to any excavation work. The Contractor's DIG SAFE # for the Project shall be recorded as part of the Safety Plan Compliance Document (SPCD).

Utility Damage

- a. Should the Contractor encounter any damaged utilities, the Contractor is to contact the RPR immediately who will in turn notify MHT Operations and Maintenance.
- b. Should the Contractor damage any underground utilities, the Contractor will suspend all construction activity and notify the RPR. The Contractor shall then repair or replace the underground utility immediately.
- c. See Section 9 – *Notification of Construction Activities*, for notification requirements.

12. PENALTIES:

Construction Suspension:

- a. MHT Operations and Maintenance Management will immediately suspend all construction if and when:
 - i. A Contractor or subcontractor employee enters the Air Operations Area (AOA) outside of the designated work area.
 - ii. Any unescorted construction vehicle operates on any active AOA surface.
- b. The MHT Operations and Maintenance Management will allow construction work to resume only when the discrepancy is corrected to his/her satisfaction.
- c. The penalty for non-compliance with the Airport rules, regulations and/or safety plans shall be suspension of driving privileges and or suspension of airport access.
- d. The Contractor shall be responsible for controlling access to the work area and ensuring that airport security is maintained at all times. The FAA can impose fines of \$10,000 or more for security violations and incursions into active aircraft operation areas. The Contractor shall pay all fines assessed against the airport due to violations caused by the Contractor and his/her personnel, subcontractors and vendors.
- e. Any construction related runway incursion, as described in Section 1 – *Special Conditions* will require immediate suspension of all construction activity on the airport until a thorough investigation on cause is completed.

Expulsion of Non-compliant Employees:

- a. The MHT Operations and Maintenance Management may permanently prohibit any consultant, or contractor employee, acting in violation with Airport rules and regulations from entering or working on Airport property.

13. SPECIAL CONDITIONS:

Aircraft in Distress:

- a. MHT Operations and Maintenance, the RPR, and/or the Contractor Superintendent will immediately clear all construction personnel of all runways and approach areas upon monitoring a distress call on the airport ground frequency. See Section 5 – *Contractor Access*, for ground frequency monitoring requirements.

Aircraft Accident:

- a. The Contractor will notify MHT Operations and Maintenance of any suspicious persons or behavior on Airport property. No unauthorized vehicles shall enter through the construction access gates.
- b. There are four categories of runway incursions:
 - Category A is a serious incident in which a collision was narrowly avoided.
 - Category B is an incident in which separation decreases and there is a significant potential for collision, which may result in a time critical corrective/evasive response to avoid a collision.
 - Category C is an incident characterized by ample time and/or distance to avoid a collision.
 - Category D is an incident that meets the definition of runway incursion such as incorrect presence of a single vehicle/person/aircraft on the protected area of a surface designated for the landing and take-off of aircraft but with no immediate safety consequences.
- c. Incursions will be prevented by thorough training of ground vehicle operators; radio communication; coordination among all parties; and clearly marking the boundaries of

construction operations established in this safety plan. Construction related runway incursion will be subject to penalties as described in Section 12 – *Penalties*.

- d. All construction personnel will immediately vacate Airport property and remain off until cleared by the MHT Operations and Maintenance Management.

Vehicle / Pedestrian Deviation (V/PD)

- a. MHT Operations and Maintenance Management may temporarily suspend construction on the Air Operations Area (AOA) in the event of a non-construction related V/PD. See Section 12 – *Penalties*, for construction related construction suspension V/PD procedures.

14. RUNWAY AND TAXIWAY VISUAL AIDS:

Temporary Runway Closures:

- a. Runway 17-35 ~~*Landings*~~ will be closed during PHASE 2A, in accordance with the Airside phasing plans in Appendix B. Closures will use temporary Runway Closure Markers. Refer to Appendix B for details.
- b. Runway 6 - 24 will be closed during PHASE 3A, in accordance with the Airside phasing plans in Appendix B. Closures will use temporary Runway Closure Markers. Refer to Appendix B for details

Temporary Taxiway Closures:

- a. A portion of Taxiway H (North) – Northern Section will be closed temporarily during PHASE 2 on a phase duration as outlined in the Airside phasing plans in Appendix B.
- b. A portion of Taxiway H (North) – Southern Section will be closed temporarily during PHASES 1 and 3 on a phase duration as outlined in the Airside phasing plans in Appendix B.
- c. Closures will use barricades and/or channelizer cones as outlined in Section 16, *Hazard Marking and Lighting*.

Runway Safety Areas:

- a. The Contractor will delineate work areas that abut the Runway Safety Area or other aircraft protection areas with traffic cone/stake delineation or barricades, as indicated on the phasing plan, or other measures acceptable to the MHT Operations and Maintenance Management.

Taxiway Visual Aids:

- a. The Contractor will be required to provide temporary “jumpers” to keep portions of a taxiway edge light system operational in order to bypass closed portions of a taxiway.
- b. Guidance signs on taxiways closed for the entire phase duration shall have the circuit “locked out-tagged out” or be adequately covered with plastic securely fastened or temporary blank panels installed. Whereas, guidance signs for taxiways and/or runways guidance signs for phases having a daily closure will not be required to be covered.

Temporary Pavement Markings:

- a. Temporary pavement markings may be necessary as outlined in the Airside phasing plans in Appendix B. Any temporary pavement markings shall be installed per the requirements of the Pavement Marking specifications in the Contract Documents.

15. MARKINGS AND SIGNS FOR ACCESS ROUTES:

Haul Route Markings:

- a. There are no markings or signs proposed for the Contractor haul routes since the Contractor will be under escort, except there will be barricades/cones adjacent to active aircraft areas.

16. HAZARD MARKING AND LIGHTING

All Phases

- a. Construction low-profile barricades and/or channelizer cones will be used to delineate all closed construction airfield movement areas from the active aircraft.
- b. Barricades and cones shall be provided as shown on the phasing plans in Appendix B. These devices will delineate closed taxi routes that are not available to air traffic and will ensure that the Contractor's vehicles will not interfere with airport operations.
- c. Barricades and cones shall be weighted to protect against inadvertent movement from wind currents or prop/jet wash. These materials will be securely fastened to prevent FOD.
- d. Cones will be at 4' maximum intervals and low-profile barricades will be interlocking.
- e. For night-time closures, barricades and cones will be equipped with a flashing or steady-burn light (red in color) meeting the luminescence requirements of NHDOT and have a maximum spacing of 10'.
- f. Supplemental signs (i.e. "No Entry") and barricades will be used, as required, to limit vehicle movement.
- g. The Contractor shall maintain all barricades and cones as required and will have an "On-Call" person available for 24 hours/day, for emergency maintenance.

17. PROTECTION OF AREAS, ZONES, & SURFACES:

- a. The Airport will remain open during the project.
- b. Construction equipment is not anticipated to penetrate the Runway 17 or any other approach surface when available for use, as well as any departure surface. See Section 9 – *Notification of Construction Activities*, for 7460 case file information.
- c. All Safety Areas (SAs), Object Free Areas (OFAs) and Obstacle Free Zones (OFZs) will be protected from construction activity using the temporary barricades described in Section 16 – *Hazard Marking & Lighting*, and as depicted on the phasing plans.
- d. The Contractor will be responsible to instruct all workers and subcontractors on where travel is permitted on the Airport property. The Contractor will also instruct all subcontractors on the vehicle identification requirements as described in Section 5 – *Contractor Access*.
- e. Open trenches or excavations are not permitted within the safety area adjacent to active Runways or Taxiways, unless temporarily allowed by the Engineer with special precautions (i.e. plates over a small width trench).
- f. Open trenches or excavations must be prominently marked.

18. OTHER LIMITS ON CONSTRUCTION:

Prohibitions:

- a. Cranes and other tall equipment (i.e. concrete pumpers, etc.) will not be deployed without a 7460 approval determination letter.
- b. Open flame welding, torches, and flare pots will not be used at any time.
- c. No blasting (with electronic blasting caps) will be permitted for this project.
- d. Smoking is not allowed on the AOA.

Restrictions:

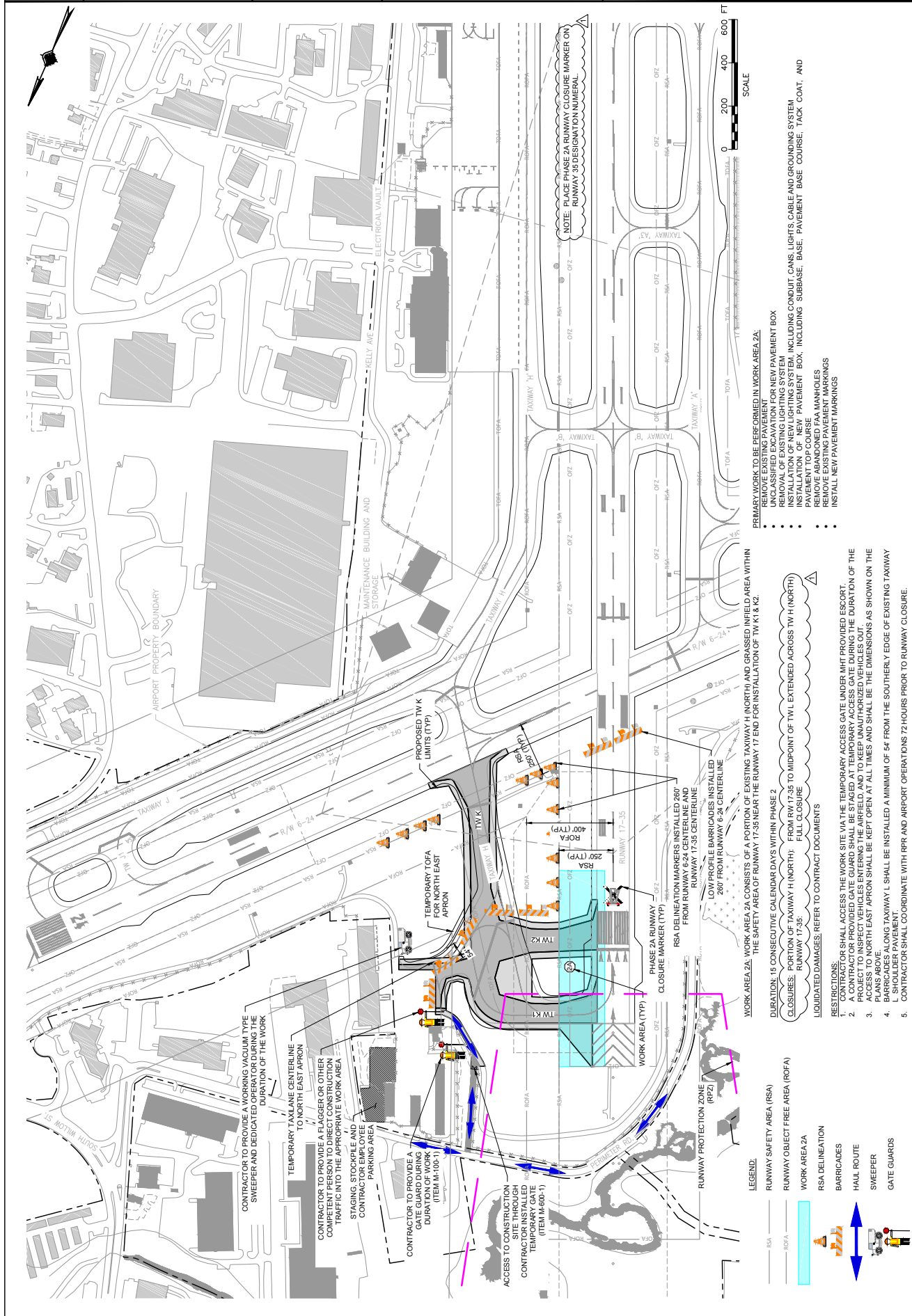
- a. Calendar days for phases are consecutive, except as noted in Section 2 *Phasing* or in the phasing plans in Appendix B. Once work has begun in an area the area must be worked daily during work hours until the work area is complete, unless otherwise allowed by the phasing plans in Appendix B.

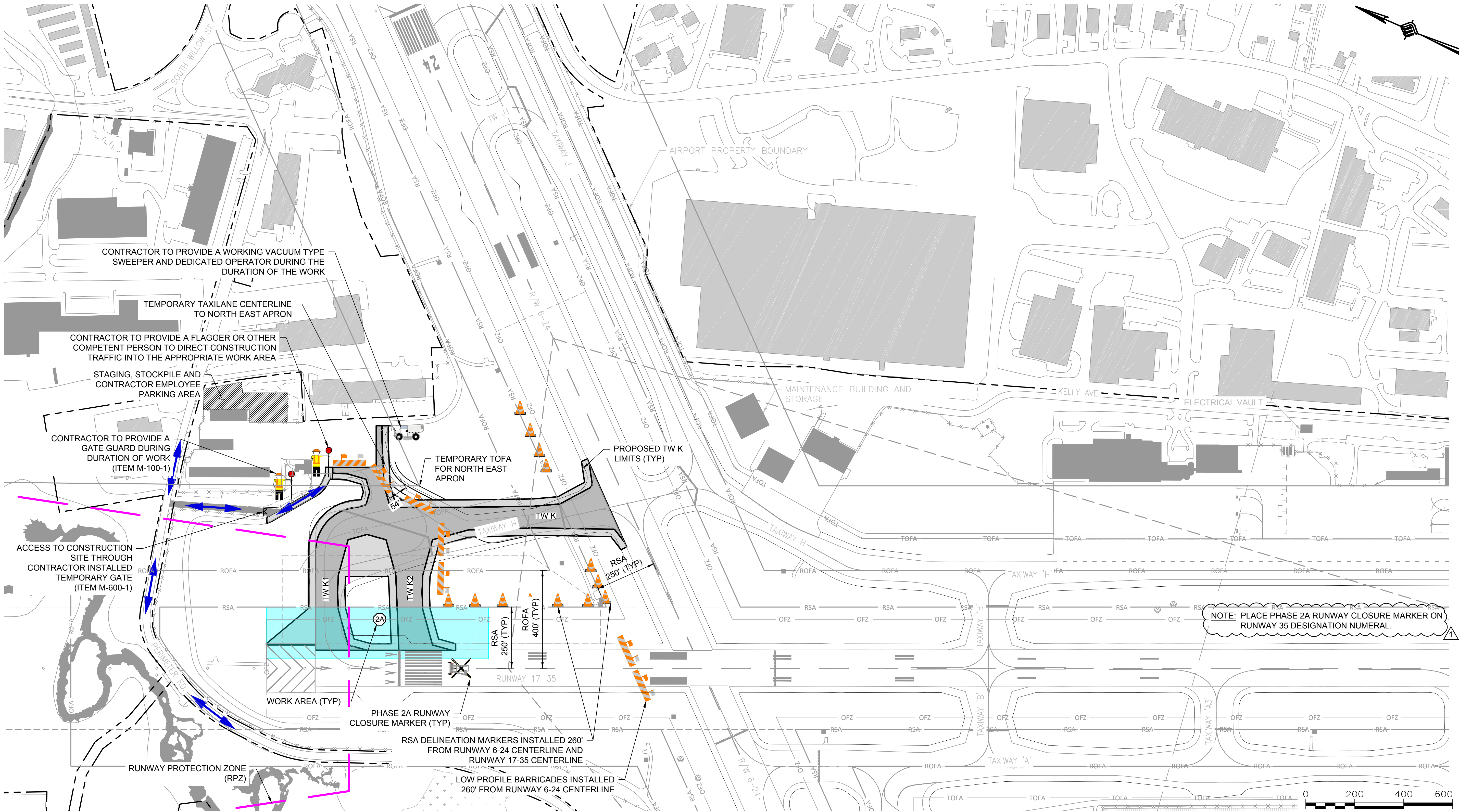
- b. Refer to Section 2 – *Phasing* for restrictions on calendar days or limits on the number of hours for each phase of the project.
- c. The Contractor’s work hours will be limited to 7:00 AM to 5:00 PM, Monday through Friday, unless otherwise authorized by the MHT Operations and Maintenance Management. No work shall be permitted on Sundays or legal holidays, except in cases of emergency. No work will be permitted at night, unless a Night Work Lighting Plans is approved by the RPR and MHT Operations and Maintenance Management which outlines how sufficient lighting is provided to ensure a comparable degree of accuracy, workmanship, and conditions regarding safety as would be obtained in daylight.

19. AIRPORT WATCH PROGRAM.

The “Airport Watch Program” was established to visually remind all Airport employees, users, and tenants of their role in maintaining a safe and secure Airport. If you see something suspicious, report it to your supervisor and to the Airport Communications Center immediately. With the willing assistance of many watchful eyes and alert ears, the Airport will remain a safe and secure environment for travelers, employees, contractors, and the general public.

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LEGEND:

- RSA — RUNWAY SAFETY AREA (RSA)
- ROFA — RUNWAY OBJECT FREE AREA (ROFA)
- WORK AREA 2A
- RSA DELINEATION
- BARRICADES
- HAUL ROUTE
- SWEEPER
- GATE GUARDS

WORK AREA 2A: WORK AREA 2A CONSISTS OF A PORTION OF EXISTING TAXIWAY H (NORTH) AND GRASSED INFIELD AREA WITHIN THE SAFETY AREA OF RUNWAY 17-35 NEAR THE RUNWAY 17 END FOR INSTALLATION OF TW K1 & K2.

DURATION: 15 CONSECUTIVE CALENDAR DAYS WITHIN PHASE 2

CLOSURES: PORTION OF TAXIWAY H (NORTH): FROM RW 17-35 TO MIDPOINT OF TW L EXTENDED ACROSS TW H (NORTH)
RUNWAY 17-35: FULL CLOSURE

LIQUIDATED DAMAGES: REFER TO CONTRACT DOCUMENTS

RESTRICTIONS:

1. CONTRACTOR SHALL ACCESS THE WORK SITE VIA THE TEMPORARY ACCESS GATE UNDER MHT PROVIDED ESCORT.
2. A CONTRACTOR PROVIDED GATE GUARD SHALL BE STAGED AT TEMPORARY ACCESS GATE DURING THE DURATION OF THE PROJECT TO INSPECT VEHICLES ENTERING THE AIRFIELD, AND TO KEEP UNAUTHORIZED VEHICLES OUT.
3. ACCESS TO NORTH EAST APRON SHALL BE KEPT OPEN AT ALL TIMES AND SHALL BE THE DIMENSIONS AS SHOWN ON THE PLANS ABOVE.
4. BARRICADES ALONG TAXIWAY L SHALL BE INSTALLED A MINIMUM OF 54' FROM THE SOUTHERLY EDGE OF EXISTING TAXIWAY L SHOULDER PAVEMENT.
5. CONTRACTOR SHALL COORDINATE WITH RPR AND AIRPORT OPERATIONS 72 HOURS PRIOR TO RUNWAY CLOSURE.

PRIMARY WORK TO BE PERFORMED IN WORK AREA 2A:

- REMOVE EXISTING PAVEMENT
- UNCLASSIFIED EXCAVATION FOR NEW PAVEMENT BOX
- REMOVAL OF EXISTING LIGHTING SYSTEM
- INSTALLATION OF NEW LIGHTING SYSTEM, INCLUDING CONDUIT, CANS, LIGHTS, CABLE AND GROUNDING SYSTEM
- INSTALLATION OF NEW PAVEMENT BOX, INCLUDING SUBBASE, BASE, PAVEMENT BASE COURSE, TACK COAT, AND PAVEMENT TOP COURSE
- REMOVE ABANDONED FAA MANHOLES
- REMOVE EXISTING PAVEMENT MARKINGS
- INSTALL NEW PAVEMENT MARKINGS

ENGINEER'S SEAL
THE STATE OF NEW HAMPSHIRE
BENJAMIN
No. 7416
LICENSED PROFESSIONAL ENGINEER

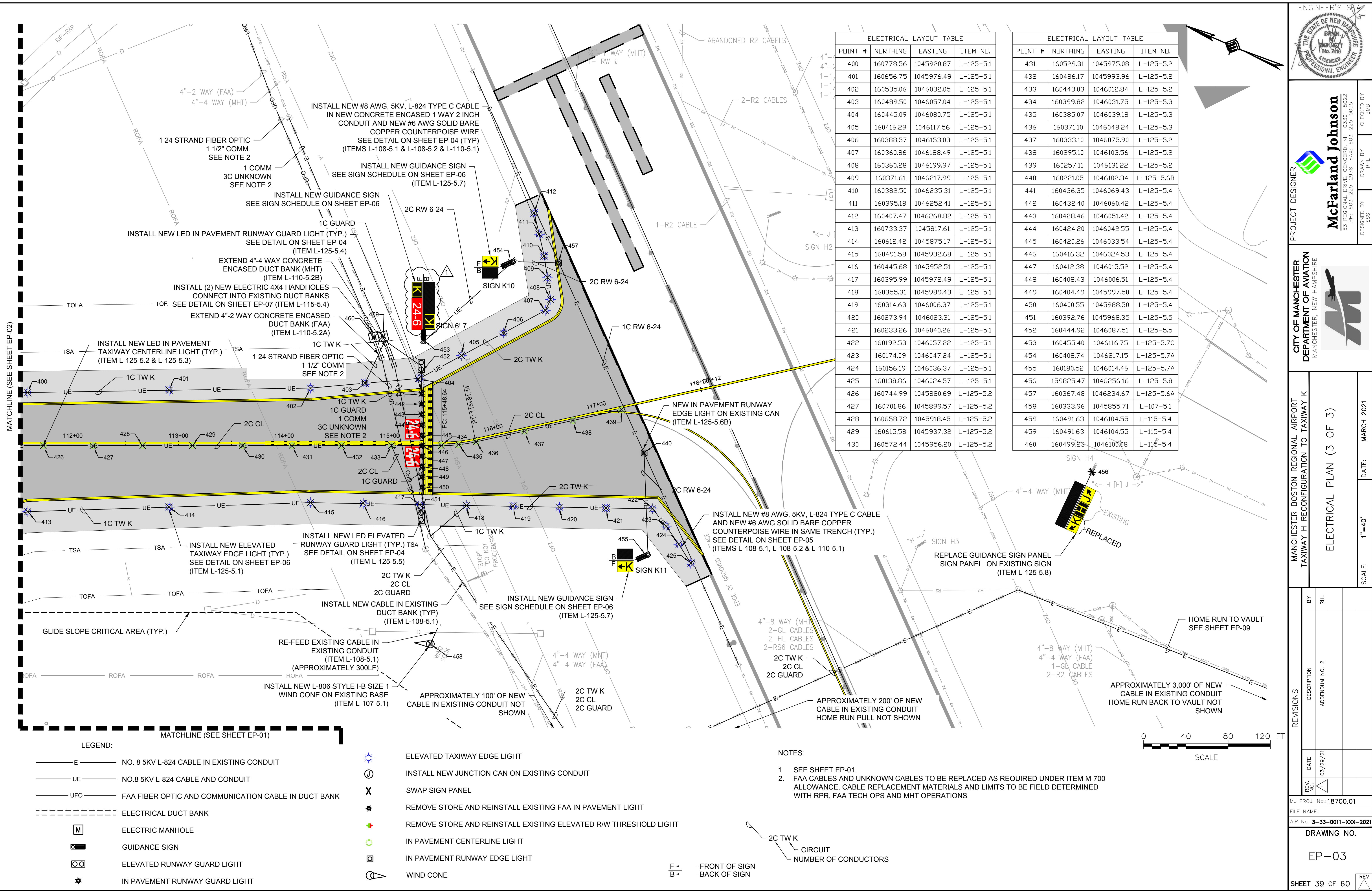
PROJECT DESIGNER
CITY OF MANCHESTER
DEPARTMENT OF AVIATION
MANCHESTER, NEW HAMPSHIRE
McFarland Johnson
53 REGIONAL DRIVE, CONCORD, NH 03301-5022
PH: 603-225-2978 FAX: 603-225-0095
DESIGNED BY SSS
DRAWN BY RHL
CHECKED BY BMB

MANCHESTER BOSTON REGIONAL AIRPORT
TAXIWAY H RECONFIGURATION TO TAXIWAY K
CONSTRUCTION SAFETY AND PHASING
PLAN - PHASE 2A

REVISIONS
REV. NO. DATE DESCRIPTION
1 03/29/21 ADDENDUM NO. 2

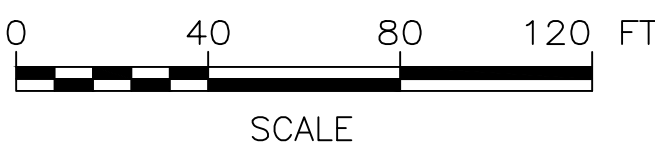
MJ PROJ. No.: 18700.01
FILE NAME:
AIP No.: 3-33-0011-XXX-2021
DRAWING NO.
CS-04
SHEET 9 OF 60

SCALE: 1"=200'
DATE: MARCH 2021



ELECTRICAL LAYOUT TABLE			
POINT #	NORTHING	EASTING	ITEM NO.
400	160778.56	1045920.87	L-125-5.1
401	160656.75	1045976.49	L-125-5.1
402	160535.06	1046032.05	L-125-5.1
403	160489.50	1046057.04	L-125-5.1
404	160445.09	1046080.75	L-125-5.1
405	160416.29	1046117.56	L-125-5.1
406	160388.57	1046153.03	L-125-5.1
407	160360.86	1046188.49	L-125-5.1
408	160360.28	1046199.97	L-125-5.1
409	160371.61	1046217.99	L-125-5.1
410	160382.50	1046235.31	L-125-5.1
411	160395.18	1046252.41	L-125-5.1
412	160407.47	1046268.82	L-125-5.1
413	160733.37	1045817.61	L-125-5.1
414	160612.42	1045875.17	L-125-5.1
415	160491.58	1045932.68	L-125-5.1
416	160445.68	1045952.51	L-125-5.1
417	160395.99	1045972.49	L-125-5.1
418	160355.31	1045989.43	L-125-5.1
419	160314.63	1046006.37	L-125-5.1
420	160273.94	1046023.31	L-125-5.1
421	160233.26	1046040.26	L-125-5.1
422	160192.53	1046057.22	L-125-5.1
423	160174.09	1046047.24	L-125-5.1
424	160156.19	1046036.37	L-125-5.1
425	160138.86	1046024.57	L-125-5.1
426	160744.99	1045880.69	L-125-5.2
427	160701.86	1045899.57	L-125-5.2
428	160658.72	1045918.45	L-125-5.2
429	160615.58	1045937.32	L-125-5.2
430	160572.44	1045956.20	L-125-5.2

ELECTRICAL LAYOUT TABLE			
POINT #	NORTHING	EASTING	ITEM NO.
431	160529.31	1045975.08	L-125-5.2
432	160486.17	1045993.96	L-125-5.2
433	160443.03	1046012.84	L-125-5.2
434	160399.82	1046031.75	L-125-5.3
435	160385.07	1046039.18	L-125-5.3
436	160371.10	1046048.24	L-125-5.3
437	160333.10	1046075.90	L-125-5.2
438	160295.10	1046103.56	L-125-5.2
439	160257.11	1046131.22	L-125-5.2
440	160221.05	1046102.34	L-125-5.6B
441	160436.35	1046069.43	L-125-5.4
442	160432.40	1046060.42	L-125-5.4
443	160428.46	1046051.42	L-125-5.4
444	160424.20	1046042.55	L-125-5.4
445	160420.26	1046033.54	L-125-5.4
446	160416.32	1046024.53	L-125-5.4
447	160412.38	1046015.52	L-125-5.4
448	160408.43	1046006.51	L-125-5.4
449	160404.49	1045997.50	L-125-5.4
450	160400.55	1045988.50	L-125-5.4
451	160392.76	1045968.35	L-125-5.5
452	160444.92	1046087.51	L-125-5.5
453	160455.40	1046116.75	L-125-5.7C
454	160408.74	1046217.15	L-125-5.7A
455	160180.52	1046014.46	L-125-5.7A
456	159825.47	1046256.16	L-125-5.8
457	160367.48	1046234.67	L-125-5.6A
458	160333.96	1045855.71	L-107-5.1
459	160491.63	1046104.55	L-115-5.4
459	160491.63	1046104.55	L-115-5.4
460	160492.23	1046100.08	L-115-5.4



- NOTES:
- SEE SHEET EP-01.
 - FAA CABLES AND UNKNOWN CABLES TO BE REPLACED AS REQUIRED UNDER ITEM M-700 ALLOWANCE. CABLE REPLACEMENT MATERIALS AND LIMITS TO BE FIELD DETERMINED WITH RPR, FAA TECH OPS AND MHT OPERATIONS

ENGINEER'S SEAL

PROJECT DESIGNER

McFarland Johnson
53 REGIONAL DRIVE, CONCORD, NH 03301-5022
PH: 603-225-2978 FAX: 603-225-0095
DESIGNED BY: SSS
DRAWN BY: RHL
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CITY OF MANCHESTER
DEPARTMENT OF AVIATION
MANCHESTER, NEW HAMPSHIRE

MANCHESTER BOSTON REGIONAL AIRPORT
TAXIWAY H RECONFIGURATION TO TAXIWAY K
ELECTRICAL PLAN (3 OF 3)

REVISIONS
BY: RHL
DATE: 03/29/21
DESCRIPTION: ADDENDUM NO. 2

MJ PROJ. No.: 18700.01
FILE NAME:
AIP No.: 3-33-0011-XXX-2021
DRAWING NO.
EP-03

SHEET 39 OF 60

