BIDDING AND CONTRACT DOCUMENTS ADDENDUM NUMBER ONE STATE PROJECT NO. 20-054A-1

DATE: July 1, 2022

WASHINGTON REGIONAL AIRPORT

CRAWFORD, MURPHY, TILLY, INC. ONE MEMORIAL DRIVE, SUITE 500 SAINT LOUIS, MISSOURI 63102

- TO: ALL PLANHOLDERS AND POTENTIAL BIDDERS
- SUBJECT: ADDENDUM NUMBER ONE TO THE BIDDING DOCUMENTS FOR: BASE BID: CONSTRUCT 8-UNIT T-HANGAR AND ASSOCIATED PAVEMENTS ADDITIVE ALTERNATE NO. 1: CONSTRUCT 10-UNIT T-HANGAR AND ASSOCIATED PAVEMENTS ADDITIVE ALTERNATE NO. 2: CONSTRUCT 12-UNIT T-HANGAR AND ASSOCIATED PAVEMENTS

This addendum forms a part of the bidding and contract documents, and modifies the original bidding documents dated June 8, 2022. This addendum must be signed on the last page and included with the submitted Bid Package. An acknowledgement sheet is also attached. This must be signed and returned to Crawford, Murphy, & Tilly, Inc via fax or e-mail by **July 8, 2022**. FAILURE TO NOT RECOGNIZE THE ADDENDUM ON THE BID FORM MAY SUBJECT THE BIDDER TO DISQUALIFICATION.

The Contract Documents are revised as follows:

CONTRACT PROPOSAL

Page 2 – Section 1, Contract Time

DELETE – "The owner has established a contract performance time of Two Hundred and Twenty (220) calendar days from the date of the Notice-to-Proceed.".

ADD – "The owner has established a contract performance time of Three Hundred and Thirty (330) calendar days from the date of the Notice-to-Proceed.".

Page 40 – Section 80-08 FAILURE TO COMPLETE ON TIME

DELETE table in Section 80-08

Liquidated Damages Cost	Allowed Construction Time
\$750 per calendar day	220 Calendar Days (Phases 1&2)

ADD table in Section 80-08

Liquidated Damages Cost	Allowed Construction Time
\$750 per calendar day	330 Calendar Days (Phases 1&2)

ITEM P-152 AGGREGATE BASE COURSE, Section 152-2.9 Proof Rolling

ADD – "The existing base that is currently in place at the existing project site shall be proof-rolled in the presence of the engineer and Geotech before placement of the P-208 aggregate base."

ITEM P-208 AGGREGATE BASE COURSE, Section 208-5.1, Basis of Payment

REMOVE – "Item P-208-5.1	6" Crushed Aggregate Base Course – per square yard"

ADD – "Item P-208-5.1 12" Crushed Aggregate Base Course – per square yard"

ITEM P-501 PORTLAND CEMENT CONCRETE (PCC) PAVEMENT, Section 501-8.1, Payment, Paragraph e. Payment

REMOVE – "Item P-501-8.1	6.5" Concrete Pavement – per square yard"
ADD – "Item P-501-8.1	5" Concrete Pavement – per square yard
Item P-501-8.2	6.5" Concrete Pavement – per square yard"

ITEM 13000 – T-HANGAR BUILDINGS, Section 1.02 DESIGN, paragraph C.

REMOVE –

"The hangars shall meet or exceed, but not limited to, the following codes:

2018 International Building Code and Amendments
2018 International Mechanical Code and Amendments
2018 International Fire Code and Amendments
2017 NFPA 70: National Electric Code and Amendments
2018 NFPA 101: Life Safety Code
2016 NFPA 409: Standard on Aircraft Hangars"

ADD –

"The hangars shall meet or exceed, but not limited to, the following codes:

2015 International Building Code and Amendments 2015 International Mechanical Code and Amendments 2015 International Fire Code and Amendments 2014 NFPA 70: National Electric Code and Amendments 2012 NFPA 409: Standard on Aircraft Hangars"

ITEM 13000 – T-HANGAR BUILDINGS, Section 1.02 DESIGN, paragraph D.

REMOVE – "Based on the 2018 IBC and 2016 NFPA 409, the proposed T-Hangar size of greater than 12,000 s.f. does require an internal fire separation wall."

ADD – "Based on the 2015 IBC and 2012 NFPA 409, the proposed T-Hangar size of greater than 12,000 s.f. does require an internal fire separation wall."

ITEM 13000 – T-HANGAR BUILDINGS, Section 1.09 BUILDING REQUIREMENTS, G. Overhead Hangar Doors

REMOVE – "Each bi-fold door shall be equipped with locks that automatically unlock as the door opens. Upon closing of bi-fold door, these locks shall automatically "pull" the door up tight to the door frame."

ADD – "Each bi-fold door shall be equipped with locks that automatically unlock as the door opens."

ITEM 13000 – T-HANGAR BUILDINGS, Section 1.09 BUILDING REQUIREMENTS, I. Unit Partitions, Paragraph 3.

REMOVE – "A firewall shall be constructed at the wall between the larger 2-unit hangar and the smaller 10-unit hangar. Firewall construction shall conform to applicable codes and shall be constructed with smooth finished and painted surfaces. The firewall shall be rated for 3-hour fire separation."

ADD – "A fire barrier shall be constructed at the wall between the larger 2-unit hangar and the smaller 10unit hangar. Fire barrier construction shall conform to NFPA 409 code for a Type III hangar and all other applicable codes and shall be constructed with smooth finished and painted surfaces. The fire barrier shall be rated for 2-hour fire separation. The fire barrier shall be UL U419 or similar."

ITEM 13000 – T-HANGAR BUILDINGS, Section 1.09 BUILDING REQUIREMENTS, J. Storage Room S1 Pedestrian Door

REMOVE – "Doors shall be 16 Ga. Galvanized steel. Frames shall be 14 Ga. Galvanized steel. Doors and frames shall be painted with color to be chosen by owner."

ADD – ""Doors shall be 24 Ga. Galvanized steel. Frames shall be 16 Ga. Galvanized steel. Doors and frames shall be painted with color to be chosen by owner."

ITEM 13000 – T-HANGAR BUILDINGS, Section 1.11 GUTTERS

DELETE – Delete paragraph 1.11 GUTTERS in its entirety. Gutters have been eliminated from this contract.

Appendix D – Construction Safety and Phasing Plan (CSPP), Tables – Phasing Tables

REMOVE – Sequence Info – Third bullet point: "90 day material procurement period separate from 120 days"

ADD – Sequence Info – Third bullet point: "210 day material procurement period separate from 120 days"

Pages 108-120

REPLACE pages 108-120 with attached pages 108a-120a.

Page 126 – FORM OF CONTRACT AGREEMENT, Article 5 – Contract Time, Second Sentence

DELETE "CONTRACTOR further agrees to complete said work with Two Hundred and Twenty (220) calendar days of the commencement date stated with the Notice to Proceed"

ADD "CONTRACTOR further agrees to complete said work with Three Hundred and Thirty (330) calendar days of the commencement date stated with the Notice to Proceed"

PLANS

Sheet 2 of 37 REPLACE Sheet 2 of 37 with REVISION 1.

PLANS

Sheet 4 of 37 REPLACE Sheet 4 of 37 with REVISION 1.

PLANS

Sheet 5 of 37

REPLACE Sheet 5 of 37 with REVISION 1.

PLANS

Sheet 6 of 37 REPLACE Sheet 6 of 37 with REVISION 1.

PLANS

Sheet 9 of 37 REPLACE Sheet 9 of 37 with REVISION 1.

PLANS Sheet 10 of 37 REPLACE Sheet 10 of 37 with REVISION 1.

PLANS

Sheet 22 of 37 REPLACE Sheet 22 of 37 with REVISION 1.

PLANS

Sheet 23 of 37 TYP. SECTION HANGAR CONCRETE SLAB REMOVE "NEW 4" AGGREGATE BASE COURSE (P-208)" REPLACE WITH "NEW 12" AGGREGATE BASE COURSE (P-208)"

PLANS

Sheet 25 of 37

REPLACE Sheet 25 of 37 with REVISION 1.

PLANS

Sheet 29 of 37 REPLACE Sheet 29 of 37 with REVISION 1.

<u>PLANS</u>

Sheet 30 of 37 REPLACE Sheet 30 of 37 with REVISION 1.

PLANS

Sheet 31-37 of 37 REPLACE Sheet 31-37 of 37 with REVISION 1.

CLARIFICATION:

1. Phase 1A calendar days (Building Procurement) have been increased to 210 Calendar Days. The total amount of Calendar Days for the project is now 330 days.

2. "Early Green Soft Cut Type" control joint sawing in the dry will be allowed.

3. Leftover topsoil is to be spread out over the soil borrow area or as directed by the engineer.

4. The geotechnical report is available by request.

5. Over-excavation of the existing base rock at the project site for building foundations is to be considered incidental to the building pay item.

6. Q1: In looking at the "borrow Materials" in the borrow pile I can see a lot of unsized concrete rubble, due to the size and nature of this materials has the geotech signed off on using the unclassified

materials for fill beneath the building pad. See pictures below. If we cannot find enough 4" and under materials will be responsible for importing these additional materials based on specs listed below.

Spec says materials larger than 4" will not be allowed in the top 12" of subgrade.

A: Borrow material from the soil borrow area shall be used to meet the requirements of the specifications for material in the top 12".

7. If only the Base Bid or AA#1 is chosen, the electrical and layout for the end units will match the layout and electrical as shown in Unit 11 and Storage Unit S1.

8. Q2: Do the interior of units 2, 4 and 11 need to be clear span or can we leave in the standard roof support column that is normally at the corner of the removed partition walls? A: The standard roof support column can remain in place.

9. Bi-fold door frames may be made from proprietary galvanized sections, not steel tubing.

10. White storage rooms doors are acceptable

11. Gutters have been removed from the project.

12. Sheet 23, A-102 – Any low plastic soil encountered will need to be replaced with limestone incidental to the project. The geotechnical report does not indicate any low plastic soil, but it will need to be replaced per this detail if encountered in the field.

13. Spill curb will be required as shown on Sheet 23, A-102.

14. All CSPP sheets are to be considered amended with new information outlined in this addendum.

CRAWFORD, MURPHY & TILLY, INC. This Addendum consists of <u>5</u> pages plus <u>17</u> revised plan sheets, a revised Proposal Form and a fax transmittal sheet.

Signed (Contractor) Date

Contractor to sign and date this Addendum #1 to acknowledge receipt. This signed Addendum must be included with the submitted Bid Package.

FAX TRASMITTAL

To: Crawford, Murphy & Tilly, Inc Attention: <u>Tom Morris</u> Re: Addendum #1 Fax 314.436.0723

From: (name)

(company)

Date:

To verify that all contractors are in receipt of this addendum, Contractors are asked to sign and date this acknowledgement sheet. The Contractor should fax or mail to Crawford, Murphy, & Tilly, Inc. at the number listed below by **July 8**, **2022**.

Crawford, Murphy, & Tilly, Inc. One Memorial Drive, Suite 500 Saint Louis, Missouri 63102

Fax: (314) 436-0723 Phone: (314) 436-5500

BY: CRAWFORD, MURPHY, & TILLY, INC.

PROPOSAL FORM (108a-120a)

PROPOSAL FORM CITY OF WASHINGTON

State Block Grant Project No. 20-054A-1

TO: Public Works Director

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

BASE BID: CONSTRUCT 8-UNIT T-HANGAR AND ASSOCIATED PAVEMENTS ADDITIVE ALTERNATE NO. 1: CONSTRUCT 10-UNIT T-HANGAR AND ASSOCIATED PAVEMENTS ADDITIVE ALTERNATE NO. 2: CONSTRUCT 12-UNIT T-HANGAR AND ASSOCIATED PAVEMENTS

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:

BASE BID								
BID ITEM	FAA or MoDOT SPEC.	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		EXTENSIC	DN	
				DOLLARS	CTS	DOLLARS	CTS	
1	C-100-5.1	CONTRACTOR QUALITY CONTROL PLAN	1 LS					
2	C-102-5.1	INSTALLATION AND REMOVAL OF SILT FENCE	900 LF					
3	C-102-5.2	DITCH CHECKS	5 EA					
4	C-102-5.3	INLET PROTECTION	3 EA					
5	C-105-5.1	MOBILIZATION (10% LIMIT) - BASE BID	1 LS					
6	P-152-4.1	UNCLASSIFIED EXCAVATION	95 CY					
7	P-152-4.2	EMBANKMENT	1,235 CY					
8	P-208-5.1	12" CRUSHED AGGREGATE BASE COURSE	3,225 SY					
9	P-501-8.1	5" CONCRETE PAVEMENT	2,020 SY					
10	P-501-8.2	6.5" CONCRETE PAVEMENT	1,055 SY					
11	P-620-5.1	AIRPORT PAVEMENT MARKING, YELLOW WITH REFLECTIVE MEDIA	650 SF					
12	P-620-5.2	AIRPORT PAVEMENT MARKING, BLACK	1,060 SF					

10	D 600 5 0						
13	P-620-5.3	AIRPORT TEMPORARY	225 SF				
	D (20 5 4	PAVEMENT MARKING					
14	P-620-5.4	AIRPORT PAVEMENT	715 SF				
1.7	D 701 5 1	MARKING REMOVAL					
15	D-701-5.1	18" REINFORCED	20015				
		CONCRETE PIPE CLASS	368 LF				
16	D 701 5 2	IV 18" REINFORCED	1 5 4				
16	D-701-5.2	CONCRETE PIPE	1 EA				
		FLARED END SECTION					
17	D-751-5.1	PRECAST DROP INLET	1 EA				
17	D-731-3.1	IN-TURF (S-1 TOP) 5'x3'	I EA				
18	D-751-5.2	TYPE II PRECAST DROP	2 EA				
18	D-731-3.2	INLET IN-PAVEMENT	2 EA				
10	T-901-5.1	SEEDING	0740				
19	T-901-3.1 T-904-5.1	SODDING	0.7 AC				
20			160 SY				
21	T-908-5.1	MULCHING	3,200 SY				
22	L-108-5.1	AIRPORT	300 LF				
		UNDERGROUND					
		CABLE (1/C #8, L-824,					
	L 100 5 0	TYPE C, 5KV) IN UD	1.050 1.5				
23	L-108-5.2	AIRPORT	1,050 LF				
		UNDERGROUND					
		CABLE (#4/0, 600V,					
24	L-108-5.3	XLP-USE) COUNTERPOISE NO. 6	410 1 E				
24	L-108-5.3		410 LF				
		AWG SOLID, BARE COPPER					
		COPPER COUNTERPOISE WIRE					
25	L-110-5.1	3" SCH-80 PVC	350 LF				
25	L-110-3.1	CONDUIT	550 LF				
26	L-110-5.2	2-WAY CONCRETE	65 LF				
20	L-110-3.2	ENCASED DUCT	0.5 LF				
27	L-110-5.3	4-WAY CONCRETE	45 LF				
21	L-110-3.3	ENCASED DUCT	43 LF				
28	SP-2-5.1	RETROREFLECTIVE	6 EA				
20	51-2-3.1	MARKERS	0 EA				
29	13000.1.1	CONSTRUCT PRE-	1 LS				
29	15000.1.1 3A	ENGINEERED 8-UNIT	1 L3				
	54	NESTED T-HANGAR					
	ТО	TAL BID (Base Bid)					

	ADDITIVE ALTERNATE 1								
BID ITEM	FAA or MoDOT SPEC.	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		EXTENSION			
				DOLLARS	CTS	DOLLARS	CTS		
30	AA1-C- 102-5.3	INLET PROTECTION	1 EA						
31	AA1-C- 105-5.2	MOBILIZATION - ADD ALT 1	1 LS						

32	AA1-P- 152-4.2	EMBANKMENT	330 CY				
33	AA1-P- 208-5.1	12" CRUSHED AGGREGATE BASE COURSE	600 SY				
34	AA1-P- 501-8.1	5" CONCRETE PAVEMENT	335 SY				
35	AA1-9- 501-8.2	6.5" CONCRETE PAVEMENT	225 SY				
36	AA1-P- 620-5.1	AIRPORT PAVEMENT MARKING, YELLOW WITH REFLECTIVE MEDIA	25 SF				
37	AA1-P- 620-5.2	AIRPORT PAVEMENT MARKING, BLACK	50 SF				
38	AA1-D- 701-5.1	18" REINFORCED CONCRETE PIPE CLASS IV	72 LF				
39	AA1-D- 751-5.2	TYPE II PRECAST DROP INLET IN-PAVEMENT	1 EA				
40	AA1-T- 901-5.1	SEEDING	0.1 AC				
41	AA1-T- 904-5.1	SODDING	15 SY				
42	AA1-T- 908-5.1	MULCHING	225 SY				
43	AA1- 13000.1.1 3B	CONSTRUCT ADDITIONAL 2-UNIT NESTED T-HANGAR	1 LS				
	TOTAL BID (Additive Alternate 1)						

	ADDITIVE ALTERNATE 2								
BID ITEM	FAA or MoDOT SPEC.	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		EXTENSION			
				DOLLARS	CTS	DOLLARS	CTS		
44	AA2-C- 105-5.3	MOBILIZATION - ADD ALT 2	1 LS						
45	AA2-P- 152-4.2	EMBANKMENT	280 CY						
46	AA2-P- 208-5.1	12" CRUSHED AGGREGATE BASE COURSE	450 SY						
47	AA2-P- 501-8.1	5" CONCRETE PAVEMENT	250 SY						
48	AA2-P- 501-8.2	6.5" CONCRETE PAVEMENT	190 SY						

49	AA2-P- 620-5.1	AIRPORT PAVEMENT MARKING, YELLOW WITH REFLECTIVE MEDIA	25 SF				
50	AA2-P- 620-5.2	AIRPORT PAVEMENT MARKING, BLACK	50 SF				
51	AA2-D- 701-5.1	18" REINFORCED CONCRETE PIPE CLASS IV	51 LF				
52	AA2-T- 901-5.1	SEEDING	0.1 AC				
53	AA2-T- 904-5.1	SODDING	10 SY				
54	AA2-T- 908-5.1	MULCHING	185 SY				
55	AA2- 13000.1.1 3B	CONSTRUCT ADDITIONAL 2-UNIT NESTED T-HANGAR	1 LS				
	TOTAL BID (Additive Alternate 2)						

ACKNOWLEDGEMENTS BY BIDDER

- **a.** By submittal of a proposal, the BIDDER acknowledges and accepts that the quantities established by the OWNER are an approximate estimate of the quantities required to fully complete the Project and that the estimated quantities are principally intended to serve as a basis for evaluation of bids. The BIDDER further acknowledges and accepts that payment under this contract will be made only for actual quantities and that quantities will vary in accordance with the General Provisions subsection entitled "Alteration of Work and Quantities".
- **b.** The BIDDER acknowledges and accepts that the Bid Documents are comprised of the documents identified within the General Provisions. The BIDDER further acknowledges that each the individual documents that comprise the Bid Documents are complementary to one another and together establishes the complete terms, conditions and obligations of the successful BIDDER.
- **c.** As evidence of good faith in submitting this proposal, the undersigned encloses a bid guaranty in the form of a certified check, cashier's check or bid bond in the amount of 5% of the bid price. The BIDDER acknowledges and accepts that refusal or failure to accept award and execute a contract within the terms and conditions established herein will result in forfeiture of the bid guaranty to the owner as a liquidated damage.
- **d.** The BIDDER acknowledges and accepts the OWNER'S right to reject any or all bids.
- e. The BIDDER acknowledges and accepts the OWNER'S right to hold all Proposals for purposes of review and evaluation and not issue a notice of award for a period not to exceed **Two Hundred and Twenty (220)** calendar days from the stated date for receipt of bids.
- **f.** The undersigned agrees that upon written notice of award of contract, he or she will execute the contract within thirty (30) days of the notice of award, and furthermore, and provide executed payment and performance bonds within fifteen (15) days from the date of contract execution. The undersigned accepts that failure to execute the contract and provide the required bonds within the stated timeframe shall result in forfeiture of the bid guaranty to the owner as a liquidated damage.
- **g.** Time of Performance: By submittal of this proposal, the undersigned acknowledges and agrees to commence work within ten (10) calendar days of the date specified in the written "Notice to Proceed" as issued by the

OWNER. The undersigned further agrees to complete the Project within **Two Hundred and Twenty (220)** Calendar days from the commencement date specified in the Notice to Proceed.

- **h.** The undersigned acknowledges and accepts that for each and every Calendar day the project remains incomplete beyond the contract time of performance, the Contractor shall pay the non-penal amount of **seven hundred fifty dollars (\$750.00)** per Calendar day as a liquidated damage to the OWNER.
- i. The undersigned prime contractor, if not a MoDOT certified DBE, hereby assures that they will subcontract 0% (zero) percent of the dollar value of the prime contract to DBE firms or make good faith efforts to meet the DBE contract goal. In addition, the prime contractor will include the DBE clauses (see Supplementary Provision No. 6 of the Federal and State Provisions) required by the DBE Program adopted by MoDOT and the Sponsor in all contracts and subcontracts relating to this project. The undersigned will complete the DBE Participation information included herein when a DBE goal has been established, including a demonstration of good faith efforts if the DBE goal is not met. If the undersigned prime contractor is a MoDOT certified DBE firm, then the prime contractor must perform at least thirty percent (30%) of the total contract value work with its own forces, and will receive DBE credit for all work which the prime contractor and any other MoDOT certified DBE firm performs directly.
- **j.** The BIDDER, by submission of a proposal, acknowledges that award of this contract is subject to the provisions of the Davis-Bacon Act and the Missouri Prevailing Wage Law. The BIDDER accepts the requirement to pay prevailing wages for each classification and type of worker as established in the attached wage rate determinations as issued by the United States Department of Labor and the Missouri Division of Labor Standards. The BIDDER further acknowledges and accepts their requirement to incorporate the provision to pay the established prevailing wages in every subcontract agreement entered into by the Bidder under this project. The highest rate between the two (Federal and State) for each job classification shall be considered the prevailing wage.
- **k.** Compliance Reports (41 CFR Part 60-1.7): Within 30 days after award of this contract, the Contractor/Subcontractor shall file a compliance report (Standard Form 100) if s/he has not submitted a complete compliance report within 12 months preceding the date of award. This report is required if the Contractor/Subcontractor meets all of the following conditions:
 - 1. Contractors/Subcontractors are not exempt based on 41 CFR 60-1,5.
 - **2.** Has 50 or more employees.
 - 3. Is a prime contractor or first tier subcontractor.
 - 4. There is a contract, subcontract, or purchase order amounting to \$50,000 or more
- **I.** The undersigned acknowledges receipt of the following addenda:

Addendum No, dated	Date Received
Addendum No, dated	Date Received

REPRESENTATIONS BY BIDDER

By submittal of a proposal (bid), the BIDDER represents the following:

- a. The BIDDER has read and thoroughly examined the bid documents, including all authorized addenda.
- **b.** The BIDDER has a complete understanding of the terms and conditions required for the satisfactory performance of project work.

- **c.** The BIDDER has fully informed themselves of the project site, the project site conditions and the surrounding area.
- **d.** The BIDDER has familiarized themselves with the requirements of working on an operating airport and understands the conditions that may in any manner affect cost, progress or performance of the work.
- e. The BIDDER has correlated their observations with that of the project documents.
- **f.** The BIDDER has found no errors, conflicts, ambiguities or omissions in the project documents, except as previously submitted in writing to the owner that would affect cost, progress or performance of the work.
- **g.** The BIDDER is familiar with all applicable Federal, State and local laws, rules and regulations pertaining to execution of the contract and the project work.
- **h.** The BIDDER has complied with all requirements of these instructions and the associated project documents.

CERTIFICATIONS BY BIDDER

a. The undersigned hereby declares and certifies that the only parties interested in this proposal are named herein and that this proposal is made without collusion with any other person, firm or corporation. The undersigned further certifies that no member, officer or agent of OWNER'S has direct or indirect financial interest in this proposal.

b. Certification of Non-Segregated Facilities (41 CFR Part 60-1.8)

The BIDDER, as a potential federally-assisted construction contractor, certifies that it does not maintain or provide, for its employees, any segregated facilities at any of its establishments and that it does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The BIDDER certifies that it will not maintain or provide, for its employees, segregated facilities at any of its establishments and that it will not permit its employees to perform their services at any location under its control, where segregated facilities are maintained. The BIDDER certifies that it will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Bidder agrees that a breach of this certification is a violation of the Equal Opportunity Clause, which is to be incorporated in the contract.

As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms, and washrooms, restaurants and other eating areas, timeclocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated on the basis of race, color, religion, or national origin because of habit, local custom, or any other reason. The Bidder agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause and that it will retain such certifications in its files.

c. Trade Restriction Certification (49 U.S.C. § 50104, 49 CFR Part 30)

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

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

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

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

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

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

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

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

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

2. Certification of Offeror/Bidder Regarding Debarment (2 CFR Part 180 (Subpart C), 2 CFR Part 1200, DOT Order 4200.5)

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

3. Certification of Lower Tier Contractors Regarding Debarment (2 CFR Part 180 (Subpart C), 2 CFR Part 1200, DOT Order 4200.5)

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

- a. Checking the System for Award Management at website: <u>http://sam.gov;</u>
- b. Collecting a certification statement similar to the Certificate Regarding Debarment and Suspension (Bidder or Offeror), above; and
- c. Inserting a clause or condition in the covered transaction with the lower tier contract.

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

f. Certification Regarding Lobbying (31 U.S.C. § 1352, 2 CFR § 200 Appendix II(J), 49 CFR Part 20, Appendix A)

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

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

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

g. Buy American Certification: (Title 49 U.S.C. § 50101)

The bidder agrees to comply with 49 U.S.C. § 50101, which provides that Federal funds may not be obligated unless all steel and manufactured goods used in AIP-funded projects are produced in the United States, unless the FAA has issued a waiver for the product; the product is listed as an Excepted Article, Material Or Supply in Federal Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued List.

A bidder or offeror must submit the appropriate Buy America certification included herein with their bid or offer. The Owner will reject as nonresponsive any bid or offer that does not include a completed Certificate of Buy American Compliance.

Certificate of Buy American Compliance for Manufactured Products (Non-building construction projects, equipment acquisition projects)

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with their proposal. The bidder or offeror must indicate how they intend to comply with 49 USC § 50101 by selecting one of the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (i.e. not both) by inserting a checkmark ($\sqrt{}$) or the letter "X".

- Bidder or offeror hereby certifies that it will comply with 49 USC 50101 by:
- 1 Only installing steel and manufactured products produced in the United States; or
- 2 Installing manufactured products for which the FAA has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
- 3 Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

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

- To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
- To faithfully comply with providing US domestic product.
- To furnish US domestic product for any waiver request that the FAA rejects.
- To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.
 - Bidder or offeror hereby certifies it cannot comply with the 100% Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:
 - To submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that support the type of waiver being requested.
 - That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination which may result in rejection of the proposal.
 - To faithfully comply with providing US domestic products at or above the approved US domestic content percentage as approved by the FAA.
 - To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

Required Documentation

Type 3 Waiver – The cost of the item components and subcomponents produced in the United States is more than 60% of the cost of all components and subcomponents of the "item". The required documentation for a Type 3 waiver is:

- 1. Listing of all product components and subcomponents that are not comprised of 100% US domestic content (excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).
- 2. Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly at place of manufacture.
- 3. Percentage of non-domestic component and subcomponent cost as compared to total "item" component and subcomponent costs, excluding labor costs associated with final assembly and at place of manufacture.

Type 4 Waiver – Total cost of project using US domestic source product exceeds the total project cost using non-domestic product by 25%. The required documentation for a Type 4 waiver is:

- 4. Detailed cost information for total project using US domestic product.
- 5. Detailed cost information for total project using non-domestic product.

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

Date

Signature

Company Name

Title

h. Compliance with the Work Authorization Law (as required by Section 285.530, Revised Statues of Missouri)

For all contracts where the total bid amount is in excess of \$50,000 (local match in excess of \$5,000), the Bidder, by submission of an offer and by signing the Worker Eligibility Verification Affidavit for All Contract Agreements in Excess of \$50,000, certifies that it:

- 1. does not knowingly employ any person who is an unauthorized alien in connection with the contracted services;
- 2. has enrolled and actively participates in a federal work authorization program;

A general contractor or subcontractor of any tier shall not be liable under sections 285.525 to 285.550 when such general contractor or subcontractor contracts with its direct subcontractor who violates subsection 1 of this section, if the contract binding the contractor and subcontractor affirmatively states that the direct subcontractor is not knowingly in violation of subsection 1 of this section and shall not henceforth be in such violation and the contractor or subcontractor receives a sworn affidavit under the penalty of perjury attesting to the fact that the direct subcontractor's employees are lawfully present in the United States.

WORKER ELIGIBILITY VERIFICATION AFFIDAVIT FOR ALL CONTRACT

AGREEMENTS IN EXCESS OF \$50,000 (Local match in excess of \$5,000)

	(101 Joint ventures, a s	separate arruavit is requ	lifed for each busiless	entity)
	`			
STATE OF)			

) 66

COUNTY	Y OF _)							
	On	this		day	of		,	20,	before	me	appeared
				,	persona	ally known to me or	proved to	me on the bas	is of satisf	actory	evidence to
be a perso	on who	ose nam	e is subscrib	ed to th	nis affid	avit, who being by n	ne duly swo	orn, deposed a	s follows:		
]	My na	me is _				, and I	am of sou	nd mind, cap	able of ma	king th	is affidavit,

and personally certify the facts herein stated, as required by Section 285.530, RSMo, to enter into any contract agreement with the state or any of its political subdivisions to perform any job, task, employment, labor, personal services, or any other activity for which compensation is provided, expected, or due, including but not limited to all activities conducted by business entities:

I am the ______ of ______, and I am duly authorized, directed, and/or ______, empowered to act officially and properly on behalf of this business entity.

I hereby affirm and warrant that the aforementioned business entity is enrolled in a federal work authorization program operated by the United States Department of Homeland Security, and the aforementioned business entity shall participate in said program to verify information (employment eligibility) of newly hired employees working in connection to work under the within contract agreement. I have attached documentation to this affidavit to evidence enrollment/participation by the aforementioned business entity in a federal work authorization program, as required by Section 285.530, RSMo.

In addition, I hereby affirm and warrant that the aforementioned business entity does not and shall not knowingly employ, in connection to work under the within contract agreement, any alien who does not have the legal right or authorization under federal law to work in the United States, as defined in 8 U.S.C. § 1324a(h)(3).

I am aware and recognize that, unless certain contract and affidavit conditions are satisfied pursuant to Section 285.530, RSMo, the aforementioned business entity may be held liable under Sections 285.525 though 285.550, RSMo, for subcontractors that knowingly employ or continue to employ any unauthorized alien to work within the state of Missouri.

I acknowledge that I am signing this affidavit as a free act and deed of the aforementioned business entity and not under duress.

(Affiant Signature)

Subscribed and sworn to before me this _____ day of _____, 20____.

(Notary Public)

My commission expires:

[Documentation of enrollment/participation in a federal work authorization program is attached. Acceptable enrollment and participation documentation consists of the following two pages of the E-Verify Memorandum of Understanding: (1) A valid, completed copy of the first page identifying the business entity; and (2) A valid copy of the signature page completed and signed by the business entity, the Social Security Administration, and the Department of Homeland Security – Verification Division.]

DISADVANTAGED BUSINESS ENTERPRISE (DBE) PARTICIPATION

The information shown in this section must be completed when a DBE contract goal has been established. The percentage must equal or exceed the DBE contract goal. If the percentage is below the contract goal, then the bidder must submit complete written documentation of good faith efforts taken to meet the DBE contract goal.

- **a.** The undersigned submits the following list of DBEs to be used in accomplishing the work of this contract. The work, supplies or services, applicable value and percent of total federal contract each DBE is to perform or furnish is as follows:
- **b.** Joint venture with a DBE. The undersigned submits the following list of bid items the DBE prime is responsible for and any items that will be subcontracted out are noted with an asterisk or a similar notation. The work, applicable value and percentage of total federal contract the DBE prime is responsible for are as follows:

(A) DBE Name and Address	(B) Bid Item Number(s) Or Work Performed	(C) Dollar Value of DBE Work **	(D) Percent Applicable to DBE Goal (100%, 60%)	(E) Dollar Amount Applicable to DBE Goal (C x D)	(F) Percent of Total Contract (C / Total Contract Amount)
	\$	%			

******Cannot exceed contract amount for given item of work.

Trucking services credited at 100% if the DBE owns the trucks or is leasing from a DBE firm Merchant wholesalers (supply) are credited at 60%.

Brokered services will only receive credit for fees.

(Please reproduce the above sheet if additional space is needed.)

THIS EXECUTED PROPOSAL FORM MUST BE SUBMITTED IN THE ORIGINAL BOUND PROJECT MANUAL.

SIGNATURE OF BIDDER

The undersigned states that the correct LEGAL NAME AND ADDRESS of (1) the individual bidder, (2) each partner or joint venturer (whether individuals or corporations, and whether doing business under a fictitious name), or (3) the corporation (with the state in which it is incorporated) are shown below; that (if not signing with the intention to bind themselves to become responsible and sole bidder) they are the agent of, and they are signing and executing this (as indicated in the proper spaces below) as the bid of a

() sole individual	() partnership	() joint	venture
() corporation, incorporated under	the laws of state of _		·
Executed by bidder this	day of _		20
Name of individual, all partners or joint venturers:	Ad	ldress of each:	
doing business under the name of:		ldress of principal pl ssouri:	ace of business in
(If using a fictitious name, show this above in addition to legal names)	s name		
(If a corporation, show its name abo	ve)		
ATTEST: (SEAL)			
(Signature) Secr	retary (Si	gnature)	(Title)
Please print name	Ple	ease print name	

NOTE: If bidder is doing business under a fictitious name, the bid shall be executed in the legal name of the individual partners, joint ventures, or corporation, with the legal address shown, and registration of fictitious name filed with the secretary of state, as required by sections 417.200 to 417.230 RSMo. If the bidder is a corporation not organized under the laws of Missouri, it shall procure a certificate of authority to do business in Missouri, as required by section 351.572 et seq RSMo.

Base Bid: Construct 8-Unit T-Hangar and Assoc. Pvmnts AA#1: Construct 10-Unit T-Hangar and Assoc. Pvmnts AA#2: Construct 12-Unit T-Hangar and Assoc. Pvmnts Addendum 1

REVISED PLAN SHEETS

ITEM #	DESCRIPTION		QUANTITIES
C-100-5.1	CONTRACTOR QUALITY CONTROL PLAN	LS	1
C-102-5.1	INSTALLATION AND REMOVAL OF SILT FENCE	LF	900
C-102-5.2	DITCH CHECKS	EA	5
C-102-5.3	INLET PROTECTION	EA	3
C-105-5.1	MOBILIZATION (10% LIMIT) - BASE BID	LS	1
P-152-4.1	UNCLASSIFIED EXCAVATION	CY	95
P-152-4.2	EMBANKMENT	CY	1,235
P-208-5.1	12" CRUSHED AGGREGATE BASE COURSE	SY	3,225
P-501-8.1	5" CONCRETE PAVEMENT	SY	2,020
P-501-8.2	6.5" CONCRETE PAVEMENT	SY	1,055
P-620-5.1	AIRPORT PAVEMENT MARKING, YELLOW WITH REFLECTIVE MEDIA	SF	650
P-620-5.2	AIRPORT PAVEMENT MARKING, BLACK	SF	1,060
P-620-5.3	AIRPORT TEMPORARY PAVEMENT MARKING	SF	225
P-620-5.4	AIRPORT PAVEMENT MARKING REMOVAL	SF	715
D-701-5.1	18" REINFORCED CONCRETE PIPE CLASS IV	LF	368
D-701-5.2	18" REINFORCED CONCRETE PIPE FLARED END SECTION	EA	1
D-751-5.1	PRECAST DROP INLET IN-TURF (S-1 TOP) 5'x3'	EA	1
D-751-5.2	TYPE II PRECAST DROP INLET IN-PAVEMENT	EA	2
T-901-5.1	SEEDING	AC	0.7
T-904-5.1	SODDING	SY	160
T-908-5.1	MULCHING	SY	3,200
L-108-5.1	AIRPORT UNDERGROUND CABLE (1/C #8, L-824, TYPE C, 5KV) IN UD	LF	300
L-108-5.2	AIRPORT UNDERGROUND CABLE (#4/0, 600V, XLP-USE)	LF	1,050
L-108-5.3	COUNTERPOISE NO. 6 AWG SOLID, BARE COPPER COUNTERPOISE WIRE	LF	410
L-110-5.1	3" SCH-80 PVC CONDUIT	LF	350
L-110-5.2	2-WAY CONCRETE ENCASED DUCT	LF	65
L-110-5.3	4-WAY CONCRETE ENCASED DUCT	LF	45
SP-2-5.1	RETROREFLECTIVE MARKERS	EA	6
13000.1.13A	CONSTRUCT PRE-ENGINEERED 8-UNIT NESTED T-HANGAR	LS	1

ADDITIVE ALTERNATE 1: CONSTRUCT 10-UNIT					
ITEM #	DESCRIPTION				
AA1-C-102-5.3	INLET PROTECTION				
AA1-C-105-5.2	MOBILIZATION - ADD ALT 1				
AA1-P-152-4.2	EMBANKMENT				
AA1-P-208-5.1	12" CRUSHED AGGREGATE BASE COURSE				
AA1-P-501-8.1	5" CONCRETE PAVEMENT				
AA1-P-501-8.2	6.5" CONCRETE PAVEMENT				
AA1-P-620-5.1	AIRPORT PAVEMENT MARKING, YELLOW WITH REFLECTIVE MEDIA				
AA1-P-620-5.2	AIRPORT PAVEMENT MARKING, BLACK				
AA1-D-701-5.1	18" REINFORCED CONCRETE PIPE CLASS IV				
AA1-D-751-5.2	TYPE II PRECAST DROP INLET IN-PAVEMENT				
AA1-T-901-5.1	SEEDING				
AA1-T-904-5.1	SODDING				
AA1-T-908-5.1	MULCHING				
AA1-13000.1.13B	CONSTRUCT ADDITIONAL 2-UNIT NESTED T-HANGAR				

ADDITIVE ALTERNATE 2: CONSTRUCT 12-UNIT				
ITEM #	DESCRIPTION			
AA2-C-105-5.3	MOBILIZATION - ADD ALT 2			
AA2-P-152-4.2	EMBANKMENT			
AA2-P-208-5.1	12" CRUSHED AGGREGATE BASE COURSE			
AA2-P-501-8.1	S" CONCRETE PAVEMENT			
AA2-P-501-8.2	6.5" CONCRETE PAVEMENT			
AA2-P-620-5.1	AIRPORT PAVEMENT MARKING, YELLOW WITH REFLECTIVE MEDIA			
AA2-P-620-5.2	AIRPORT PAVEMENT MARKING, BLACK			
AA2-D-701-5.1	18" REINFORCED CONCRETE PIPE CLASS IV			
AA2-T-901-5.1	SEEDING			
AA2-T-904-5.1	SODDING			
AA2-T-908-5.1	MULCHING			
AA2-13000.1.13B	CONSTRUCT ADDITIONAL 2-UNIT NESTED T-HANGAR			

UNIT	QUANTITIES
EA	1
LS	1
CY	330
SY	600
SY	335
SY	255
SF	25
SF	50
LF	72
EA	1
AC	0.1
SY	15
SY	225
LS	1

	UNIT	QUANTITIES
	LS	1
	CY	280
	SY	450
	SY	250
	SY	190
	SF	25
	SF	50
	LF	51
	AC	0.1
	SY	10
	SY	185
	LS	1







OVERALL

G-100

OF

SHEET

4

٩B	LE	
) N	MAX* ELEVATION (FT)	DESCRIPTION
	25	CONSTRUCTION LIMITS
	25	STAGING AREA
	25	HAUL ROUTE
	25	HAUL ROUTE

POINT TABLE						
Е	ELEVATION	DESCRIPTION				
17"	503	PROPOSED HANGAR				
53"	505	PROPOSED HANGAR				
90"	503	PROPOSED HANGAR				
93"	503	PROPOSED HANGAR				
29"	505	PROPOSED HANGAR				
66"	503	PROPOSED HANGAR				
21"	501	PROPOSED HANGAR				
52"	503	PROPOSED HANGAR				
33"	501	PROPOSED HANGAR				



th: K:WashMOAp/2004-2001-00_T-Hangar/Draw/Sheets/G-100 Construction Activities Plan.











THE COORDINATES PROVIDED FOR THE BUILDING CORNERS ARE BASED ON ERECT-A-TUBE MODEL N51-42 FOR THE 10-UNIT OF THE T-HANGAR AND MODEL N60-48 FOR THE 2-UNIT PORTION OF THE T-HANGAR. THE ACTUAL BUILDING CORNER COORDINATES MAY NEED TO BE ADJUSTED FOR THE MAKE OF PRE-ENGINEERED BUILDING SELECTED BY THE CONTRACTOR THAT MEETS THE MINIMUM REQUIREMENTS AS OUTLINED IN THE PROJECT TECHNICAL SPECIFICATIONS. THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER AT THE TIME THE FINAL COORDINATE LOCATIONS ARE ESTABLISHED IN THE FIELD PRIOR TO POURING THE BUILDING FOUNDATION.



SHEET

22

OF

ELECTRICAL WIRING NOTES

- ALL WIRING METHODS AND ELECTRICAL EQUIPMENT INSTALLATION INSIDE T-HANGARS SHALL 1. COMPLY WITH NFPA 70: NATIONAL ELECTRICAL CODE, ARTICLE 513: AIRCRAFT HANGARS. EXCEPT FOR GROUNDING (EARTHING) AND BONDING AS DETAILED ON THE PLANS, NO CONDUIT, POWER WIRING, ELECTRICAL DEVICES OR ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN CLASS 1. DIVISION 1 OR CLASS 1 DIVISION 2 AREAS IN THE T-HANGAR, AS DEFINED BY NEC ARTICLE 513. FOR EXAMPLE, PER NEC ARTICLE 513, THE ENTIRE AREA OF THE T-HANGAR TO 18" ABOVE THE FLOOR IS A CLASS 1, DIVISION 2 AREA. NO POWER WIRING, ELECTRICAL DEVICES OR EQUIPMENT SHALL BE INSTALLED WITHIN THIS AREA.
- EXCEPT WHERE NOTED OTHERWISE, ALL WIRING INSIDE T-HANGAR BAYS SHALL BE INSTALLED IN 2. ELECTRICAL METALLIC TUBING (EMT). EMT SHALL BE ATTACHED TO WALL STRUCTURAL MEMBERS AND GIRTS AND ROUTED OVERHEAD, ATTACHED TO T-HANGAR ROOF WIDE FLANGE BEAMS AND PURLINS. EXPOSED WIRING OR CORDS SHALL NOT BE PERMITTED. ACCEPTABLE SUBSTITUTES FOR ELECTRICAL METALLIC TUBING (EMT) ARE GALVANIZED RIGID STEEL (GRS) OR ALUMINUM CONDUIT. DEVICE BOXES AND JUNCTION BOXES SHALL BE METALLIC, EXCEPT WHERE NOTED OTHERWISE FOR USE IN GROUNDING (EARTHING) AND BONDING.
- SWITCHES AND RECEPTACLES SHALL BE INSTALLED IN METALLIC DEVICE BOXES. THE DOOR MOTOR OPERATOR SHALL NOT BE PLUGGED INTO A RECEPTACLE, BUT SHALL BE "HARD WIRED" IN CONDUIT. INTERIOR LED LIGHT FIXTURES (F1) SHALL BE ATTACHED TO ROOF WIDE FLANGE BEAMS OR PURLINS.
- 4. ALL RECEPTACLES TO BE MOUNTED 48" AFF.
- ALL EXTERIOR LIGHTING WILL BE CONTROLLED BY ONE PHOTOCELL LOCATED OUTSIDE STORAGE 5. ROOM "S1". SEE PLAN VIEW FOR PHOTOCELL LOCATION.
- ALL CIRCUITS SHALL BE FED FROM POWER PANEL "MDP-1" INSIDE STORAGE ROOM "S1" 6.
- 7. ALL LIGHTING RECEPTACLE, AND DOOR MOTOR OPERATOR CIRCUITS SHALL BE WIRED WITH (2) #12 THWN, (1) #12 GND. CIRCUIT NUMBERS ARE AS SHOWN.
- 8. INSTALL 20A, 1-POLE LIGHTING CONTACTOR WITH H-O-A SELECTOR SWITCH, CONTROLLED BY PHOTOCELL.
- 9. ALL ELECTRICAL PENETRATIONS TO THE FIRE WALL SHALL BE FIRE PROOFED.

I EGEND

	LEGEND		
\mathbb{M}	BIFOLD DOOR MOTOR OPERATOR, 1HP, 1 PHASE, MULTI-VOLTAGE (120/208/240)	PAVEMENT	
\$	TOGGLE SWITCH (INTERIOR LIGHTS)		
\$ ^{cs}	BIFOLD DOOR MOTOR OPERATOR CONTROL STATION (SUPPLIED WITH DOOR)		F1_LP-2 (4)
ф	DUPLEX RECEPTACLE		LP-2
F1	F1 - FEM L48 6000LM IMAFD WD 80CRI 35K OR EQUAL		(2)
F2	F2 - LITHONIA DSXF2 LED P2 40K WFR 120 THK DDBXD, OR EQUIVALENT. FLOOD LIGHTING	LP-2	
\bigotimes	F3 - LITHONIA LHQM LED R WALL MOUNTED EXIT LIGHT	(4)	F1 LP-2
\bigcirc	GROUNDING RECEPTACLE	WP/GF	CI [(4)
Ø	PHOTOCELL		LP-2
	T-HANGAR PANEL BOARD		ЦГ-2 (2)







EARTHWORK SUMMARY							
PAVEMENT SECTIONS	PAVEMENT SECTIONS CUT (CY) FILL (CY)						
	BASE	ADD ALT 1	ADD ALT 2	BASE	ADD ALT 1	ADD ALT 2	
EAST/WEST TAXILANE PAVEMENT AND GRADING	95	0	0	1235	330	280	
T-HANGAR (INCLUDED IN T-HANGAR LUMP SUM)	0	0	0	695	180	190	
TOTALS	95	0	0	1930	510	470	

+1 00 <:\WashMC



Path: K:\WashMOAp\20042001-00_T-Hangar\Draw\Sheets\Cross Sections.c Date: Tuesday, June 28, 2022 4:11:28 PM







Path: K:WashMOAp\20042001-00_T-HangarDraw/Sheets\Cross Sectio Date: Tuesday, June 28, 2022 4:11.31 PM





Path: K:WashMOAp/20042001-00_T-Hangar/DrawiSheets/Cross Sections. Date: Tuesday, June 28, 2022 4:11:36 PM











Path: K:WashMOAp/20042001-00_T-Hangar/DrawiSheets/Cross Sections Date: Tuesday, June 28, 2022 4:11:46 PM





Path: K:WashMOAp\20042001-00_T-HangarlDraw/Sheets\Cross Sections.c Date: Tuesday, June 28, 2022 4:11:51 PM













Path: K:WashMOAp20042001-00__T-HangarlDrawiSheets/Cross Section Date: Tuesday, June 28, 2022 4:12:01 PM

