Dynamic Civil Solutions, Inc. Birmingham-Shuttlesworth International Airport Taxiway P&N Airfield Pavement Improvements Birmingham, Alabama FAA Project No. AIP122 BAA Project No. AF057 DCS Project No. 230107

#### **ADDENDUM NO. 2**

Wednesday, May 08, 2024

**OWNER:** Birmingham Airport Authority

**PROJECT:** Birmingham-Shuttlesworth International Airport

Taxiway P&N Airfield Pavement Improvements

DCS Project No. 230107

TO: ALL PLAN HOLDERS

Specifications and drawings for the above reference project are hereby amended or clarified as set out below. This addendum forms a part of the Contract Documents dated April 12, 2024. Acknowledge receipt of this Addendum in the space provided on the Proposal Form. Failure to do so may subject Bidder to disgualification.

#### **PROJECT MANUAL**

#### 1. SECTION P-209 – CRUSHED AGGREGATE BASE COURSE

a. Paragraph 209-2.4 Separation Geotextile is modified as follows:

Not Used Separation geotextile shall be Class 2, 0.02 sec-1 permittivity per ASTM D4491, Apparent opening size per ASTM D4751 with 0.60 mm maximum average roll value.

b. Paragraph 209-2.5.1 is modified as follows:

Add the following pay item: Item P-209.5.2 Separation Geotextile

#### 2. SECTION 00 05 00 - BID FORM

This Section should be deleted in its entirety and replaced with the attached form (6 pages)

#### RESPONSE TO QUESTIONS AND CLARIFICATIONS

#### 1. TAXIWAY P PAVEMENT MARKINGS

The existing markings on Taxiway P shall remain in place and be protected throughout the construction duration. Nightly protection of the existing markings and the removal of the protective material will be required prior to each re-opening of the taxiway. Subsequent to the completion of the crack seal and seal coat application for the entire taxiway, the existing markings shall be prepared for remarking incidental to and per Item P-620-5.2, Airport Traffic Markings.

#### 2. PROTECTION OF EXISTING ITEMS

The contractor is required to exercise care to not get seal coat treatment on adjacent lighting, exposed ducts, concrete foundations, and existing markings. The cost of protecting items against seal coat overspray shall be considered incidental to the pay item P-608-R-8.1, Asphalt Surface Treatment.

3. *Question:* Will the Affirmation signatures on the bottom of the Letter of Intent be required prior to the Bid opening or just before Award?

ADDENDUM NO. 2 Page 1



Response: DBE Letter(s) of Intent should be signed and submitted with the bid proposal prior to bid opening.

4. *Question:* Is Note 3.B. under "Areas and Operations affected by the Construction Activity" intending for permanent striping to be completed at the end of **every night** shift on Taxiway P?

Response: Refer to #1 above.

5. Question: I don't see any mention of asphalt laydown lift limitations in the Project Manual. Is there anything specified regarding the maximum thickness per lift that will be required?

Response: Reference is made to FAA Technical Specification P-401, Asphalt Mix Pavement. There is no specified maximum lift limitation on asphalt lift thickness, however Paragraph 401-3.3, Job mix formula (JMF) stipulates a recommended minimum construction lift thickness of 3 inches. Reference Sheet C-13, Typical Sections for asphalt layers' thicknesses.

6. Question: For Pay Item P-209-5.2 Separation Geotextile, there is 3,344 SQYD set up. When I reference the Project Manual, it says "209-2.4 Separation Geotextile. Not Used". Is this correct?

Response: Refer to project manual modification above.

#### **DRAWINGS**

1. SHEET C-01 (SUMMARY OF QUANTITIES)

Replace this sheet with the sheet bearing a revision date of 5/7/24 (Revised Sheet C-01 attached).

2. SHEET C-04 (CONSTRUCTION SAFETY & PHASING PLAN NOTES)

Replace this sheet with the sheet bearing a revision date of 5/7/24 (Revised Sheet C-04 attached).

3. SHEET C-06 (CONSTRUCTION SAFETY & PHASING PLAN)

Replace this sheet with the sheet bearing a revision date of 5/7/24 (Revised Sheet C-06 attached).

#### Attachments

- 1. Section 00 05 00 Bid Form (6 pages)
- 2. Revised Sheets C-01, C-04 and C-06.

Dynamic Civil Solutions, Inc. Birmingham-Shuttlesworth International Airport Taxiway P&N Airfield Pavement Improvements Birmingham, Alabama FAA Project No. AIP122 BAA Project No. AF057 DCS Project No. 230107

### **DOCUMENT 00 05 00**

### **BID FORM**

			RID FORM			
1.0	Bid					
	Submitted By:					
	Date:					
TO:						
named h this Bid	nerein and that no	person other than herein me onnection with any other pers	ntioned has any interest in this Bid of	nis Bid as principal or principals is or are or in the Contract to be entered into; that d; and that it is in all respects fair and in		
the place relative	e where the Work i thereto and has re	is to be done; that it has exam ad all of the Addenda furnishe	ined the Plans and Specifications for	lly in regard to all conditions pertaining to the Work and other Contract Documents as acknowledged below; and that it has performed.		
Agreement mainten Docume Payment evidence the processing and the proce	If provided with a Notice of Intent to Award the Contract by the Owner, the Bidder shall Contract with the Owner in the form of Contract Agreement contained in the Contract Documents, furnish all necessary permits, licenses, materials, equipment, machinery, maintenance, tools, apparatus, means of transportation and labor necessary to complete the Work provided for in the Contract Documents for "Taxiway P&N Airfield Pavement Improvements" Birmingham, Alabama, furnish the Performance Bond and Payment Bond in the form contained in the Contract Documents each for not less than the Total Contract Price, furnish the required evidence of the specified insurance coverages, furnish the required Disadvantage Business Enterprise data and submittals, and furnish the proof of authority to execute required by the Instructions to Bidders. The Bidder shall commence Work specified herein within the time limits set forth in the Contract Documents, which time limits the Bidder acknowledges are reasonable.					
forth in t	If the Bidder fails or refuses to execute the Contract Documents, or furnish the required Bonds and other required documents as set forth in the Instructions to Bidders within ten (10) Days calendar days after the date of the Notice of Intent to Award the Contract to it, the Bid Guaranty accompanying this Bid, and the money payable thereon shall become the property of the Owner. Otherwise, the Bid Guaranty will be returned to the Bidder.					
	If the Bidder fails to complete the Work within the scheduled time or any authorized extension thereof, damages, including Liquidation Damages in accordance with the terms of the Contract Documents shall be deducted from the Total Contract Price payable to Contractor.					
	Acknowledgment is hereby made of the following Addenda (identified by number) received since issuance of the Contract Documents, Plans and Specifications:					
ADDEN	DUM No.	Date	Addendum No.	Date		

Dynamic Civil Solutions, Inc. Birmingham-Shuttlesworth International Airport Taxiway P&N Airfield Pavement Improvements Birmingham, Alabama FAA Project No. AIP122 BAA Project No. AF057 DCS Project No. 230107

### <u>BID</u>

For all Work required in accordance with the applicable Plans, Specifications and other Contract Documents including the cost of the required Performance Bond and Payment Bond and Insurance, the undersigned submits:

TOTAL BID PRICE:				
DOLLARS (\$	).			
Attached is a Bid Guaranty on the stan	ndard form of the Owner	for the sum of		
			_DOLLARS (\$	)
according to the requirements of the	Instructions to Bidders,	which Bid Bond is subje	ect to the conditions and provis	sions thereof.
(If Bidder is an individual, sign on this li	ne.)			
			(Seal)	
			(Seal)	
(If Bidder is partnership or limited liabilithe partner, member or manager sign				y the signature of
		A Partnership/Lin	nited Liability Company	
		•	(Se	eal) Name:
		-		
Name and address of all partners or me	embers:			
		_		
(If Bidder is a corporation, fill in the nar followed by the officer's title.) The below Corporation is organized a this Bid and perform all Work and fur business in the State of Alabama.	and existing under the I	aws of the State of _	, authoriz	zed by law to make
		A Corporation		-
Attest:Secretary	Ву:		(Seal)	

Taxiway P&N Airfield Pavement Improvements
Birmingham, Alabama

Name: \_\_\_\_\_\_

Title: \_\_\_\_\_

(Affix Corporate Seal)

(Address)

The full names and home addresses of persons or firms interested in the foregoing Bid as Principals or Officers (specifically include the President, Secretary, and Treasurer and state the corporate office held by all other individuals listed) are as follows:

Dynamic Civil Solutions, Inc.

Birmingham-Shuttlesworth International Airport

FAA Project No. AIP122 BAA Project No. AF057

FAA Project No. AIP122 BAA Project No. AF057 DCS Project No. 230107

# SCHEDULE OF PRICES BID PROJECT NO: AIP122 TAXIWAY P&N AIRFIELD PAVEMENT IMPROVEMENTS

NO.	ITEM NUMBER	ITEM DESCRIPTION	UNIT	QTY	PRICE	TOTAL		
	TAXIWAY N							
1	SS-102-1	CONSTRUCTION SAFETY & SECURITY	LS	1	\$	\$		
2	SS-104-1	PROJECT SURVEY & STAKEOUT	LS	1	\$	\$		
3	SS-105-1	TEMPORARY CONSTRUCTION ITEMS	LS	1	\$	\$		
4	C-100-1	CONTRACTOR QUALITY CONTROL PROGRAM	LS	1	\$	\$		
5	C-102-5.1	TEMPORARY EROSION CONTROL	LS	1	\$	\$		
6	C-105-1	MOBILIZATION	LS	1	\$	\$		
7	P-101-5.1	REMOVAL OF EXISTING ASPHALT	SF	30,100	\$	\$		
8	P-152-4.1	UNCLASSIFIED EXCAVATION	CY	1,300	\$	\$		
9	P-152-4.2	UNSUITABLE EXCAVATION	CY	2,230	\$	\$		
10	P-209-5.1	CRUSHED AGGREGATE BASE COURSE, 12" THICKNESS	SY	3,344	\$	\$		
11	P-209-5.2	SEPARATION GEOTEXTILE	SY	3,344	\$	\$		
12	P-209-5.3	CRUSHED AGGREGATE BASE COURSE, ALDOT #1, 24" THICKNESS	SY	3,344	\$	\$		
13	P-401-8.1	5" ASPHALT BINDER COURSE	TON	1,003	\$	\$		
14	P-401-8.2	4" ASPHALT SURFACE COURSE	TON	1,250	\$	\$		
15	P-602-5.1	EMULSIFIED ASPHALT PRIME COAT	GAL	1,003	\$	\$		
16	P-603-5.1	EMULSIFIED ASPHALT TACK COAT	GAL	234	\$	\$		

FAA Project No. AIP122 BAA Project No. AF057 DCS Project No. 230107

17	P-620-5.2	AIRPORT TRAFFIC MARKINGS	LS	1	\$	\$
18	P-620-5.4	TEMPORARY RUNWAY & TAXIWAY MARKING	LS	1	\$	\$
19	T-904-5.1	SODDING	SY	900	\$	\$
20	T-905-5.1	4" TOPSOIL	CY	100	\$	\$
			TAXIV	VAY P		
NO.	ITEM NUMBER	ITEM DESCRIPTION	UNIT	QTY	PRICE	TOTAL
1	SS-102-1	CONSTRUCTION SAFETY & SECURITY	LS	1	\$	\$
2	SS-104-1	PROJECT SAFETY & STAKEOUT	LS	1	\$	\$
3	SS-105-1	TEMPORARY CONSTRUCTION ITEMS	LS	1	\$	\$
4	C-100-1	CONTRACTOR QUALITY CONTROL PROGRAM	LS	1	\$	\$
5	C-105-1	MOBILIZATION	LS	1	\$	\$
6	P-101-1	REMOVAL OF FOREIGN SUBSTANCES/CONTAMINATES /RUBBER	LS	1	\$	\$
7	P-605-5.1	JOINT SEALING FILLER	LF	2,500	\$	\$
8	P-608-R-8.1	ASPHALT SURFACE TREATMENT	SY	5,000	\$	\$
9	P-620-5.2	AIRPORT TRAFFIC MARKINGS	LS	1	\$	\$

TOTAL BASE BID AMOUNT=	AND	/100 DOLLARS

### **END OF SECTION**

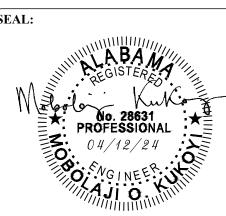
		SUMMARY OF QUANTITIES		
NO.	ITEM NUMBER	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY
		TAXIWAY N		
1	SS-102-1	CONSTRUCTION SAFETY & SECURITY	LS	1
2	SS-104-1	PROJECT SURVEY & STAKEOUT	LS	1
3	SS-105-1	TEMPORARY CONSTRUCTION ITEMS	LS	1
4	C-100-1	CONTRACTOR QUALITY CONTROL PROGRAM	LS	1
5	C-102-5.1	TEMPORARY EROSION CONTROL	LS	1
6	C-105-1	MOBILIZATION	LS	1
7	P-101-5.1	REMOVAL OF EXISTING ASPHALT	SF	30,100
8	P-152-4.1	UNCLASSIFIED EXCAVATION	CY	1,300
9	P-152-4.2	UNSUITABLE EXCAVATION	CY	2,230
10	P-209-5.1	CRUSHED AGGREGATE BASE COURSE, 12" THICKNESS	SY	3,344
11	P-209-5.2	SEPARATION GEOTEXTILE	SY	3,344
12	P-209-5.3	CRUSHED AGGREGATE BASE COURSE, ALDOT #1, 24" THICKNESS	SY	3,344
13	P-401-8.1	5" ASPHALT BINDER COURSE	TON	1,003
14	P-401-8.2	4" ASPHALT SURFACE COURSE	TON	1,250
15	P-602-5.1	EMULSIFIED ASPHALT PRIME COAT	GAL	1,003
16	P-603-5.1	EMULSIFIED ASPHALT TACK COAT	GAL	234
17	P-620-5.2	AIRPORT TRAFFIC MARKINGS	LS	1
18	P-620-5.4	TEMPORARY RUNWAY & TAXIWAY MARKING	LS	1
19	T-904-5.1	SODDING	SY	900
20	T-905-5.1	4" TOPSOIL	CY	100
		TAXIWAY P		
1	SS-102-1	CONSTRUCTION SAFETY & SECURITY	LS	1
2	SS-104-1	PROJECT SAFETY & STAKEOUT	LS	1
3	SS-105-1	TEMPORARY CONSTRUCTION ITEMS	LS	1
4	C-100-1	CONTRACTOR QUALITY CONTROL PROGRAM	LS	1
5	C-105-1	MOBILIZATION	LS	1
6	P-101-1	REMOVAL OF FOREIGN SUBSTANCES/CONTAMINATES/RUBBER	LS	1
7	P-605-5.1	JOINT SEALING FILLER	VIF~	2,500
8	P-608-R-8.1	ASPHALT SURFACE TREATMENT	SY	5,000
	D 000 F 0		<u> </u>	3,000

P-620-5.2 AIRPORT TRAFFIC MARKINGS



2210 2nd Avenue North Birmingham, AL 35203 Tel: (205) 358-7256 Fax: (205) 358-7258 www.dcseng.com





SUBMITTAL:

**BID DOCUMENTS** 

NO.	DATE:	<b>DESCRIPTION:</b>
1	05/07/24	ADDENDUM #2
PROJE	CT NUMBE	R: 230107
ISSUE	DATE:	04/12/24
DRAW	N BY:	TJR
CHEC	KED BY:	MOK

NOT TO SCALE

SHEET TITLE:

SUMMARY OF QUANTITIES

SHEET NUMBER:

### 1. COORDINATION

- A. CONTRACTOR PROGRESS MEETINGS THE OWNER, ENGINEER AND CONTRACTOR WILL HOLD WEEKLY PROGRESS MEETINGS ON A COORDINATED SCHEDULE DURING CONSTRUCTION. OPERATIONAL SAFETY WILL BE A STANDING AGENDA ITEM IN SUCH MEETINGS.
- SCOPE OR SCHEDULE CHANGES THE OWNER AND/OR ENGINEER WILL CALL SUCH COORDINATION CONFERENCES AS MAY SEEM EXPEDIENT TO HIM FOR THE PURPOSE OF ASSURING COORDINATION OF THE WORK COVERED BY THIS CONTRACT AND/OR SCOPE OR SCHEDULE CHANGES. THE CONTRACTOR SHALL ATTEND ALL SUCH CONFERENCES.
- C. ALL RELOCATION OR ADJUSTMENTS TO NAVAIDS, OR CHANGES TO FINAL GRADES IN CRITICAL AREAS, SHOULD BE COORDINATED WITH FAA ATO AND MAY REQUIRE AN FAA FLIGHT INSPECTION PRIOR TO RESTARTING THE FACILITY. FLIGHT INSPECTIONS MUST BE COORDINATED AND SCHEDULED WELL IN ADVANCE OF THE INTENDED FACILITY RESTART.

#### PHASING

DURING PERFORMANCE OF THIS PROJECT, THE AIRPORT RUNWAYS, TAXIWAYS, AND AIRCRAFT PARKING APRONS SHALL REMAIN IN USE BY AIRCRAFT TO THE MAXIMUM EXTENT POSSIBLE. THE PROJECT SHALL BE PHASED TO REDUCE OPERATIONAL IMPACTS AT THE AIRPORT. THIS PROJECT SHALL CONTAIN A TOTAL OF 2 PHASES. PHASE 1 SHALL CORRESPOND WITH WORK ON TAXIWAY P, WHILE PHASE 2 WILL CORRESPOND WITH WORK ON TAXIWAY N.

- A. PHASE ELEMENTS IF NECESSARY FOR A GIVEN PHASE, EACH PHASE OF THE CONSTRUCTION SAFETY DRAWINGS SHALL DETAIL THE AREAS CLOSED TO AIRCRAFT OPERATIONS, ESTIMATED DURATION OF CLOSURES, CONSTRUCTION STAGING AREAS, CONSTRUCTION ACCESS AND HAUL ROUTES, LIGHTING AND MARKING CHANGES, AND REQUIRED LEAD TIME FOR NOTICE TO AIR MISSIONS (NOTAMS).
- B. CONSTRUCTION SAFETY DRAWINGS SEE SHEET C-04 THROUGH C-06 FOR CONSTRUCTION SAFETY DRAWINGS, NOTES AND DETAILS.

### 3. AREAS AND OPERATIONS AFFECTED BY THE CONSTRUCTION ACTIVITY

- A. IDENTIFICATION OF AFFECTED AREAS HANGARS 21, 21B, 22, 23 AND 24 MAY BE AFFECTED DUE TO TEMPORARY CLOSURE OF TAXIWAY P. DUE TO
- CONSTRUCTION WITHIN THE TOFA ON TAXIWAY N, TAXIWAY G WILL BE PARTIALLY CLOSED BETWEEN TAXIWAYS F & A

  MITIGATION EFFORTS WORK ON TAXIWAY P SHALL BE NIGHT WORK ONLY. THE CONTRACTOR SHALL COORDINATE WORK AT LEAST 5 CALENDAR
  DAYS PRIOR TO BEGINNING WORK ON TAXIWAY P. THE CLOSURE OF TAXIWAY P SHALL BE LIMITED TO 2200 0600 HOURS, LOCAL TIME. TAXIWAY
  SHALL BE OPEN TO ALL AIRCRAFT TRAFFIC 0600 2200 HOURS. EACH RE-OPENING OF TAXIWAY P SHALL ADHERE TO ALL FAA & BAA REQUIREMENTS.
  AIRCRAFT UTILIZING TAXIWAY N WILL BE DIRECTED THROUGH TAXIWAY F.

### 4. PROTECTION OF NAVIGATION AIDS (NAVAIDS)

THE CONTRACTOR MUST NOT CONDUCT ANY CONSTRUCTION ACTIVITY WITHIN NAVIGATIONAL AID RESTRICTED AREAS WITHOUT PRIOR APPROVAL FROM THE LOCAL FAA AIRWAY FACILITIES SECTOR REPRESENTATIVE. IT IS NOT KNOWN AT THIS TIME IF NAVAIDS WILL BE AFFECTED BY CONSTRUCTION ACTIVITY.

### 5. CONTRACTOR ACCESS

- A. STOCKPILED MATERIALS AND EQUIPMENT STORAGE ARE NOT PERMITTED WITHIN THE RSA AND OFZ. STOCKPILED MATERIALS AND EQUIPMENT STORAGE ARE PERMITTED IN STAGING AREAS ONLY.
- B. VEHICLE AND PEDESTRIAN OPERATIONS CONSTRUCTION SITE PARKING AND EQUIPMENT STORAGE AREAS WILL BE LOCATED AT STAGING AREA LOCATED AT GATE 41. SEE SHEET C-05 FOR STAGING AREA AND HUAL ROUTES. VEHICULAR TRAFFIC SHALL ALWAYS YIELD TO AIRCRAFT TRAFFIC.

### 6. WILDLIFE MANAGEMENT

IF APPLICABLE, THE CONTRACTOR SHALL REVIEW AND ADHERE TO THE CONTENTS OF THE AIRPORT OPERATOR'S WILDLIFE HAZARD MANAGEMENT PLAN. THE CONTRACTOR SHALL ALSO REVIEW AC 150/5200-33, HAZARDOUS WILDLIFE ATTRACTANTS ON OR NEAR AIRPORTS, AND CERTALERT 98-05, GRASSES ATTRACTIVE TO HAZARDOUS WILDLIFE (WWW.FAA.GOV). THE CONTRACTOR SHALL CAREFULLY CONTROL AND CONTINUOUSLY REMOVE WASTE OR LOOSE MATERIALS THAT MIGHT ATTRACT WILDLIFE. CONTRACTOR PERSONNEL MUST BE AWARE OF AND AVOID CONSTRUCTION ACTIVITIES THAT CAN CREATE WILDLIFE HAZARDS ON AIRPORTS. THE CONTRACTOR SHALL MITIGATE THE FOLLOWING ITEMS.

- A. TRASH THE CONTRACTOR SHALL PERFORM TRASH CLEAN-UP ON A DAILY BASIS.
- B. STANDING WATER THE CONTRACTOR SHALL PROVIDE TEMPORARY DRAINAGE DURING CONSTRUCTION TO AVOID STANDING WATER.
- C. TALL GRASS AND SEEDS THE CONTRACTOR SHALL ADHERE TO THE REQUIREMENTS OF SECTION T-901, SEEDING OF THE CONTRACT DOCUMENTS AND SPECIFICATIONS.
- D. POORLY MAINTAINED FENCING AND GATES THE CONTRACTOR SHALL IMMEDIATELY REPORT ANY DAMAGE TO GATES OR FENCES. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRS TO ANY GATES OR FENCES CAUSED BY NEGLIGENCE OF THE CONTRACTOR.
- E. DISRUPTION OF EXISTING WILDLIFE HABITAT THE CONTRACTOR SHALL NOTIFY THE AIRPORT IMMEDIATELY OF ANY WILDLIFE SIGHTINGS.

# 7. FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT

THE CONTRACTOR SHALL ENSURE THAT THE PAVEMENT SURFACES ARE KEPT CLEAN FROM DIRT, MUD, AND OTHER DEBRIS FROM THE CONTRACTOR'S EQUIPMENT. FREQUENT CLEAN UP IN THE VICINITY OF CONTRACTOR'S WORK AREAS IS REQUIRED. SEE AC 150/5210-24, FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT (WWW.FAA.GOV) FOR FURTHER INSTRUCTION.

# 8. HAZARDOUS MATERIALS (HAZMAT) MANAGEMENT

IF ANY CONSTRUCTION VEHICLE OR EQUIPMENT IS OPERATED WITHIN AIRPORT PROPERTY, THE CONTRACTOR MUST BE ADEQUATELY PREPARED TO EXPEDITIOUSLY CONTAIN AND CLEAN-UP SPILLS RESULTING FROM FUEL OR HYDRAULIC FLUID LEAKS. SPECIAL CARE MUST ALSO BE TAKEN WHEN HANDLING OR TRANSPORTING HAZARDOUS MATERIALS ON AIRPORT PROPERTY. SEE AC 150/5320-15, MANAGEMENT OF AIRPORT INDUSTRIAL WASTE (WWW.FAA.GOV), FOR FURTHER INSTRUCTION.

# 9. NOTIFICATION OF CONSTRUCTION ACTIVITIES

- A. LIST OF RESPONSIBLE REPRESENTATIVES A POINT OF CONTACT LIST WILL BE COMPLETED AS PART OF THE SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) AND WILL BE DELIVERED TO ALL PARTIES PRIOR TO CONSTRUCTION.
- B. NOTICES TO AIR MISSIONS (NOTAM) BEFORE BEGINNING ANY CONSTRUCTION ACTIVITY, THE CONTRACTOR MUST, THROUGH THE BIRMINGHAM AIRPORT AUTHORITY, GIVE 72 HOURS NOTICE USING THE NOTAM SYSTEM OF PROPOSED LOCATION, TIME, AND DATE OF COMMENCEMENT OF CONSTRUCTION. UPON COMPLETION OF WORK AND RETURN OF ALL SUCH AREAS TO STANDARD CONDITIONS, THE CONTRACTOR MUST, THROUGH THE BIRMINGHAM AIRPORT AUTHORITY. VERIFY THE CANCELLATION OF ALL NOTICES ISSUED VIA THE NOTAM SYSTEM.
- C. EMERGENCY NOTIFICATION PROCEDURES IN THE EVENT OF AN EMERGENCY, THE CONTRACTOR SHALL NOTIFY AIRPORT OPERATIONS FIRST AND THEN CALL 911.
- D. COORDINATION WITH ARFF PERSONNEL ANY DEACTIVATION OF WATER LINES OR HYDRANTS, REROUTING OF ACCESS ROUTES, OR USE OF HAZARDOUS MATERIALS ON THE AIRFIELD SHALL BE COORDINATED AND APPROVED BY THE AIRPORT'S ARFF PERSONNEL PRIOR TO EXECUTION OF SUCH ACTIVITIES.
- E. NOTIFICATION TO THE FAA THE ENGINEER WILL BE RESPONSIBLE FOR SUBMITTING FAA AIRSPACE STUDIES ASSOCIATED WITH THE PROJECT UTILIZING FAA FORM 7460-1 (LATEST EDITION).

# 10. INSPECTION REQUIREMENTS

- A. DAILY INSPECTIONS THE CONTRACTOR SHALL PERFORM DAILY SAFETY INSPECTIONS TO VERIFY ALL CONSTRUCTION OPERATIONS ARE IN CONFORMANCE WITH THE CONSTRUCTION SAFETY AND PHASING PLAN (CSPP).
- B. FINAL INSPECTIONS PRIOR TO OPENING ANY PORTION OF THE AIRPORT TO TRAFFIC, THE CONTRACTOR, ENGINEER, AND AIRPORT OPERATOR SHALL PERFORM A SAFETY INSPECTION OF THE AREA TO BE OPENED TO TRAFFIC TO VERIFY CONFORMANCE WITH THE CSPP AND FAA STANDARDS.

# 11. UNDERGROUND UTILITIES

EXISTING UTILITY INFORMATION, LIGHTING DUCTS, AND CABLES SHOWN ON THE PLANS CONCERNING THE TYPE, SIZE, AND LOCATION WERE COMPILED BASED ON RECORDS AVAILABLE. THE CONTRACTOR SHALL PROVIDE A UTILITY LOCATOR AND VERIFY THE ACTUAL LOCATION PRIOR TO CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL EXISTING UTILITIES IN PLACE UNLESS NOTED OTHERWISE OR SPECIFIED. THE OWNER AND ENGINEER BEAR NO RESPONSIBILITY FOR UTILITIES NOT SHOWN ON THE PLANS OR NOT IN THE LOCATION SHOWN ON THE PLANS. ANY AND ALL DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. EXCAVATION IMMEDIATELY NEAR UTILITIES SHALL BE DONE BY HAND. UTILITIES INTERFERING WITH CONSTRUCTION SHALL BE RESET OR RELOCATED BY THE UTILITY COMPANY CONCERNED UNLESS NOTED OTHERWISE. CONTRACTOR SHALL CONTACT THE FOLLOWING AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO BEGINNING CONSTRUCTION:

BIRMINGHAM-SHUTTLESWORTH INTERNATIONAL AIRPORT (BHM)

OCEAN BOYD

(205) 599-0562

5900 MESSER AIRPORT HWY

BIRMINGHAM, AL 35212

# 12. PENALTIES

FAILURE OF THE CONTRACTOR (INCLUDING EMPLOYEES) OR ANY OF HIS SUBCONTRACTORS (INCLUDING EMPLOYEES) TO COMPLY WITH BAA ESCORT INSTRUCTIONS, THE AIRPORT SAFETY PLAN, OR ANY OF THE OTHER REQUIREMENTS OF THE AIRPORT WHILE OPERATING ON AIRPORT PROPERTY, SHALL BE SUBJECT TO THE FOLLOWING:

- A. FIRST OFFENSE THE VIOLATOR SHALL RECEIVE A WRITTEN WARNING AND MUST REVISIT THE BIRMINGHAM AIRPORT AUTHORITY DRIVER TRAINING PROGRAM.
- B. SECOND OFFENSE THE VIOLATOR'S DRIVING PRIVILEGES WILL BE SUSPENDED FOR 30 DAYS ALONG WITH THE COMPLETION OF THE BIRMINGHAM AIRPORT AUTHORITY DRIVER TRAINING PROGRAM.
- C. THIRD OFFENSE THE VIOLATOR'S DRIVING PRIVILEGES WILL BE PERMANENTLY REVOKED WITH POSSIBLE FINES OF UP TO \$10,000.

### 13. SPECIAL CONDITIONS

A. CONTRACTOR'S FORCES, INCLUDING SUBCONTRACTORS, MATERIAL DELIVERY PERSONNEL, AND ALL OTHER PERSONS ENTERING THE AOA, SHALL BE ESCORTED BY BIRMINGHAM AIRPORT AUTHORITY PERSONNEL AT ALL TIMES.

### 14. RUNAWAY AND TAXIWAY VISUAL AIDS

- A. GENERAL ALL AIRPORT MARKINGS, LIGHTING, SIGNS, AND VISUAL NAVAIDS THAT ARE IN OPERATION MUST BE CLEAR FROM ALL OBSTRUCTIONS. ALL TEMPORARY MARKINGS, SIGNS, LIGHTS, OR OTHER VISUAL AIDS MUST BE SECURED IN PLACE TO PREVENT DAMAGE OR DISPLACEMENT BY PROP WASH, JET BLAST, WING VORTICES, OR OTHER WIND CURRENTS.
- B. MARKINGS ALL TEMPORARY OR PERMANENT RUNWAY AND TAXIWAY VISUAL AIDS SHALL CONFORM TO THE REQUIREMENTS OF THE MOST RECENT EDITION OF FAA AC 150/5340-1 (WWW.FAA.GOV). MARKINGS FOR THIS PROJECT INCLUDE THE FOLLOWING:
- TEMPORARILY CLOSED TAXIWAYS THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, INSTALLING, AND MAINTAINING LOW PROFILE AIRCRAFT BARRICADES AT THE LOCATIONS SHOWN ON THE CSPP. BARRICADES SHALL BE INSTALLED OUTSIDE ALL ACTIVE RUNWAY AND

TAXIWAY SAFETY AREAS. SEE DETAILS ON CONSTRUCTION SAFETY DRAWINGS FOR LOW-PROFILE AIRCRAFT BARRICADE DETAILS.

- C. LIGHTING AND VISUAL NAVAIDS ALL TEMPORARY LIGHTING FOR RUNWAY AND TAXIWAY SYSTEMS SHALL CONFORM TO THE REQUIREMENTS OF THE MOST RECENT EDITION OF FAA AC 150/5340-30 AND 150/5345-50 (WWW.FAA.GOV). THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISCONNECTING ISOLATION TRANSFORMERS ASSOCIATED WITH ANY RUNWAY OR TAXIWAY LIGHT FIXTURES THAT ARE BEING DISCONNECTED. AIRFIELD LIGHTING WITHIN LIMITS OF WORK CLOSED AIR TRAFFIC SHALL BE COVERED, UNLESS OTHERWISE INDICATED. SEE GC6.00 AND GC6.01 FOR DETAILS.
- D. SIGNS THE CONTRACTOR SHALL INSTALL ALL SIGNS IN ACCORDANCE WITH THE MOST RECENT EDITION OF FAA AC 150/5345-44 AND 150/5340-18.

  ANY SIGN THAT IS NOT PERFORMING ITS NORMAL FUNCTION MUST BE COVERED OR REMOVED TO PREVENT MISLEADING PILOTS.

### 15 MARKING AND SIGNS FOR ACCESS ROUTES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING AND INSTALLING ALL NECESSARY MARKINGS AND SIGNAGE FOR ALL ACCESS ROUTES TO AND FROM THE SITE TO BE USED BY CONTRACTOR PERSONNEL, SUBCONTRACTOR PERSONNEL, OR DELIVERY OPERATIONS. ALL SIGNAGE IN THE AIR OPERATIONS AREA SHALL BE FRANGIBLY MOUNTED.

### 16. HAZARD MARKING AND LIGHTING

- A. PURPOSE HAZARD MARKING AND LIGHTING PREVENTS PILOTS FROM ENTERING AREAS CLOSED TO AIRCRAFT AND PREVENTS CONTRACTOR PERSONNEL FROM ENTERING AREAS OPEN TO AIRCRAFT.
- B. EQUIPMENT THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN LOW-PROFILE BARRICADES IN HAZARDOUS AREAS INSIDE MOVEMENT AREAS. BARRICADES SHALL RESTRICT ACCESS AND MAKE HAZARDS OBVIOUS TO AIRCRAFT, PERSONNEL, AND VEHICLES. DURING PERIODS OF LOW VISIBILITY AND AT NIGHT, BARRICADES SHALL BE EQUIPPED WITH RED FLASHING OR STEADY BURNING LIGHTS. THE SPACING OF BARRICADES SHALL BE SUCH THAT A BREACH IS PHYSICALLY PREVENTED BARRING A DELIBERATE ACT. IF BARRICADES ARE INTENDED TO PREVENT PEDESTRIANS, THEN THEY SHALL BE LINKED. SEE DETAILS ON CONSTRUCTION SAFETY DRAWINGS FOR LOW-PROFILE AIRCRAFT BARRICADE DETAIL.

### 17. WORK ZONE LIGHTING FOR NIGHTTIME CONSTRUCTION

ALL WORK CONDUCTED AT NIGHT SHALL BE ACCOMPANIED BY ADEQUATE LIGHT FACILITIES TO COMPLETE THE WORK. ALL LIGHT FACILITIES SHALL BE AIMED OR SHIELDED AS NECESSARY TO AVOID IMPACTING AIRCRAFT OR ATCT OPERATIONS. THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT A LIGHTING PLAN SHOWING THE LOCATION AND AIMING DIRECTION OF ALL LIGHT FACILITIES PRIOR TO THE COMPLETION OF ANY NIGHT WORK. CONTRACTOR SHALL COORDINATE WITH THE BIRMINGHAM AIRPORT AUTHORITY OPERATIONS DEPARTMENT 72 HOURS PRIOR TO WORK DURING HOURS OF DARKNESS.

### 18. PROTECTION OF SAFETY AREAS, OBJECT FREE AREAS, OBSTACLE FREE ZONES, AND APPROACH/DEPARTURE SURFACES

- A. TAXIWAY SAFETY AREAS (TSA) NO WORK SHALL BE PERMITTED WITHIN AN OPEN TSA. IF REQUIRED, ADJUSTMENTS TO THE TAXIWAY TSA DIMENSIONS THROUGH RESTRICTED OPERATIONS SHALL BE COORDINATED WITH THE FAA AIRPORTS REGIONAL OR DISTRICT OFFICE PRIOR TO CONSTRUCTION. ALL OPEN TRENCHES OR EXCAVATIONS WITHIN THE LIMITS OF THE TSA SHALL BE BACK FILLED OR COVERED PRIOR TO OPENING THE TAXIWAY TO OPERATIONS. IN ADDITION, EROSION CONTROL MEASURES SHALL BE PROVIDED IN THE TSA TO PREVENT RUTS, HUMPS, OR DEPRESSIONS INSIDE THE LIMITS OF THE TSA.
- B. TAXIWAY OBJECT FREE AREAS (TOFA) NO CONSTRUCTION SHALL BE PERMITTED INSIDE AN OPEN TOFA. CONSTRUCTION MAY BE PERMITTED INSIDE THE TOFA IF APPROPRIATE NOTAMS ARE ISSUED. CONSTRUCTION MAY ALSO BE PERMITTED INSIDE THE TOFA IF A FIVE FOOT WING TIP CLEARANCE IS MAINTAINED FOR ALL CONSTRUCTION EQUIPMENT AND VEHICLES. IN THIS SCENARIO, FLAGGERS AND WING WALKERS MUST BE USED TO DIRECT TRAFFIC THROUGH THE CONSTRUCTION SITE.

# 19. OTHER LIMITATIONS ON CONSTRUCTION

- A. PROHIBITIONS THE USE OF TALL EQUIPMENT (I.E. CRANES, CONCRETE PUMPS) SHALL NOT BE PERMITTED UNLESS APPROVED BY THE AIRPORT AND THE ENGINEER. OPEN FLAME WELDING AND TORCH CUTTING OPERATIONS ARE NOT PERMITTED UNLESS ADEQUATE FIRE SAFETY PRECAUTIONS ARE PROVIDED AND THESE OPERATIONS ARE AUTHORIZED BY THE AIRPORT OPERATOR AND THE ENGINEER. ELECTRICAL BLASTING CAPS SHALL NOT BE PERMITTED WITHIN 1,000-FT OF THE AIRPORT PROPERTY. FLARE POTS ARE NOT PERMITTED WITHIN THE AIR OPERATIONS AREA.
- RESTRICTIONS THE CONTRACTOR SHALL BE RESTRICTED TO HIS DESIGNATED STAGING AND WORK AREA. ALL ACCESS TO THE CONSTRUCTION WORK AREA WILL BE THROUGH AUTHORIZED ACCESS POINTS AND DESIGNATED HAUL ROUTES. WHEN IT IS NECESSARY FOR THE CONTRACTOR TO WORK OUTSIDE OF THE DESIGNATED CONSTRUCTION AREA, AN ESCORT WILL BE REQUIRED. ALL MATERIAL OR EQUIPMENT ENTERING OR LEAVING THE CONSTRUCTION WORK AREA SHALL BE ESCORTED. THE CONTRACTOR'S VEHICLES WILL FOLLOW AND OBEY THE DIRECTIONS OF THE ESCORT AT ALL TIMES. LARGE QUANTITIES OF HEAVY HAULING WILL NEED TO BE COORDINATED WITH THE AIRPORT. IN SUCH INSTANCES, AND AT THE AIRPORTS DISCRETION. DESIGNATED HAUL ROUTES MAY BE ESTABLISHED SO AS NOT TO REQUIRE NUMEROUS INDIVIDUAL ESCORTS.



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BIRMINGHAM-SHUTTLESWORTH
INTERNATIONAL AIRPORT

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MENTS

Y P&N AIR

I IMPROV

PROJECT NO: AIP122
PROJECT NO: AF057

VEMENT
FAA PR

SUBMITTAL:
BID DOCUMENTS

NO. DATE: DESCRIPTION:

1 05/07/24 ADDENDUM #2

PROJECT NUMBER: 230107
ISSUE DATE: 04/12/24
DRAWN BY: TJR
CHECKED BY: MOK

SCALE:

200' 100' 0 100' 200'

SCALE IN FEET

**NOTES** 

(1 IN = 200 FT)

SHEET TITLE:

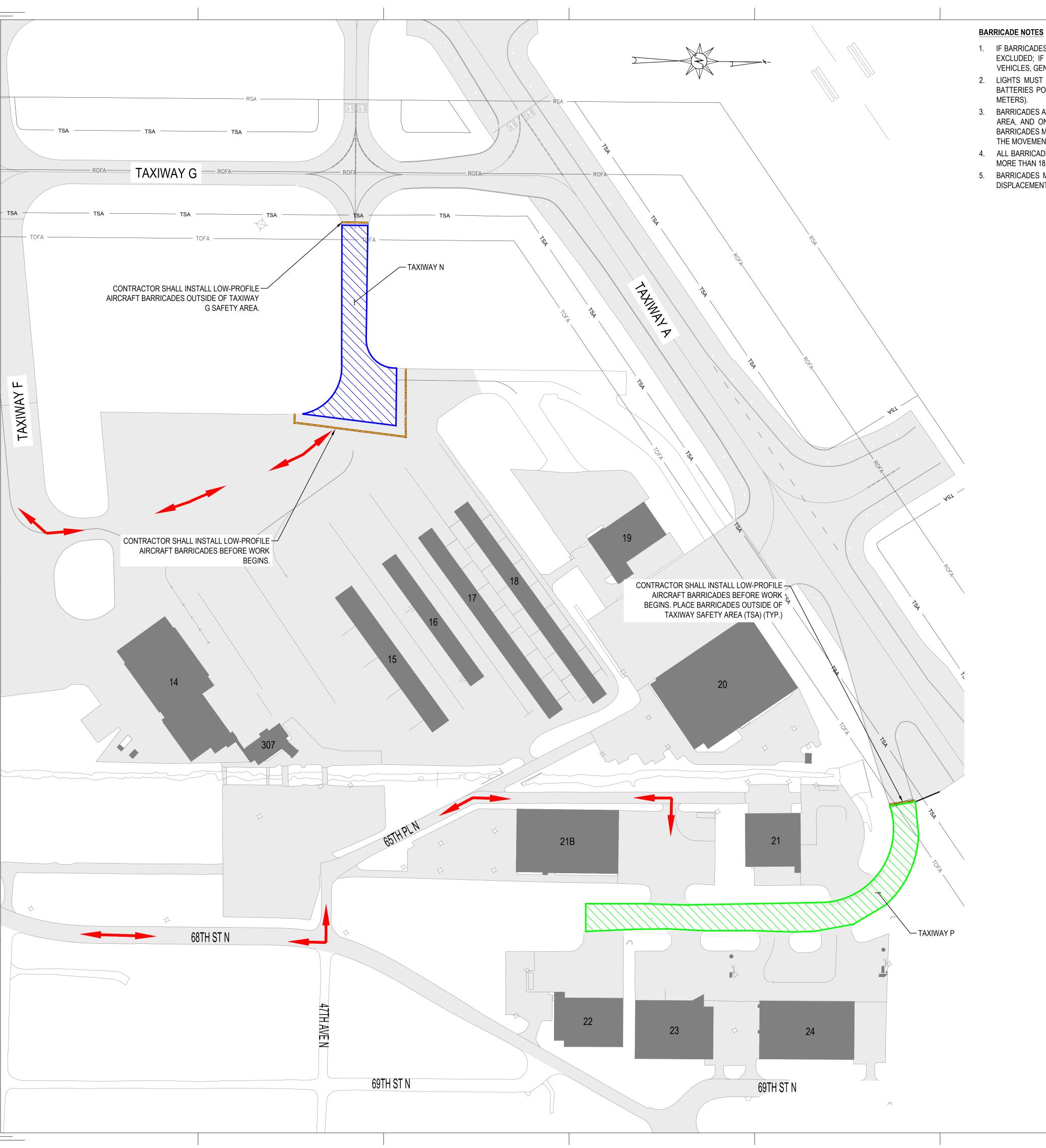
CONSTRUCTION

SAFETY &

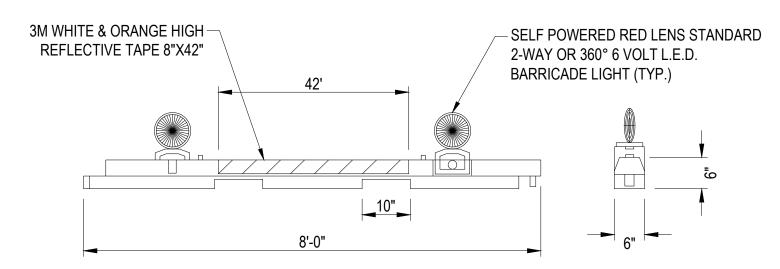
PHASING PLAN

SHEET NUMBER:

C-04



- 1. IF BARRICADES ARE INTENDED TO EXCLUDE AIRCRAFT, GAPS BETWEEN BARRICADES MUST BE SMALLER THAN THE WINGSPAN OF THE SMALLEST AIRCRAFT TO BE EXCLUDED; IF BARRICADES ARE INTENDED TO EXCLUDE VEHICLES, GAPS BETWEEN BARRICADES MUST BE SMALLER THAN THE WIDTH OF THE EXCLUDED VEHICLES, GENERALLY 4 FEET (1.2 METERS).
- 2. LIGHTS MUST BE RED, EITHER STEADY BURNING OR FLASHING, AND MUST MEET THE LUMINANCE REQUIREMENTS OF THE STATE HIGHWAY DEPARTMENT BATTERIES POWERING LIGHTS WILL LAST LONGER IF LIGHTS FLASH, LIGHTS MUST BE MOUNTED ON BARRICADES AND SPACED AT NO MORE THAN 10 FEET (3
- 3. BARRICADES ARE NOT PERMITTED IN ANY ACTIVE SAFETY AREA OR ON THE RUNWAY SIDE OF A RUNWAY HOLD LINE. WITHIN A RUNWAY OR TAXIWAY OBJECT FREE AREA, AND ON APRONS, USE ORANGE TRAFFIC CONES, FLASHING OR STEADY BURNING RED LIGHTS AS NOTED ABOVE, HIGHLY REFLECTIVE COLLAPSIBLE BARRICADES MARKED WITH DIAGONAL, ALTERNATING ORANGE AND WHITE STRIPES; AND/OR SIGNS TO SEPARATE ALL CONSTRUCTION/MAINTENANCE AREAS FROM
- 4. ALL BARRICADES ADJACENT TO ANY OPEN RUNWAY OR TAXIWAY / TAXILANE SAFETY AREA, OR APRON MUST BE AS LOW AS POSSIBLE TO THE GROUND, AND NO MORE THAN 18 INCHES HIGH, EXCLUSIVE OF SUPPLEMENTARY LIGHTS AND FLAGS.
- 5. BARRICADES MUST BE OF LOW MASS; EASILY COLLAPSIBLE UPON CONTACT WITH AN AIRCRAFT OR ANY OF ITS COMPONENTS; AND WEIGHTED TO PREVENT DISPLACEMENT FROM PROP WASH, JET BLAST, WING VORTEX, AND OTHER SURFACE WIND CURRENTS.



### AIRFIELD BARRICADE DETAIL NOT TO SCALE

- 1. BARRICADES AND POSITION OF BARRICADES SHALL MEET THE REQUIREMENTS OF AC 150/5370-2, LATEST EDITION.
- 2. BARRICADES ACROSS RUNWAYS SHALL BE INTERLOCKED

**DETAIL NOTES** 

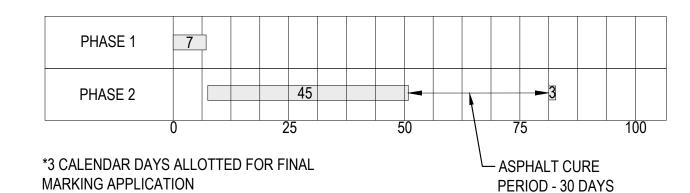
- 3. THERE SHALL BE NO DIRECT PAYMENT FOR FURNISHING, INSTALLING, MAINTAINING OR REMOVAL OF BARRICADES.
- 4. BARRICADES SHALL INCLUDE FLASHING LIGHTS. LIGHTS SHALL BE BATTERY OPERATED, RED IN COLOR AND OPERATIONAL DURING LOW VISIBILITY
- 5. ALL BARRICADES SHALL DELINEATE THE AREA TO BE PROTECTED AND BARRICADE LINE SHALL EXTEND TO 10' OFF THE EDGE OF EITHER SIDE OF ANY PAVEMENT
- 6. UNLESS PREVIOUSLY APPROVED BY THE ENGINEER, ALL BARRICADES SHALL BE WATER FILLED TO PREVENT DISPLACEMENT DURING STRONG WINDS OR POTENTIAL AIRCRAFT JET BLAST.

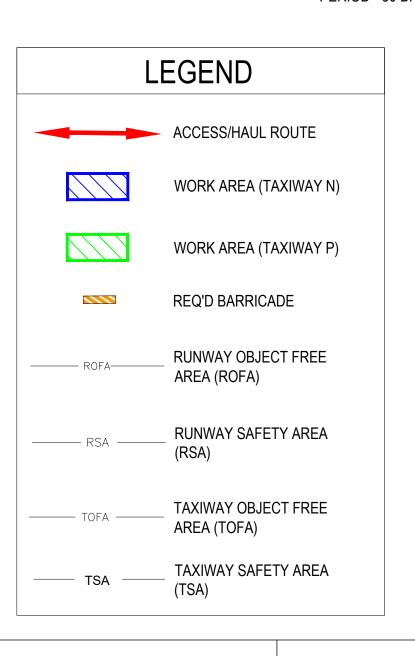
PHASE 1 SHALL BE 7 CALENDAR DAYS. CONTRACTOR SHALL PROTECT EXISTING TAWIWAY MARKINGS, CRACK SEAL AND SEALCOAT TAXIWAY P PAVEMENT AND PREPARE EXISTING MARKINGS FOR REMARKING WITHIN THE DESIGNATED WORK AREA IN ACCORDANCE WITH PLANS & SPECIFICATIONS. THE CONTRACTOR IS REQUIRED TO EXERCISE CARE TO NOT GET SEAL COAT TREATMENT ON ADJACENT LIGHTING, EXPOSED DUCTS, CONCRETE FOUNDATIONS, AND EXISTING MARKINGS. THE COST OF PROTECTING ITEMS AGAINST SEAL COAT OVERSPRAY SHALL BE CONSIDERED INCIDENTAL TO THE PAY

ITEM P-608-R-8.1: ASPHALT SURFACE TREATMENT.

PHASE 2 SHALL BE 48 CALENDAR DAYS. CONTRACTOR SHALL PERFORM DEMOLITION, GRADING, PAVEMENT RECONSTRUCTION, AND APPLY PERMANENT TAXIWAY STRIPING/MARKINGS WITHIN THE DESIGNATED WORK AREA IN ACCORDANCE WITH PLANS & SPECIFICATIONS.

# CONTRACT TIME







2210 2nd Avenue North Birmingham, AL 35203 Tel: (205) 358-7256 Fax: (205) 358-7258

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SUBMITTAL: **BID DOCUMENTS** 

NO.	DATE:	D	ESCRIPT	ΓΙΟN:
1	05/07/24	A	DDENDU	JM #2
ROJE	CT NUMB	ER:		230107
SSUE	DATE:			04/12/24
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SHEET TITLE: CONSTRUCTION SAFETY & PHASING PLAN

SHEET NUMBER: