

ADDENDUM No. 1
Relocate Taxiway A – Phase 2 Construction
May 17, 2024

This addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated May 6, 2024. Acknowledge receipt of this addendum in the space provided on the bid form, failure to do so may subject the Bidder to disqualification.

General Items

- **Plan Holders List**
The plan holders list can be found on the Rapids Reproductions Plan Room:
<https://www.rapidsreproplanroom.com/jobs/2287/plan-holders/foth-23d02206-dubuque-regional-airport-relocate-taxiway-a-phase-2>
- **Pre-Bid Meeting Minutes**
The Pre-Bid meeting minutes, along with attendees list, is attached to this Addendum. No questions were asked during the pre-bid meeting.
- **Contractor Questions**
Questions related to the bidding documents were asked either through e-mail, telephone correspondence, or during the Pre-Bid meeting. Answers to questions that warrant additional clarification have been included within the attached question and answer log. No contractor questions requiring additional clarification have been received at the time of Addendum 1.
- **Estimate Reference Notes**
The current estimate reference notes on sheets C.03 and C.04 are being added in their entirety to this addendum in letter format to improve the ease of reading and reviewing. A revision to the bid item 12 and bid item 15 estimate reference note is described further into the addendum and is included with this reprinted version of the estimate reference notes.

Specification

Section 1 – Notices, Instructions to Bidders

- None

Section 2 - Bid Forms

- **Proposal Form**
 - REVISE Item No. 12 *Unclassified Excavation*. quantity to 24,275 CY.
 - Pages 1 - 4 of the proposal form have been revised and included as an attachment to Addendum 1. Contractors shall replace these first four pages of the original proposal with the four sheets modified by this addendum. No other changes have been made to the proposal form or proposal attachments.

Section 3 – Contract Forms

- None

Section 4 – General Provisions

- None

Section 5 – Supplementary Provisions

- None

Section 6 – General Construction Items

- None

- None

Section 8 – Supplementary Specifications

- None

Appendices

- None

Plans

- **Plan Sheet C.01 – Estimated Project Quantities**
 - **REVISE** the quantity for Bid Item 12 – Unclassified Excavation to 24,275 CY.
 - Plan sheet is not being reissued.
- **Plan Sheet C.03 – Estimate Reference Notes**
 - **REVISE** the estimate reference note for Bid Item 12 – Unclassified Excavation. *An additional 2,500 CY of unclassified excavation has been estimated for undercutting of existing unsuitable material beneath the proposed taxiway pavement section. This additional estimated quantity is unbalanced and shall be adjusted as encountered during construction.*
 - **REVISE** The estimate reference note for Bid Item 15 – Subbase Course, 8 Inch, letter B to *Material available from project pavement removals shall not be utilized to produce P-154.*
 - Plan sheet is not being reissued. However, this revision is current in the re-printed estimate reference notes attached to this addendum.
- **Plan Sheet J.05 – Construction Safety and Phasing Plan**
 - **REVISE** referenced note 18 to “Install FOUR evenly spaced pavement mounted...” to reflect the additional pavement mounted retroreflector shown on plan sheet K.01.
 - Plan sheet is not being reissued.
- **Plan Sheet K.01 – Airfield Pavement Marking Plan**
 - **ADD** an additional pavement mounted retroreflective marker. Four temporary retroreflective markers are now required.
 - **REVISE** callout stating that the existing 6” taxiway centerline marking shall be painted over with gray paint.
- **Plan Sheet L.04 – Geometrics, Staking, and Jointing**
 - **REVISE** joint type callout from A-1 to A. The joint abutting existing Taxiway A near the t-hangars shall be a Type “A” – Thickened Edge Isolation Joint.

Plan/Specification Attachments

- **Specifications:** Proposal Form (Pages 1 thru 4 only).
- **Drawings:** Estimate Reference Notes, issued in letter size format (which includes the revisions to sheet C.03), sheet K.01, and sheet L.04.

END OF ADDENDUM

Meeting Minutes have been added to this document in red colored text.



Relocate Taxiway A – Phase 2 Construction

FAA AIP No. 3-19-0028-079

Pre-Bid Meeting

Dubuque Regional Airport
May 13, 2024



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Welcome and Introductions

- ◆ Todd Dalsing – Airport Director
- ◆ Dan Klaas – Assistant Airport Director
- ◆ Cheryl Sheldon – Airport Accountant
- ◆ Ryan Turner – Foth Project Civil Engineer
- ◆ Eric Scott – Foth Lead Civil Engineer
- ◆ Matthew Huinker – Foth Civil Engineer
 - Foth RPR during construction
- ◆ Cortney Graber – Foth Construction Manager
 - Technical advisor during construction.

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Agenda

- ◆ General Project Overview
- ◆ General Bidding, Bidding Schedule, and Proposal Requirements
- ◆ Project Scope and Design Elements
- ◆ Construction Safety and Phasing Plan
 - Phasing Plan
 - Airport safety and Security Requirements
- ◆ Construction Schedule
- ◆ Bidding Schedule, Proposal Requirements, and Addendums
- ◆ Question and Answer

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General Project Overview



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Taxiway A Program Overview

- Phase 2 of Multiphase Taxiway Relocation Program



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This project scope reconstructs/relocates the light blue area shown on the exhibit.

FAA funded project. Therefore federal contract provisions apply as indicated in the project manual.

General Project Overview

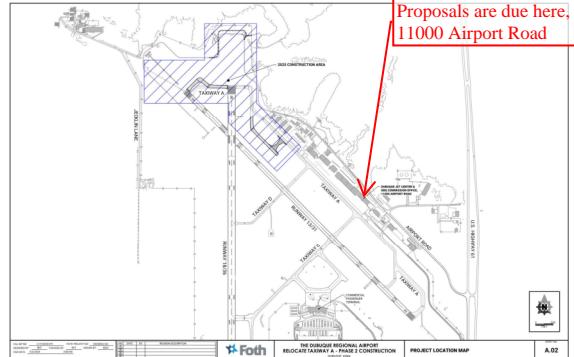
- April 2025 – October 2025 Construction Period
- Project is contingent upon receipt of FAA AIP Grant Funding.
 - Anticipated August 2024
- FAA Standard Construction Specifications
- Civil and Electrical Demolition – Approx. 8,000 SY of Existing Taxiway Pavement Removal
- Approx. 20,000 CY of Unclassified Excavation
- Approx. 15,000 SY of P-501 PCC
- Approx. 17,000 LF of Compression Seals
- Approx. 1,700 LF of Storm Sewer
- Taxiway Lighting and Signage
- Pavement Markings and Traffic Control

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General Project Overview

Proposals are due here, second floor of 11000 Airport Road



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General Bidding

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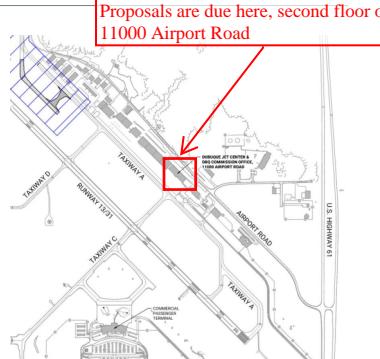
8

Modified to Monday, May 20 at 12:00 CDT.

Bidding Schedule

- Pre-Bid Meeting – Monday, May 13 at 10:00 am
- Last Day for Questions – Friday, May 17 at 5:00 pm
- Bids Due – Thursday, May 23, prior to 10:00 am
 - Office of the Airport Director – 11000 Airport Road
- Notice of Public Hearing – June 4, 2024, Airport Commission Meeting
- Owner may hold the awarded bid up to 100 calendar days from date of receipt of bids before executing the contract.

Proposals are due here, second floor of 11000 Airport Road



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Award of contract is contingent on receipt of FAA AIP grant.

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Bidding Requirements

- All included in Specification Manual*
- Standard Form of Bid (unit price contract) – pg 27
- Acknowledge Addendum – pg 32
- Signed Proposal – pg 34
- Identity of Subcontractors – pg 37
- DBE Utilization Statement (1.50% goal) – pg 39
- DBE Letter of Intent (one for each DBE firm) – pg 41
 - Good Faith Efforts must be submitted if not able to achieve the project goal.*
- Statement of DBE Commitments – pg 43
- Buy American Certification – pg 45
 - Waiver requests shall be submitted after the bid if not able to meet 100%.
- Bid Bond (Separate Envelope) – pg 47

See Instructions to Bidders for additional guidance.

* Page Numbers Refer to PDF of the Manual | Page 10 | Foth

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DBE Information

- Only DBE's currently on the Iowa DOT DBE Directory qualify
- From Supplementary Provision A – Federal Provisions – pg 148
- Good Faith Efforts if not meeting DBE goal of 1.50%
 - Offering assistance in areas of interpreting plans and preparing proposals;
 - Response to requests from any small businesses submitting quotes, concerning quantities, overtime, project scheduling, etc.;
 - Making portions of the work available for DBE subcontracting;
 - Evidence of negotiations with DBE firms;
 - DBE quotes obtained and non-DBE quotes used;
 - Reason agreements were not reached;
 - Follow-up after initial solicitations;
 - Efforts to assist in obtaining bonding, lines of credit, or insurance; and
 - Efforts to assist in obtaining equipment, supplies, and materials.
 - Pro forma mailings to DBEs requesting bids are not alone sufficient to satisfy good faith efforts.**
- Counting DBE Participation
 - DBE Manufacturer, Trucker, Contractor = 100%
 - DBE Supplier = 60%

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GCs should be contacting DBEs ASAP if they have not already.

Davis Bacon Wage Rates

- Required for all contractors / subcontractors working on-site.
- Page 157 of project manual

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13 Bidder must certify that it can comply with the project Buy American Requirements. If the selected responsive bidder cannot comply at 100%, they shall submit their formal waiver request to the FAA within 15 calendar days.



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Design Components – Plans and Spec.

- ◆ FAA standard specifications.
- ◆ Approx. 20,000 CY of Unclassified Excavation
 - ◆ Excess Material Installed as Embankment at location TBD but within 1.5-mile haul.
- ◆ Rock Excavation Anticipated
- ◆ Pavement Section – 13.5" P-501, 6" P-307, 6" P-219, 8" P-154.
 - ◆ Crush P-219 using project pavement removals. Extra uncrushed PCC and asphalt millings become Airport property. See sheet C.02 for material available calculations and notes.
 - ◆ P-154 shall not be produced with Airport pavement removal.
 - ◆ No P-307 at the Taxiway Connector near the T-hangars.

Design Components – Plans and Spec. (cont.)

- ◆ Electrical Scope – FAA L-series specification. (Taxiway Edge Lights and Signage)
- ◆ Storm Sewer and Subdrain Installation
- ◆ Temporary and Final Stabilization
- ◆ Contractor Quality Control Program – C-100 specification
 - ◆ Pay Item – Quality is more than test results.
 - ◆ QC/QA workshop prior to construction. Separate from preconstruction meeting.
 - ◆ Terracon will be owners quality assurance representation

Taxiway Lighted signs shall be curved face matching the existing airport signs.

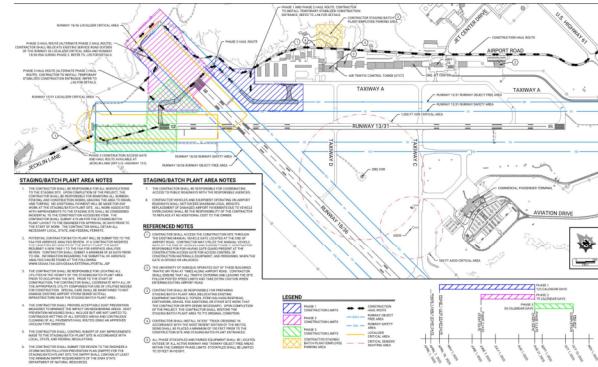
Construction Phasing



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General Overview (Plan Sheet J.03)



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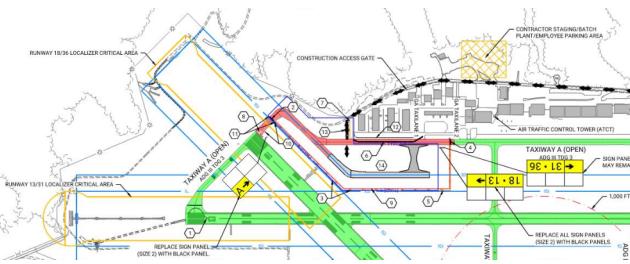
Phase 1 Construction



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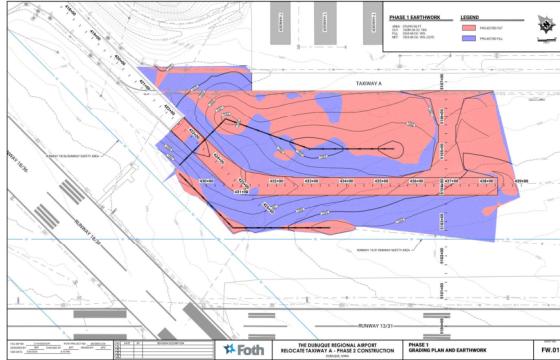
Phase 1 (Plan Sheet J.04)



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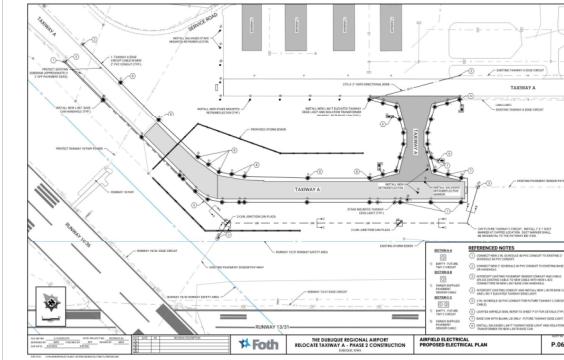
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Phase 1 Grading & Storm Sewer



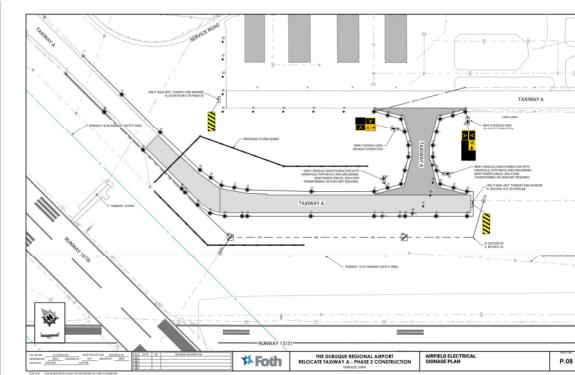
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Phase 1 Taxiway Lighting



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Phase 1 Taxiway Signage



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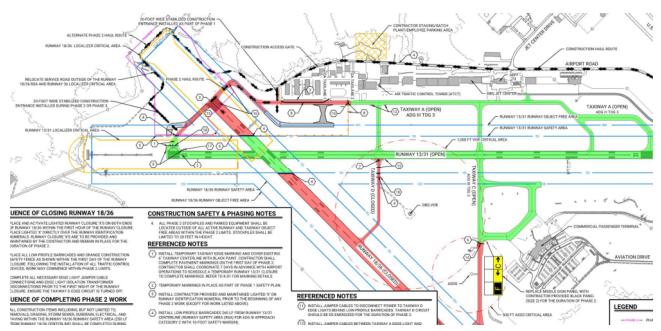
Phase 2 Construction



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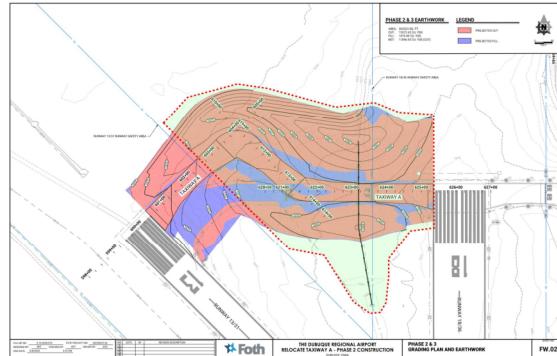
24

Phase 2 (Plan Sheet J.05)



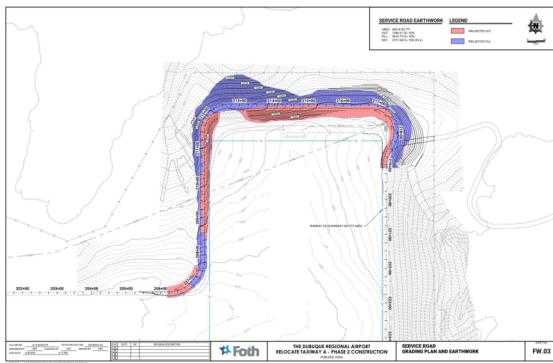
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Phase 2 Grading & Storm Sewer

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Phase 2 Service Road

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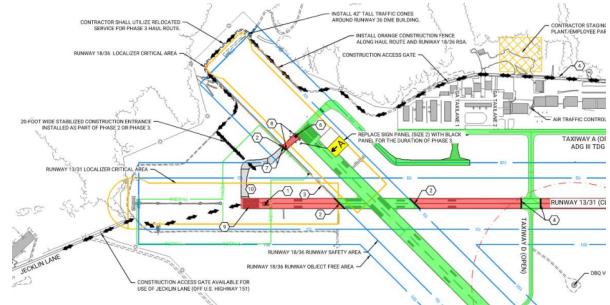
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Phase 3 Construction


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Phase 3 (Plan Sheet J.06)

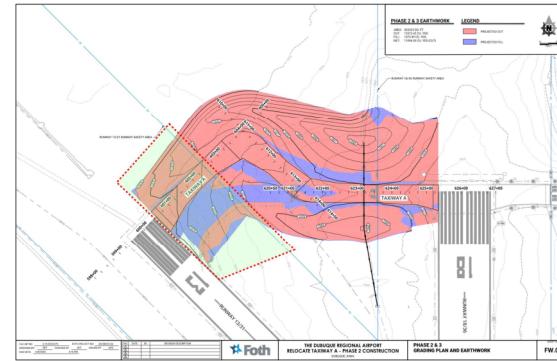


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Phase 3 Grading

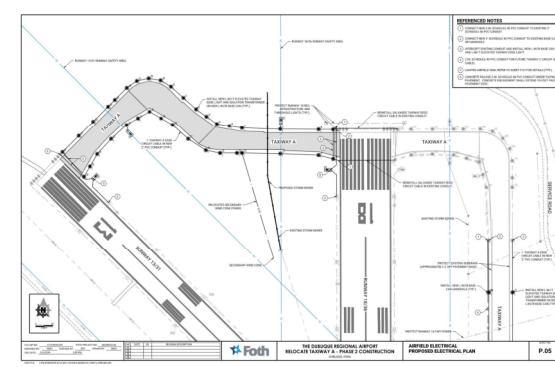


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Phase 2 and 3 Taxiway Lighting

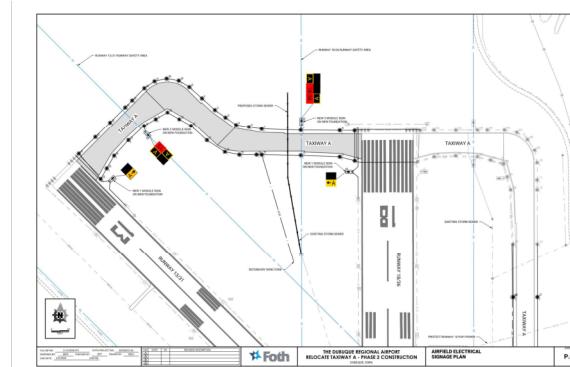


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Phase 2 and 3 Taxiway Signage

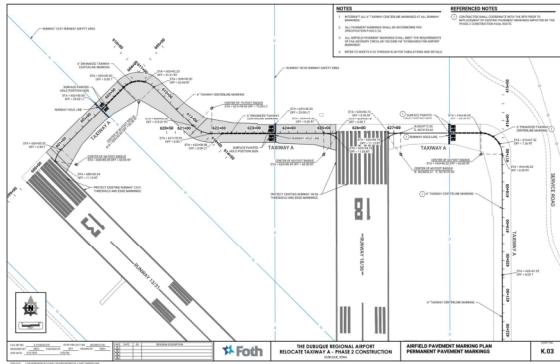


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Phase 2 and 3 Markings



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Construction Schedule

- ◆ Award of Contract anticipated end of August 2024
- ◆ Calendar Day and Completion Date Contract
 - Phase 1 – Late start date of April 18, 2025. 125 Calendar Days
 - Phase 2 – Late start date of June 7, 2025. 75 calendar day completion.
 - Phase 3 – Begins following completion of Phases 1 & 2. 50 calendar day completion.
 - Total Project completion – October 10, 2025
 - Liquidated Damages:

Schedule	Liquidated Damages Cost	Allowed Construction Time
Phase 1	\$1,000 per Calendar Day	125 Calendar Days
Phase 2	\$1,000 per Calendar Day	75 Calendar Days
Phase 3	\$1,000 per Calendar Day	50 Calendar Days
Total Project Completion	\$500 per Calendar Day	October 10, 2025

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Construction Schedule

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Airport Safety and Security Considerations

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Airport Safety and Security

- ◆ Contractor will be required to Obtain Badges by completing Security Threat Assessment.
- ◆ Contractor shall provide all traffic control as shown on the plans including 'Lighted X's'.
- ◆ Gate guards required during hauling operations.
- ◆ DBQ Operations Staff to escort contractor into the Secured AOA and Open Pavement on the Airfield during placement of traffic control and closure of pavement. Once traffic control is in place and taxiway is closed the Contractor will be allowed unescorted access within the work area.
- ◆ Airport Security Requirements – See Attachment 4 of the Supplementary Provisions.
- ◆ Construction Safety and Phasing Plan –See Attachment 3 of the Supplementary Provisions.
- ◆ Contractor to Submit Safety Plan Compliance Document

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Final Bidding Requirements & Addendum 1

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Bidding Reiterated

- ◆ Contact DBEs! Read the Instructions to Bidders!
- ◆ Bids Due – Thursday, May 23 prior to 10:00 am
 - Office of the Airport Director – 11000 Airport Road
- ◆ Owner may hold the awarded bid up to 100 calendar days from date of receipt of bids before executing the contract.
- ◆ Engineer's Estimate \$5,400,000 and \$5,800,000

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Addendum 1 & Final Thoughts

- ◆ Anticipated Wednesday May 15
 - ◆ Issued through Rapids Reproductions
 - ◆ Pre-bid meeting minutes.
 - ◆ Contractor Questions to Date
 - ◆ Will attach the estimate reference notes on sheet C.03 and C.04 in Letter size to make it easier to read.
- ◆ Rapids Reproductions for official Bid Documents and current Plan Holders List!!

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Questions & Answers



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Attendee List

Name	Email
Turner, Ryan P	Ryan.Turner@foth.com
Dan Klaas	dklaas@cityofdubuque.org
Royce Kies (Unverified)	Flynn Company
Lucas Petersen	LPetersen@fischerinc.com
Ben Fochs	ben.fochs@integrityge.com
Erin Rogers	Tschiggfrie Excavating
Charles Arnold	cjarnold@pirctobin.com
Ryan Harter	rjharter@pirctobin.com
JACK (Unverified)	Biechler Electric
Drumm, Jon	jdrumm@tricityelectric.com
Ryan Kipp	RKIPP@cjmoyna.com
Scott Borgerding (Unverified)	Midwest Concrete Inc.
+15635423574 (Unverified)	Portzen Construction
Nick Z Steger Const. Inc. (Unverified)	Steger Construction
Cheryl Sheldon	CSheldon@cityofdubuque.org
Todd Dalsing	tdalsing@cityofdubuque.org
Tammie Nelson - MULTI ELECTRIC	Tammie.Nelson@multielectric.com
+15632139509 (Unverified)	
Bob (Guest) (Unverified)	Gansen Excavation
Huinker, Matthew	Matthew.Huinker@foth.com

PROPOSAL FORM
 Addendum 1
AIP PROJECT: 3-19-0028-079

TO: The Dubuque Regional Airport Commission
 11000 Airport Road
 Dubuque, Iowa 52003

The undersigned, in compliance with the request for bids for construction of the following Project:

Relocate Taxiway A - Phase 2 Construction

hereby proposes to furnish all labor, permits, material, machinery, tools, supplies and equipment to faithfully perform all work required for construction of the Project in accordance with the project manual, project drawings and issued Addenda within the specified time of performance for the following prices:

ITEM NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	AIRFIELD PAVEMENT REMOVAL, VARIABLE DEPTH HMA (2-12 INCH) ON VARIABLE DEPTH PCC (8-9.5 INCH)	SY	6,000		
2	AIRFIELD PAVEMENT REMOVAL, 2.5 INCH HMA ON 9 INCH PCC	SY	1,325		
3	AIRFIELD PAVEMENT REMOVAL, 13.5 INCH PCC	SY	575		
4	REMOVE AND SALVAGE GRAVEL/HMA MILLING SERVICE ROAD (APPROXIMATELY 5 INCH THICK)	SY	2,475		
5	REMOVE HMA SERVICE ROAD (UNKNOWN DEPTH)	SY	140		
6	FULL DEPTH SAW CUTTING	LF	875		
7	DRAINAGE PIPE REMOVAL, LESS THAN OR EQUAL TO 18 INCH DIA.	LF	2,125		
8	DRAINAGE STRUCTURE REMOVAL	EA	9		
9	SALVAGE AND REINSTALL EROSION STONE	SY	120		
10	AIRFIELD PAVEMENT MARKING REMOVAL	SF	3,150		
11	CLEARING AND GRUBBING	ACRE	2		
12	UNCLASSIFIED EXCAVATION	CY	24,275		
13	8 INCH GRAVEL/HMA MILLING SERVICE ROAD INSTALLATION	SY	1,975		
14	GEOGRID	SY	15,975		
15	SUBBASE COURSE, 8 INCH	SY	15,975		
16	RECYCLED CONCRETE AGGREGATE BASE COURSE, 6 INCH	SY	15,975		
17	CEMENT TREATED DRAINABLE BASE COURSE (CTPB), 6 INCH	SY	13,055		
18	PCC PAVEMENT, 13.5 INCH	SY	14,755		

ITEM NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
19	COMPRESSION JOINT SEALS	LF	17,385		
20	JOINT SEALING FILLER	LF	1,040		
21	PAVEMENT MARKINGS - YELLOW/WHITE AIRFIELD PAINT, TYPE I BEADS	SF	225		
22	PAVEMENT MARKINGS - YELLOW/WHITE AIRFLIED PAINT, TYPE III BEADS	SF	3,000		
23	PAVEMENT MARKINGS - RED AIRFIELD PAINT, TYPE I BEADS	SF	725		
24	PAVEMENT MARKINGS - BLACK OUTLINES AIRFIELD PAINT, NO BEADS	SF	5,400		
25	PAVEMENT MARKINGS - TEMPORARY YELLOW AIRFIELD PAINT, TYPE I BEADS	SF	575		
26	PAVEMENT MARKINGS - TEMPORARY BLACK OUTLINES AIRFIELD PAINT, NO BEADS	SF	1,275		
27	15 INCH DIA. STORM SEWER PIPE	LF	230		
28	15 INCH DIA. STORM SEWER PIPE INSTALLED UNDER TAXIWAY PAVEMENT	LF	250		
29	18 INCH DIA. POLYPROPYLENE STORM SEWER PIPE	LF	495		
30	18 INCH DIA. POLYPROPYLENE STORM SEWER PIPE, INSTALLED UNDER TAXIWAY PAVEMENT	LF	190		
31	24 INCH DIA. POLYPROPYLENE STORM SEWER PIPE	LF	495		
32	ROCK EXCAVATION	CY	4,000		
33	LIGHT DRAIN, 2 INCH SCHEDULE 40 PVC	LF	300		
34	NON-PERFORATED SUBDRAIN, 6 INCH DIA.	LF	600		
35	PERFORATED SUBDRAIN, 6 INCH DIA.	LF	4,250		
36	SUBDRAIN CLEANOUT	EA	17		
37	MODIFIED SW-502, 48 IN. SINGLE GRATE INTAKE	EA	6		
38	FLARED END SECTION WITH APRON GUARD AND FOUNDATION, 15 INCH RCP	EA	1		
39	SW-211 STOM SEWER CONNECTION TO EXISTING PIPE OR STRUCTURE	EA	2		
40	NO. 8 AWG, 5KV, L-824, TYPE C CABLE, INSTALLED IN CONDUIT	LF	7,800		
41	NO. 6 AWG, BARE SOLID COUNTERPOISE WIRE WITH GROUND RODS AND EXCOTHERMIC CONNECTIONS	LF	7,500		

ITEM NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
42	NO. 8 AWG, 5KV L-824, TYPE C CABLE, TEMPORARY JUMPER CABLE WIRE	LF	5,500		
43	1 WAY 2 INCH SCHEDULE 40 PVC CONDUIT	LF	6,500		
44	2 WAY 2 INCH SCHEDULE 40 PVC CONDUIT	LF	700		
45	2 WAY 2 INCH SCHEDULE 40 PVC CONDUIT, CONCRETE ENCASED	LF	200		
46	1 WAY 2 INCH HDPE DIRECTIONAL BORE	LF	270		
47	NEW L-867B BASE CAN JUNCTION HANHOLE	EA	3		
48	2-WAY BASE CAN PLAZA	EA	2		
49	NEW L-867B BASE CAN AND FOUNDATION FOR FUTURE TAXIWAY EDGE LIGHT	EA	6		
50	NEW L-861T TAXIWAY EDGE LIGHT INSTALLED ON NEW L-867B BASE CAN WITH NEW FOUNDATION	EA	69		
51	INSTALL SALVAGED STAKE MOUNTED L-861T TAXIWAY EDGE LIGHT	EA	4		
52	INSTALL SALVAGED L-861T TAXIWAY EDGE LIGHT ON NEW L-867B BASE CAN WITH NEW FOUNDATION	EA	9		
53	NEW L-858 LED SIGN UNIT WITH NEW FOUNDATION - 1 MODULE	EA	2		
54	NEW L-858 LED SIGN UNIT WITH NEW FOUNDATION - 2 MODULE	EA	2		
55	NEW L-858 LED SIGN UNIT WITH NEW FOUNDATION - 3 MODULE	EA	2		
56	NEW L-858 UNLIT SIGN UNIT WITH NEW FOUNDATION, TAXIWAY ENDING MARKER	EA	2		
57	NEW SIGN UNIT FOUNDATION ONLY - 3 MODULE	EA	2		
58	NEW RETROREFLECTOR, SURFACE OR STAKE MOUNTED, 30 INCH	EA	9		
59	INSTALL SALVAGED RETROREFLECTOR, SURFACE OR STAKE MOUNTED, 30 INCH	EA	3		
60	INSTALL OWNER SUPPLIED PAVEMENT SENSOR CABLE	LS	1		
61	AIRFIELD ELECTRICAL DEMOLITION AND MISCELLANEOUS	LS	1		
62	SPARE PART FOR ELECTRICAL SYSTEMS	LS	1		
63	SEEDING AND FERTILIZING, PERMANENT	ACRE	18		
64	SEEDING AND FERTILIZING, TEMPORARY	ACRE	10		

ITEM NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
65	SODDING	SY	2,375		
66	TOPSOIL - STRIP, STOCKPILE, AND RESPREAD	CY	7,750		
67	HYDROMULCH	ACRE	24		
68	HYDROMULCH - MECHANICALLY BONDED FIBER MATRIX (MBFM)	ACRE	4		
69	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)	LS	1		
70	STORM WATER POLLUTION PREVENTION PLAN (SWPPP), PREPARATION AND MANAGEMENT	LS	1		
71	INLET PROTECTION DEVICE	EA	10		
72	INSTALLATION AND REMOVAL OF SILT FENCE	LF	3,000		
73	MOBILIZATION AND MISCELLANEOUS	LS	1		
74	TRAFFIC CONTROL AND SECURITY	LS	1		
75	CONSTRUCTION ACCESS	LS	1		
76	ENGINEER/RPR FIELD OFFICE	LS	1		
77	CONSTRUCTION SURVEY	LS	1		

COMPUTED TOTAL BASE BID (ITEMS 1 - 77)

\$

ESTIMATE REFERENCE INFORMATION

ITEM NO.	ITEM CODE	DESCRIPTION
1 2 3	P-101 P-101 P-101	AIRFIELD PAVEMENT REMOVAL, VARIABLE DEPTH HMA (2-12 INCH) ON VARIABLE DEPTH PCC (8-9.5 INCH) AIRFIELD PAVEMENT REMOVAL, 2.5 INCH HMA ON 9 INCH PCC AIRFIELD PAVEMENT REMOVAL, 13.5 INCH PCC A. THIS ITEM INCLUDES THE MILLING OF EXISTING ASPHALT PAVEMENT, CONCRETE PAVEMENT, AND AGGREGATE BASE COURSES. REMOVALS SHALL OCCUR TO THE BOTTOM OF THE EXISTING AGGREGATE BASE COURSE. B. CONTRACTOR SHALL UTILIZE ASPHALT MILLINGS GENERATED FROM PAVEMENT REMOVALS TO SURFACE THE PROPOSED RELOCATED SERVICE ROAD (BID ITEM 12) AND FOR THE PRODUCTION OF P-219 RECYCLED CONCRETE AGGREGATE BASE COURSE (BID ITEM 16). REFER TO THE P-219 SPECIFICATION FOR ALLOWABLE ASPHALT MILLINGS IN P-219. EXCESS ASPHALT MILLINGS SHALL BE HAULED TO AND STOCKPILED AT THE LOCATIONS SHOWN IN THE J-SHEETS AND BECOME PROPERTY OF THE OWNER. THE HAULING AND STOCKPILING OF EXCESS ASPHALT MILLINGS SHALL BE INCIDENTAL TO THE PAVEMENT REMOVAL BID ITEM. C. CONTRACTOR SHALL UTILIZE PCC PAVEMENT REMOVALS FOR PRODUCTION OF P-219 RECYCLED CONCRETE AGGREGATE BASE COURSE (BID ITEM 16). ALL EXCESS UNCRUSHED PCC CONCRETE SHALL BE HAULED TO AND STOCKPILED AT THE LOCATIONS SHOWN ON THE J-SHEETS AND BECOME PROPERTY OF THE AIRPORT. THE HAULING AND STOCKPILING OF EXCESS UNCRUSHED OR CRUSHED CONCRETE SHALL BE INCIDENTAL TO THE PAVEMENT REMOVAL BID ITEM.
4	P-101	REMOVE AND SALVAGE GRAVEL/HMA MILLING SERVICE ROAD (APPROXIMATELY 5 INCH THICK) A. THIS ITEM INCLUDES THE REMOVAL OF THE GRANULAR SURFACE OF THE EXISTING SERVICE ROAD (REFER TO D-SHEETS FOR REMOVAL LIMITS). EXISTING GRAVEL/HMA MILLINGS SHALL BE REMOVED TO THE FULL GRANULAR DEPTH AND SALVAGED/STOCKPILED FOR RE-USE ON THE RELOCATED SERVICE ROAD (BID ITEM 13).
5	P-101	REMOVE HMA SERVICE ROAD (UNKNOWN DEPTH) A. THIS ITEM INCLUDES THE REMOVAL OF EXISTING ASPHALT PAVEMENT AND ANY AGGREGATE BASE COURSE. REMOVALS SHALL OCCUR TO THE BOTTOM OF THE EXISTING AGGREGATE BASE COURSE, IF ANY. DEPTH OF EXISTING ASPHALT PAVEMENT IS UNKNOWN. REFER TO SHEET D.01 FOR REMOVAL LIMITS. B. ALL COSTS ASSOCIATED WITH REMOVAL, HAULING, AND DISPOSING OF THIS MATERIAL SHALL BE INCIDENTAL TO THIS BID ITEM.
6	P-101	FULL DEPTH SAW CUTTING A. DOUBLE SAW CUT ON THE EXISTING PAVEMENT SHALL BE INCIDENTAL TO THIS BID ITEM. REFER B-SHEETS FOR FULL DEPTH SAW CUTTING DETAILS AND D-SHEETS FOR SAW CUT LOCATIONS.
7 8	P-101 P-101	DRAINAGE PIPE REMOVAL, LESS THAN 18 INCH DIA. DRAINAGE STRUCTURE REMOVAL A. REFER TO D-SHEETS FOR DRAINAGE PIPE AND STORM STRUCTURE REMOVAL LOCATIONS AND DETAILS. B. REMOVALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR. NO DISPOSAL SITE EXISTS ON THE AIRPORT. C. THE BACKFILL FOR PIPE TRENCHES AND STRUCTURES SHALL MEET THE P-152 SPECIFICATION AND SHALL BE INCIDENTAL TO THIS BID ITEM.
9	P-101	SALVAGE AND REINSTALL EROSION STONE A. THIS ITEM IS FOR THE REMOVAL AND SALVAGE OF APPROXIMATELY 117 SY OF EXISTING EROSION STONE AS SHOWN ON PLAN SHEET D.04 TO ALLOW FOR THE INSTALLATION OF P-152 EMBANKMENT FOR THE RELOCATED SERVICE ROAD (BID ITEM 13). B. THIS ITEM INCLUDES THE REINSTALLATION OF SALVAGED EROSION STONE AS SHOWN ON SHEET U.04 AROUND PROPOSED 15 INCH RCP FLARED END SECTION (BID ITEM 38). ANY EXCESS EROSION STONE SHALL BE HAULED AND STOCKPILED ADJACENT TO THE STAGING/BATCH PLANT SITE, COORDINATE WITH RPR. C. DISPOSAL OF EXISTING ENGINEERING FABRIC, IF ANY, AND PROVIDING NEW ENGINEERING FABRIC DURING REINSTALLATION SHALL BE INCIDENTAL TO THIS ITEM.
10	P-101	AIRFIELD PAVEMENT MARKING REMOVALS A. ALL PAVEMENT MARKING REMOVALS ON ASPHALT PAVEMENT SHALL BE ACCOMPLISHED UTILIZING COLD MILLING OR ROTARY GRINDING. B. ALL PAVEMENT MARKING REMOVALS ON PCC PAVEMENT SHALL BE ACCOMPLISHED UTILIZING HIGH PRESSURE WATER BLASTER. C. REMOVAL METHODS SHALL NOT CAUSE MAJOR DAMAGE TO PAVEMENT OR TO ANY STRUCTURE ADJACENT TO THE WORK AREA. REFER TO SPECIFICATION SECTION P-101-3.3 FOR WHAT IS CONSIDERED "MAJOR DAMAGE". D. CONTRACTOR SHALL PERFORM A TEST STRIP OF EACH REMOVAL METHOD ON EACH PAVEMENT TYPE AND OBTAIN APPROVAL BY THE RPR PRIOR TO IMPLEMENTING FULL SCALE OPERATIONS. E. THE CLEANING AND REMOVAL OF ALL DEBRIS CREATED DURING PAVEMENT MARKING REMOVAL SHALL BE INCIDENTAL TO THE AIRFIELD PAVEMENT MARKING REMOVAL BID ITEM. F. REFER TO SHEETS K.01 AND K.02 FOR AIRFIELD PAVEMENT MARKING REMOVAL LOCATIONS AND SHEET K.05 FOR TABULATIONS.
10	P-151	CLEARING AND GRUBBING A. THIS BID ITEM SHALL BE USED AT THE DISCRETION OF THE RPR FOR WOODED AREAS THAT MAY BE ENCOUNTERED IN ORDER TO INSTALL EXCESS OR UNSUITABLE EXCAVATION MATERIAL (LOCATION PROVIDED AT TIME OF CONSTRUCTION). BID ITEM SHALL BE PAID FOR BY ACRE OF AREA TO BE CLEARED AND GRUBBED.
12	P-152	UNCLASSIFIED EXCAVATION A. THIS BID ITEM INCLUDES THE FOLLOWING QUANTITY FOR EXCAVATION OF EXISTING ON-SITE MATERIAL PER THE FW-SHEETS: - FW.01 CUT MATERIAL = 10,290 CY (CUT USED FOR ON-SITE FILL SHALL HAVE A 1.10 SHRINK FACTOR) - FW.02 CUT MATERIAL = 12,572 CY (CUT USED FOR ON-SITE FILL SHALL HAVE A 1.10 SHRINK FACTOR) - FW.03 CUT MATERIAL = 1,908 CY (CUT USED FOR ON-SITE FILL SHALL HAVE A 1.10 SHRINK FACTOR) - AN ADDITIONAL 2,500 CY OF UNCLASSIFIED EXCAVATION HAS BEEN ESTIMATED FOR UNDERCUTTING OF EXISTING UNSUITABLE MATERIAL BENEATH THE PROPOSED TAXIWAY PAVEMENT SECTION. THIS ADDITIONAL ESTIMATED QUANTITY IS UNBALANCED AND SHALL BE ADJUSTED AS ENCOUNTERED DURING CONSTRUCTION. - ROCK EXCAVATION THAT IS ENCOUNTERED DURING MASS GRADING OPERATIONS HAS BEEN DEDUCTED FROM THIS BID ITEM QUANTITY AND SHALL BE PAID FOR UNDER BID ITEM 31 (24,770 CY OF CUT ON FW-SHEETS MINUS 3,000 CY OF ROCK EXCAVATION ANTICIPATED = BID ITEM QUANTITY OF APPROX. 21,775 CY). B. ALL EXCESS AND UNSUITABLE MATERIAL SHALL BE INSTALLED AS ENGINEERED FILL UNDER MOISTURE AND DENSITY CONTROL (95% STANDARD PROCTOR) AT A FILL LOCATION TO BE PROVIDED AT THE TIME OF CONSTRUCTION. FILL LOCATION WILL BE WITHIN A 1.5 MILE HAUL ROUTE OF THE PROJECT SITE. C. SLOPED SURFACES STEEPER THAN (1) VERTICAL TO (5) HORIZONTAL SHALL HAVE BENCHES CUT INTO THE EXISTING SLOPES PRIOR TO FILL PLACEMENT. REFER TO THE PROJECT GEOTECHNICAL REPORT, LOCATED IN THE PROJECT MANUAL, FOR ADDITIONAL DETAILS. D. ALL ROCK EXCAVATION (BID ITEM 32) IN EXCESS OF WHAT IS ANTICIPATED FOR MASS GRADING OPERATIONS SHALL BE DEDUCTED FROM THIS BID ITEM.
13	SUDAS 2010	8 INCH GRAVEL/HMA MILLING SERVICE ROAD INSTALLATION A. THIS ITEM INCLUDES THE REINSTALLATION OF SALVAGED MATERIAL FROM EXISTING SERVICE ROAD REMOVALS (BID ITEM 4). B. THIS ITEM INCLUDES REINSTALLATION OF SALVAGED HMA MILLINGS PRODUCED DURING AIRFIELD PAVEMENT REMOVALS (BID ITEMS 1 AND 2). C. SALVAGED SERVICE ROAD MATERIAL SHALL BE INSTALLED FIRST AND TOPPED WITH ASPHALT MILLINGS TO COMPLETE THE TOTAL 8 INCH DEPTH. D. ALL EQUIPMENT, HAULING, COMPACTIVE EFFORTS, AND LABOR NECESSARY TO COMPLETE THIS ITEM SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM.
14	P-154	GEOGRID A. SEE SUDAS SPECIFICATION 2010 FOR GEOCGRID MATERIAL. INSTALL GEOCGRID MATERIAL PER THE FAA P-154 SPECIFICATION.
15	P-154	SUBBASE COURSE, 8 INCH A. THE PROJECT GEOTECHNICAL REPORT AND SOIL BORINGS INDICATE THAT LIMESTONE WILL BE ENCOUNTERED DURING PROJECT EXCAVATION. EXCAVATED MATERIAL MAY BE USED TO PRODUCE THE REQUIRED SUBBASE COURSE MATERIAL, PROVIDED THAT THE MATERIAL MEETS THE REQUIREMENTS OF THE P-154 SPECIFICATION. B. MATERIAL AVAILABLE FROM PROJECT PAVEMENT REMOVALS SHALL NOT BE UTILIZED TO PRODUCE P-154. C. REFER TO ROCK EXCAVATION (BID ITEM 32) FOR DETAILS AND EXPECTED QUANTITIES TO BE ENCOUNTERED.
16	P-219	RECYCLED CONCRETE AGGREGATE BASE COURSE, 6 INCH A. P-219 JOB MIX FORMULA MAY INCLUDE UP TO 10% ASPHALT MILLINGS. REFER TO SPECIFICATION SECTION P-219-2.1 FOR DETAILS. B. TABULATIONS OF P-219 CRUSHED AGGREGATE AVAILABILITY AND NEEDS LOCATED ON SHEET C.02. TABULATIONS INTENDED TO CONVEY ESTIMATED MATERIAL AVAILABILITY AND PROJECT NEEDS. CONTRACTOR'S OPERATIONS MAY IMPACT ACTUAL AVAILABLE MATERIAL. C. THE INCREASED THICKNESS AT MAINLINE AND CONNECTOR PAVEMENT AS SHOWN ON DETAIL 04 ON PLAN SHEET B.01 SHALL BE INCIDENTAL TO THIS ITEM.
19 20	P-604 P-605	COMPRESSION JOINT SEALS JOINT SEALING FILLER A. COMPRESSION JOINT SEALANT SHALL BE APPLIED TO ALL TYPE C AND E JOINTS ON TAXIWAY PAVEMENT. B. JOINT SEALING FILLER (SILICONE) SHALL BE APPLIED TO ALL A, A-1 AND A-2 JOINTS.
21 22 23 24 25 26	P-620 P-620 P-620 P-620 P-620 P-620	PAVEMENT MARKINGS - YELLOW WHITE AIRFIELD PAINT, TYPE I BEADS PAVEMENT MARKINGS - RED AIRFIELD PAINT, TYPE III BEADS PAVEMENT MARKINGS - BLACK OUTLINES AIRFIELD PAINT, NO BEADS PAVEMENT MARKINGS - TEMPORARY YELLOW AIRFIELD PAINT, TYPE I BEADS PAVEMENT MARKINGS - TEMPORARY BLACK OUTLINES AIRFIELD PAINT, NO BEADS A. THESE ITEMS SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO COMPLETE THE PAINTING AS INDICATED ON THE PAVEMENT MARKING PLAN (PLAN SHEETS K.01 THROUGH K.04) AND IN ACCORDANCE WITH THE P-620 SPECIFICATION. B. WATERBORNE TYPE I PAINT SHALL BE USED FOR ALL TEMPORARY PAVEMENT MARKINGS. CONTRACTOR MAY SUBSTITUTE TYPE I PAINT WITH TYPE III PAINT FOR TEMPORARY MARKINGS. THE TEMPORARY GRAY PAINT CALLED FOR ON THE K-SHEETS SHALL BE PAID FOR UNDER BID ITEM 26, TEMPORARY BLACK OUTLINES...". C. WATERBORNE TYPE III PAINT SHALL BE USED FOR ALL PERMANENT PAVEMENT MARKINGS. D. REFER TO PLAN SHEET K.06 FOR BEAD APPLICATION TYPE FOR ALL MARKINGS AND THE P-620 SPECIFICATION FOR PAINT AND BEAD APPLICATION RATES.

ESTIMATE REFERENCE INFORMATION

ITEM NO.	ITEM CODE	DESCRIPTION
27 28 29 30 31	D-701 D-701 D-701 D-701 D-701	<p>15 INCH DIA. STORM SEWER PIPE 15 INCH DIA. STORM SEWER PIPE, INSTALLED UNDER TAXIWAY PAVEMENT 18 INCH DIA. POLYPROPYLENE STORM SEWER PIPE 18 INCH DIA. POLYPROPYLENE STORM SEWER PIPE, INSTALLED UNDER TAXIWAY PAVEMENT 24 DIA. POLYPROPYLENE STORM SEWER PIPE</p> <p>A. REFER TO PLAN SHEETS M.01 THROUGH M.03 FOR STORM SEWER PLAN AND PROFILE AND PLAN SHEET M.05 FOR STORM SEWER TABULATIONS. B. ALL STORM SEWER PIPE TO BE INSTALLED IN GREEN SPACE SHALL BE RCP CLASS III FABRIC WRAPPED OR EQUIVALENT (STORM SEWER PIPE OR POLYPROPYLENE STORM SEWER PIPE). C. ALL STORM SEWER PIPE TO BE INSTALLED UNDER TAXIWAY PAVEMENT SHALL BE RCP CLASS V GASKETED OR EQUIVALENT (STORM SEWER PIPE OR POLYPROPYLENE STORM SEWER PIPE). D. UNCLASSIFIED TRENCH EXCAVATION AND HAULING/DISPOSING OF WASTE MATERIAL SHALL BE INCIDENTAL TO THE UNIT PRICE OF THE PIPE INSTALLED. REFER TO ROCK EXCAVATION (BID ITEM 32) IF ROCK, HARDPAN, OR OTHER UNYIELDING MATERIALS ARE ENCOUNTERED ALL PIPE JOINT WRAPPING, GASKETS, AND CONNECTED PIPE JOINTS SHALL BE INCIDENTAL TO THE UNIT PRICE OF THE PIPE INSTALLED. E. ALL BEDDING, INITIAL BACKFILL AND TRENCH BACKFILL MATERIAL AND INSTALLATION SHALL BE INCIDENTAL TO THE UNIT PRICE OF THE PIPE INSTALLED. REFER TO DETAIL 01 AND DETAIL 02 ON SHEET M.06 FOR STORM SEWER TRENCH DETAILS. F. WHEN POLYPROPYLENE STORM PIPE IS INSTALLED, THE PIPE CONNECTION TO STORM SEWER INTAKES SHALL BE COMPLETED USING A MANUFACTURED PRODUCT (ADS A-LOK OR EQUIVALENT). FURNISHING AND INSTALLING THIS MANUFACTURED PRODUCT SHALL BE INCIDENTAL TO THE PIPE BID ITEM.</p>
32	P-152/D-701	<p>ROCK EXCAVATION</p> <p>A. THIS ITEM IS FOR ROCK EXCAVATION AS ENCOUNTERED DURING PROJECT CONSTRUCTION. REFER TO THE P-152 AND D-701 SPECIFICATIONS FOR CLASSIFICATION OF ROCK EXCAVATION AND REQUIREMENTS OF REMOVAL. B. THE PROJECT GEOTECHNICAL REPORT AND SOIL BORINGS INDICATE THAT LIMESTONE WILL BE ENCOUNTERED DURING PROJECT EXCAVATION. THE BID ITEM QUANTITY IS AN ESTIMATE MADE FROM THE SOIL BORINGS OF ROCK EXCAVATION THAT CANNOT BE REMOVED WITHOUT THE USE OF BLASTING, RIPPERS, OR HYDRAULIC BREAKERS. C. EXCAVATED ROCK MATERIAL WILL BE PAID FOR AS ENCOUNTERED. THE ESTIMATED ROCK EXCAVATION QUANTITY IS AS FOLLOWS: - STORM SEWER TRENCH EXCAVATION = 1,000 CY - MASS GRADING = 3,000 CY ROCK EXCAVATION IN EXCESS OF THE ESTIMATED QUANTITY ENCOUNTERED DURING MASS GRADING SHALL BE ADDED TO THE QUANTITY OF THIS BID ITEM AND BE SUBTRACTED FROM THE UNCLASSIFIED EXCAVATION BID ITEM (BID ITEM 12). IF ROCK EXCAVATION ENCOUNTERED DURING MASS GRADING IS LESS THAN THE ESTIMATED QUANTITY THE REMAINING QUANTITY SHALL BE ADDED TO THE UNCLASSIFIED EXCAVATION BID ITEM 12. D. MATERIAL REMOVED DURING ROCK EXCAVATION MAY BE UTILIZED FOR P-154 PRODUCTION (BID ITEM 15) AT THE CONTRACTOR'S DISCRETION, PROVIDED THAT IT MEETS THE REQUIREMENTS OF THE P-154 SPECIFICATION. REFER TO BID ITEM 15 ESTIMATE REFERENCE NOTES FOR DETAILS. E. ALL EXCESS MATERIAL REMOVED DURING ROCK EXCAVATION SHALL BE HAULED AND INSTALLED IN AN ENGINEERED FILL UNDER MOISTURE AND DENSITY CONTROL (95% STANDARD PROCTOR) AT A FILL LOCATION TO BE PROVIDED AT THE TIME OF CONSTRUCTION. FILL LOCATION WILL BE WITHIN A 1.5 MILE HAUL ROUTE DISTANCE OF THE PROJECT SITE.</p>
33	D-705	<p>LIGHT DRAIN, 2 INCH SCHEDULE 40 PVC</p> <p>A. THIS ITEM IS FOR THE INSTALLATION OF 2" SCHEDULE 40 PVC PIPE TO DRAIN THE TAXIWAY EDGE LIGHTS. REFER TO P-SHEETS FOR DETAILS. B. THIS ITEM INCLUDES ALL FITTING AND CONNECTIONS OF THE DRAIN SYSTEM FROM THE BASE CANS TO THE SUBDRAIN SYSTEM.</p>
34 35 36	D-705 D-705 D-705	<p>NON-PERFORATED SUBDRAIN, 6 INCH DIA. PERFORATED SUBDRAIN, 6 INCH DIA. SUBDRAIN CLEANOUT</p> <p>A. REFER TO PLAN SHEET M.04 FOR SUBDRAIN PLAN AND SHEET M.05 FOR SUBDRAIN AND SUBDRAIN CLEANOUT TABULATIONS. B. UNCLASSIFIED TRENCH EXCAVATION AND HAULING/DISPOSING OF WASTE MATERIAL SHALL BE INCIDENTAL TO THE UNIT PRICE OF THE PIPE INSTALLED. C. ALL FILTER FABRIC, PIPE FITTINGS AND POROUS BACKFILL MATERIAL AND INSTALLATION SHALL BE INCIDENTAL TO THE UNIT PRICE OF THE PIPE INSTALLED. D. ALL PIPE, FITTINGS, CASTINGS AND REINFORCEMENT FOR SUBDRAIN CLEANOUTS SHALL BE INCIDENTAL TO THE SUBDRAIN CLEANOUT BID ITEM. E. REFER TO SHEETS M.09 AND M.10 FOR SUBDRAIN AND SUBDRAIN CLEANOUT DETAILS.</p>
37 38	D-751 D-751	<p>MODIFIED SW-502, 48 IN. SINGLE GRATE INTAKE FLARED END SECTION WITH APRON GUARD AND FOUNDATION, 15 INCH RCP</p> <p>A. UNCLASSIFIED EXCAVATION AND HAULING/DISPOSING OF WASTE MATERIAL SHALL BE INCIDENTAL TO THE UNIT PRICE OF THIS BID ITEM. B. ALL BEDDING AND BACKFILL MATERIAL SHALL BE INCIDENTAL TO THE UNIT PRICE OF THIS BID ITEM. C. MODIFIED SW-502 SINGLE GRATE INTAKES SHALL BE INSTALLED PER DETAIL 01 ON SHEET M.07. D. FLARED END SECTION SHALL BE INSTALLED PER DETAILS 01 THOROUGH 03 ON PLAN SHEET M.08. RCP FOOTING AND APRON GUARD SHALL BE INCIDENTAL TO THE UNIT PRICE OF THIS ITEM.</p>
39	D-751	<p>SW-211, STORM SEWER CONNECTION TO EXISTING PIPE OR STRUCTURE</p> <p>A. ALL MATERIAL, EQUIPMENT, AND LABOR NECESSARY TO MODIFY EXISTING INTAKE, INSTALL PROPOSED 15 INCH STORM SEWER PIPE/6 INCH DIA. SUBDRAIN PIPE, AND INSTALL CONCRETE COLLAR/NON-SHRINK GROUT AS SHOWN ON PLAN SHEET M.03 AND M.04 SHALL BE INCIDENTAL TO THIS ITEM. B. REFER TO SHEET M.06 FOR SW-211 STORM SEWER CONNECTION DETAILS AND PLAN SHEET M.09 FOR STORM STRUCTURE SUBDRAIN CONNECTION DETAIL.</p>
40	L-108	<p>NO. 8 AWG, 5KV, L-824, TYPE C CABLE, INSTALLED IN CONDUIT</p> <p>A. THIS ITEM IS FOR THE INSTALLATION OF NEW NO. 8 AWG, 5KV, L-824 TYPE C CABLE IN NEW OR EXISTING CONDUIT. B. L-823 CONNECTOR INSTALLATION AT EACH LIGHT AND MANHOLE SHALL BE INCIDENTAL TO THIS ITEM. C. L-823 PRIMARY CABLE CONNECTIONS SHALL BE AMERACE "SUPER KIT", INTEGRO "COMPLETE KIT", OR APPROVED EQUAL.</p>
41	L-108	<p>NO. 6 AWG, BARE SOLID COUNTERPOISE WIRE WITH GROUND RODS AND EXOTHERMIC CONNECTIONS</p> <p>A. THIS ITEM IS FOR THE INSTALLATION OF COUNTERPOISE WIRING IN CONDUIT TRENCHES AS SHOWN IN THE P-SHEET DETAILS. B. ALL GROUND RODS AND EXOTHERMIC CONNECTIONS SHALL BE INCIDENTAL TO THE UNIT PRICE OF THIS BID ITEM.</p>
42	L-108	<p>NO. 8 AWG, 5 KV, L-824, TYPE C CABLE, TEMPORARY JUMPER CABLE WIRE</p> <p>A. THIS ITEM IS FOR CABLE TO BE USED AS TEMPORARY JUMPER CABLE DURING CONSTRUCTION TO DEACTIVATE CLOSED SECTIONS OF TAXIWAY. B. REFER TO J-SHEETS FOR JUMPER CABLE LOCATIONS REQUIRED BY THE CONSTRUCTION SAFETY AND PHASING PLAN. C. JUMPER CABLE MUST BE NEW CABLE AND HAVE NO SPLICES WITHIN EACH JUMPER RUN, UNLESS APPROVED AND ACCEPTED BY THE RPR.</p>
53 54 55	L-125 L-125 L-125	<p>NEW L-858 LED SIGN UNIT WITH NEW FOUNDATION - 1 MODULE NEW L-858 LED SIGN UNIT WITH NEW FOUNDATION - 2 MODULE NEW L-858 LED SIGN UNIT WITH NEW FOUNDATION - 3 MODULE</p> <p>A. REFER TO P-SHEETS AND THE L-125 SPECIFICATION FOR MATERIAL AND INSTALLATION REQUIREMENTS. AS DESCRIBED IN L-125.2.8 OF THE PROJECT SPECIFICATIONS, SIGNS SHALL HAVE A CURVED FACE MATCHING EXISTING AIRPORT LIGHTED SIGNS.</p>
57	L-125	<p>NEW SIGN UNIT FOUNDATION ONLY - 3 MODULE</p> <p>A. THIS ITEM SHALL INCLUDE THE INSTALLATION OF A NEW FOUNDATION, BASE CAN, PATHWAYS, AND GROUNDING TO ALLOW FOR A FUTURE SIGN INSTALLATION. THE POWER CABLE, ISOLATION TRANSFORMER, AND ACTUAL SIGN UNIT ARE NOT REQUIRED.</p>
60	L-125	<p>INSTALL OWNER SUPPLIED PAVEMENT SENSOR CABLE</p> <p>A. OWNER SHALL PROCURE TYPE II- AND TYPE V PAVEMENT SENSOR CABLE AND SPLICE KITS FROM VAISSALA. CONTRACTOR SHALL COMPLETE NECESSARY DEMOLITION, INSTALL OWNER SUPPLIED CABLE IN NEW CONDUIT, AND COMPLETE THE SPLICE CONNECTIONS TO THE EXISTING CABLE TO RESTORE PAVEMENT SENSOR CONNECTION BACK TO THE AIRPORT RPU. ADDITIONAL TECHNICAL INFORMATION MAY BE PROVIDED FROM VAISSALA AFTER THE TIME OF BID.</p>
61	L-125	<p>AIRFIELD ELECTRICAL DEMOLITION AND MISCELLANEOUS</p> <p>A. THIS ITEM IS FOR THE REMOVAL AND SALVAGE OF ALL ELEVATED TAXIWAY EDGE LIGHTS, LIGHTED SIGN UNITS, AND ISOLATION TRANSFORMERS CALLED FOR REMOVAL IN THE ELECTRICAL DEMOLITION PLAN AS SHOWN IN THE P-SHEETS. ALL SALVAGED EQUIPMENT SHALL BECOME PROPERTY OF THE AIRPORT. B. THIS ITEM IS FOR THE REMOVAL AND DISPOSAL OFF ALL ITEMS NOT OTHERWISE NOTED AS SHOWN ON THE ELECTRICAL DEMOLITION PLAN IN THE P-SHEETS. ALL ITEMS REMOVED SHALL BECOME PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE NOTED.</p>
62	L-126	<p>SPARE PARTS FOR ELECTRICAL SYSTEMS</p> <p>A. ITEM IS FOR ELECTRIC SPARE PARTS TO BE PROVIDED AS PART OF THIS PROJECT. B. REFER TO THE P-SHEETS AND SPECIFICATION L-126 FOR PART REQUIREMENTS, AND THE SPARE PART ITEMS THAT ARE TO BE INCLUDED AS PART OF THIS BID ITEM.</p>
63 64	T-901 T-901	<p>SEEDING AND FERTILIZING, PERMANENT SEEDING AND FERTILIZING, TEMPORARY</p> <p>A. CONTRACTOR SHALL COORDINATE TEMPORARY SEEDING WITH RPR AND SHALL BE USED AS NECESSARY TO COMPLY WITH THE SWPPP DURING PERIODS THAT ARE OUTSIDE THE ALLOWABLE PERMANENT SEEDING WINDOWS AS SPECIFIED IN SPECIFICATION SECTION T-901-2.1.</p>

ESTIMATE REFERENCE INFORMATION

ITEM NO.	ITEM CODE	DESCRIPTION
66	T-905	<p>TOPSOIL - STRIP, STOCKPILE, AND RESPREAD</p> <p>A. THIS QUANTITY WAS CALCULATED ASSUMING A 4-INCH STRIP AND A 3-INCH RESPREAD ALONG DISTURBED AREAS.</p> <p>B. CONTRACTOR TO COORDINATE RESPREAD LIMITS AND THICKNESS WITH RPR PRIOR TO INSTALLATION. CONTRACTOR SHALL STOCKPILE TOPSOIL IN LOCATIONS OUTSIDE OF ALL ACTIVE RUNWAY AND TAXIWAY OBJECT FREE AREAS. ALL TOPSOIL ENCOUNTERED SHALL REMAIN ON AIRPORT PROPERTY AND INCORPORATED AS RESPREAD.</p> <p>C. TOPSOIL - STRIP, STOCKPILE, AND RESPREAD AT THE EXCESS MATERIAL FILL AREA SHALL BE INCIDENTAL TO UNCLASSIFIED EXCAVATION, DISTURBED AREA OF UP TO TWO ACRES IS ANTICIPATED.</p>
67	T-908	<p>HYDROMULCH</p> <p>A. THE CONTRACTOR SHALL HYDROMULCH ALL AREAS DESIGNATED FOR PERMANENT SEEDING AS SHOWN ON THE U-SHEETS, AND ANY OTHER LOCATIONS THAT ARE DISTURBED BY CONSTRUCTION ACTIVITIES. MULCHING IS NOT REQUIRED FOR TEMPORARY SEEDING.</p> <p>B. THE USE OF STRAW INSIDE THE AOA IS PROHIBITED.</p>
68	T-908	<p>HYDROMULCH - MECHANICALLY BONDED FIBER MATRIX (MBFM)</p> <p>A. THIS ITEM SHALL BE INSTALLED IN PROPOSED DITCH BOTTOMS AND ON STEEPER SLOPES AS SHOWN ON THE U-SHEETS.</p> <p>B. ITEM SHALL MEET THE REQUIREMENTS OF IOWA SUDAS SPECIFICATION 9040, SECTION 2.16.B.3. MULCHING MATERIAL TO BE USED FOR THE MBFM SHALL MEET THE REQUIREMENTS OF IOWA SUDAS SPECIFICATIONS 9010, SECTION 2.07.B.3. INSTALLATION AND APPLICATION RATES SHALL BE PER THE MANUFACTURER'S RECOMMENDATIONS. REFER TO SPECIFICATION SECTION T-908-2.1B AND C-102-2.6 FOR DETAILS AND ANY ADDITIONAL INSTALLATION REQUIREMENTS.</p>
69	C-100	<p>CONTRACTOR QUALITY CONTROL PROGRAM</p> <p>A. THIS ITEM INCLUDES BUT IS NOT LIMITED TO ALL COSTS ASSOCIATED WITH DEVELOPING AND IMPLEMENTING A QUALITY CONTROL PROGRAM THAT DETAILS METHODS AND PROCEDURES THAT WILL BE TAKEN TO ASSURE THAT ALL MATERIAL, AND COMPLETED CONSTRUCTION, INCLUDING THAT WHICH IS PERFORMED BY SUBCONTRACTORS REQUIRED BY THIS CONTRACT CONFORM TO THE CONTRACT PLANS, TECHNICAL SPECIFICATIONS, AND APPLICABLE STATE AND FEDERAL REQUIREMENTS.</p> <p>B. REFER TO SPECIFICATION C-100 FOR PROGRAM REQUIREMENTS AND EXECUTION.</p>
70	C-102	<p>STORM WATER POLLUTION PREVENTION PLAN (SWPPP), PREPARATION AND MANAGEMENT</p> <p>A. THE UNIT PRICE SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIALS, LABOR, AND EQUIPMENT NECESSARY TO MAINTAIN THE EROSION CONTROL PLAN DURING CONSTRUCTION AT BOTH THE RECONSTRUCTION SITE AND THE STAGING/BATCH PLANT AREA.</p> <p>B. THIS ITEM INCLUDES PLAN PREPARATION, NPDES GENERAL PERMIT #2, MANAGEMENT, INSPECTIONS, INSTALLATION AND MAINTENANCE OF SILT FENCE AND OTHER CONTROL MEASURES, AND ALL ADDITIONAL POLLUTION CONTROL MEASURES THAT WILL BE CONSTRUCTED AND MAINTAINED BY THE CONTRACTOR BASED ON THE CONTRACTOR'S STORM WATER POLLUTION PREVENTION PLAN.</p> <p>C. THE CONTRACTOR SHALL SUBMIT A DETAILED STORM WATER POLLUTION PLAN FOR BOTH THE RECONSTRUCTION SITE AND THE STAGING/BATCH PLANT AREA FOR REVIEW BY THE ENGINEER, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.</p> <p>D. PARTIAL PAYMENT FOR THIS ITEM SHALL BE BASED ON THE ESTIMATED PERCENTAGE OF WORK COMPLETED AT THE TIME OF SUBMITTAL OF THE PAY APPLICATION.</p> <p>E. FINAL PAYMENT WILL BE MADE AFTER ALL WORK ON THE PROJECT REQUIRED BY THE CONTRACT HAS BEEN COMPLETED, 90% OR GREATER VEGETATED COVERAGE HAS BEEN ACHIEVED, AND NOTICE OF DISCONTINUATION HAS BEEN FILED.</p>
73	C-105	<p>MOBILIZATION AND MISCELLANEOUS</p> <p>A. REFER TO SPECIFICATION C-105 FOR MOBILIZATION AND MISCELLANEOUS BID ITEM REQUIREMENTS.</p> <p>B. MOBILIZATION IS LIMITED TO 10% OF THE TOTAL COST OF THE PROJECT, REFER TO SPECIFICATION C-105 FOR PAYMENT SCHEDULE.</p>
74	C-105	<p>TRAFFIC CONTROL AND SECURITY</p> <p>A. REFER TO SPECIFICATION C-105 FOR TRAFFIC CONTROL AND SECURITY BID ITEM REQUIREMENTS.</p> <p>B. THIS BID ITEM INCLUDES COMPENSATION FOR ALL SECURITY ITEMS REQUIRED FOR CONSTRUCTION. THIS INCLUDES BUT IS NOT LIMITED TO EMPLOYEE BADGING, BACKGROUND CHECKS, GATE GUARDS, ETC. THE AIRPORT BADGING FEE IS \$60 PER INDIVIDUAL.</p> <p>C. ALL TRAFFIC CONTROL AS SHOWN ON THE J-SHEETS SHALL BE INCLUDED WITH THIS ITEM. THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO, LOW-PROFILE BARRICADES, 48" CHANNELIZERS, LIGHTED RUNWAY CLOSURE 'X'S, TAXIWAY CLOSURE 'X'S, ORANGE CONSTRUCTION SAFETY FENCE, EDGE LIGHT COVERS, AND MAINTENANCE OF ALL TRAFFIC CONTROL, AMONG OTHERS.</p> <p>D. REFER TO SPECIFICATION C-105 FOR PAYMENT SCHEDULE.</p>
75	C-105	<p>CONSTRUCTION ACCESS</p> <p>A. REFER TO SPECIFICATION C-105 FOR CONSTRUCTION ACCESS BID ITEM REQUIREMENTS.</p> <p>B. ITEM INCLUDES ALL MODIFICATIONS TO PROJECT STAGING/BATCH PLANT AREA AS DEEMED NECESSARY BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THIS ITEM ALSO INCLUDES ANY FINAL RESTORATION OR CLEAN-UP OF THE STAGING AREA AS DEEMED NECESSARY BY THE CONTRACTOR/OWNER UPON COMPLETION OF CONSTRUCTION.</p> <p>C. THIS ITEM INCLUDES THE INSTALLATION, REMOVAL, AND RESTORATION OF THE 20' WIDE STABILIZED CONSTRUCTION ENTRANCES REQUIRED FOR CONSTRUCTION SITE ACCESS. REFER TO J-SHEETS FOR 20' WIDE STABILIZED CONSTRUCTION ENTRANCE LOCATIONS.</p>
76	C-105	<p>ENGINEER/RPR FIELD OFFICE</p> <p>A. CONTRACTOR SHALL PROVIDE A DEDICATED SPACE FOR THE USE OF THE FIELD RPR AND INSPECTORS, AS A FIELD OFFICE FOR THE DURATION OF THE PROJECT. REFER TO SPECIFICATION C-105 AND SUPPLEMENTAL SPECIFICATION IOWA DOT 2520 FOR FIELD OFFICE REQUIREMENTS.</p>
77	GP-50	<p>CONSTRUCTION SURVEY</p> <p>A. REFER TO GENERAL PROVISIONS 50-07 FOR THE REQUIREMENTS OF THIS BID ITEM. CONTRACTOR SHALL NOTE GRADE TOLERANCES WITHIN THE INDIVIDUAL SPECIFICATION SECTIONS, WITH PARTICULAR ATTENTION TO THOSE INCLUDED IN THE PAVEMENT SECTION. GRADE CHECKS WILL BE PERFORMED BY THE ENGINEER TO VERIFY CONTRACTOR'S CONSTRUCTION IS WITHIN SAID TOLERANCES LISTED IN THE INDIVIDUAL TECHNICAL SPECIFICATIONS.</p>

NOTES

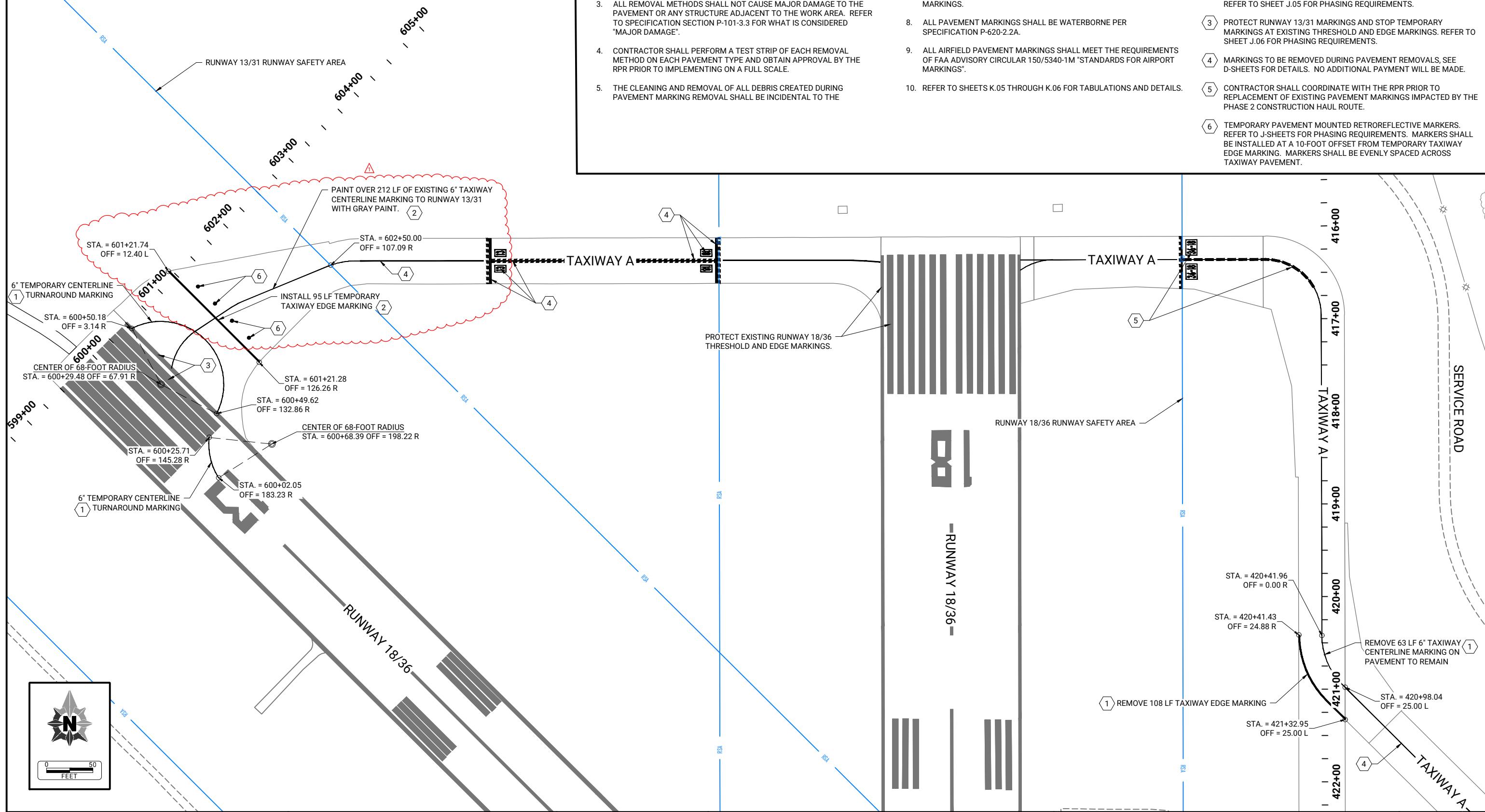
1. ALL PAVEMENT MARKING REMOVALS ON ASPHALT PAVEMENT SHALL BE ACCOMPLISHED UTILIZING COLD MILLING OR ROTARY GRINDING.
2. ALL PAVEMENT MARKING REMOVALS ON PCC PAVEMENT SHALL BE ACCOMPLISHED UTILIZING HIGH PRESSURE WATER BLASTER.
3. ALL REMOVAL METHODS SHALL NOT CAUSE MAJOR DAMAGE TO THE PAVEMENT OR ANY STRUCTURE ADJACENT TO THE WORK AREA. REFER TO SPECIFICATION SECTION P-101-3.3 FOR WHAT IS CONSIDERED "MAJOR DAMAGE".
4. CONTRACTOR SHALL PERFORM A TEST STRIP OF EACH REMOVAL METHOD ON EACH PAVEMENT TYPE AND OBTAIN APPROVAL BY THE RPR PRIOR TO IMPLEMENTING ON A FULL SCALE.
5. THE CLEANING AND REMOVAL OF ALL DEBRIS CREATED DURING PAVEMENT MARKING REMOVAL SHALL BE INCIDENTAL TO THE

NOTES (CONTINUED)

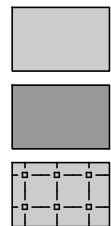
6. AIRFIELD PAVEMENT MARKING REMOVAL BID ITEM.
7. TYPE I BEADS AND 6 INCH BLACK OUTLINE REQUIRED FOR TEMPORARY 6 INCH TAXIWAY/TAXILANE CENTERLINE MARKINGS.
8. INTERRUPT ALL 6" TAXIWAY CENTERLINE MARKINGS AT ALL RUNWAY MARKINGS.
9. ALL PAVEMENT MARKINGS SHALL BE WATERBORNE PER SPECIFICATION P-620-2.2A.
10. ALL AIRFIELD PAVEMENT MARKINGS SHALL MEET THE REQUIREMENTS OF FAA ADVISORY CIRCULAR 150/5340-1M "STANDARDS FOR AIRPORT MARKINGS".
11. REFER TO SHEETS K.05 THROUGH K.06 FOR TABULATIONS AND DETAILS.

REFERENCED NOTES

1. INSTALL TEMPORARY MARKING AT THE BEGINNING OF PHASE 1 AND REMOVE EXISTING MARKINGS DURING PHASE 1. REFER TO SHEET J.04 FOR PHASING REQUIREMENTS.
2. PAINT OVER EXISTING 6" TAXIWAY CENTERLINE MARKING AND INSTALL TEMPORARY EDGE MARKING AT THE BEGINNING OF PHASE 2. REFER TO SHEET J.05 FOR PHASING REQUIREMENTS.
3. PROTECT RUNWAY 13/31 MARKINGS AND STOP TEMPORARY MARKINGS AT EXISTING THRESHOLD AND EDGE MARKINGS. REFER TO SHEET J.06 FOR PHASING REQUIREMENTS.
4. MARKINGS TO BE REMOVED DURING PAVEMENT REMOVALS, SEE D-SHEETS FOR DETAILS. NO ADDITIONAL PAYMENT WILL BE MADE.
5. CONTRACTOR SHALL COORDINATE WITH THE RPR PRIOR TO REPLACEMENT OF EXISTING PAVEMENT MARKINGS IMPACTED BY THE PHASE 2 CONSTRUCTION HAUL ROUTE.
6. TEMPORARY PAVEMENT MOUNTED RETROREFLECTIVE MARKERS. REFER TO J-SHEETS FOR PHASING REQUIREMENTS. MARKERS SHALL BE INSTALLED AT A 10-FOOT OFFSET FROM TEMPORARY TAXIWAY EDGE MARKING. MARKERS SHALL BE EVENLY SPACED ACROSS TAXIWAY PAVEMENT.



LEGEND



PROPOSED 13.5" MAINLINE PCC PAVEMENT

PROPOSED 13.5" CONNECTOR PAVEMENT

REINFORCED PCC PAVEMENT

A = THICKENED EDGE ISOLATION JOINT

A-1 = REINFORCED ISOLATION JOINT

C = DOWELED CONTRACTION JOINT

E = DOWELED CONSTRUCTION JOINT

NOTES

1. LONGITUDINAL JOINT SHALL BE DOWELED CONSTRUCTION JOINT. CONTRACTOR SHALL NOT PAVE WIDTHS GREATER THAN THE TYPICAL 12.5 FEET, CREATING A LONGITUDINAL CONTRACTION JOINT.
2. JOINT TYPES SHOWN ON THE PAVING PLAN ARE CONTINUOUS ACROSS THE ENTIRE WIDTH/LENGTH OF THE JOINT LINE UNLESS SHOWN OTHERWISE.

TAXIWAY A

