MIDWEST NATIONAL AIR CENTER
RECONSTRUCT T-HANGAR TAXILANES
14-107B-2
ADDENDUM NO. 1

June 22, 2015

To all Plan Holders:
The following clarifications, changes, additions, and/or deletions are hereby made a part of the Bid Documents for the above named Project, fully and completely as if the same were fully contained within. All other terms, conditions, and specifications of the original Notice to Bidders and Instructions to Bidders remain unchanged.

This addendum must be acknowledged in the space provided on the proposal, in the space below, and submitted with the Bid Documents. Failure to do so may subject Bid Proposers to disqualification.

Pre Bid Meeting & Questions:

a. Prebid Meeting: A prebid meeting was held on June 18, 2015. An overall review of the project was presented to the attendees.

b. The following Pre Bid Meeting attachments are enclosed:
   - Prebid Agenda (4 pages)
   - List of Attendees at the meeting (1 pages)

c. **Clarification:** Bid Opening is at the Old Clay County Courthouse. The building currently says "Administration Building" on it. The address is correct in the Project Manual.

d. **Question:** If a subcontractor (painters) has to mobilize once per phase will there be multiple mobilizations?
   - **Response:** No. There will be one mobilization unit price for each bid Schedule. Multiple trips for each phase in each bid Schedule should be accounted for in the unit price for each bid Schedule. Different unit prices may be used for different bid Schedules since the amount of work varies based upon the bid Schedule awarded.

e. **Question:** Will there be borrow material onsite?
   - **Response:** No. Embankment materials will be Contractor furnished from offsite locations in accordance with P-152.

f. **Question:** Will the Owner retain any asphalt millings?
   - **Response:** No. All materials designated for removal shall be disposed of offsite by the Contractor.

g. **Question:** After removing the pavement markings on the sealed apron, will the pavement need to be re-seal coated before painting back the yellow markings?
    - **Response:** No. The marking removals shall only affect the area which needs to be painted back. If the removals disturb more than the planned 6" wide removal areas, no additional compensation will be made under pavement marking removals. However, the markings are planned to be reinstalled with a 6" black outline on either side of the 6" yellow line (18" wide marking result) to cover up extra removal limits. If the Contractor's removal methods result in disturbed limits wider than the 18" wide marking, the Contractor shall paint the remaining disturbed and unmarked areas with black paint.

Specification Changes:

a. The following specifications/sections have been re-issued and are enclosed:
    - Notice to Bidders (10 pages)
    - Proposal Form (24 pages)
    - Specification P-101 (4 pages)
    - Specification P-152 (6 pages)
    - Specification P-209 (6 pages)
    - Specification D-705 (6 pages)
    - Federal Wage Rates (32 pages)

b. The following General Provision is added to the re-issued **Section 1, Notice to Bidders and Section 4, Supplementary Provision, Part A**:
    - **"TEXTING WHEN DRIVING** (References: Executive Order 13513, and DOT Order 3902.10)
      In accordance with Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving" (10/1/2009) and DOT Order 3902.10 "Text Messaging While Driving" (12/30/2009), FAA encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or sub-grant.

      The Contractor must promote policies and initiatives for employees and other work personnel that decrease crashes by distracted drivers, including policies to ban text messaging while driving. The Contractor must include these policies in each third party subcontract involved on this project."

c. The following excerpts are added to **Section 2, Instructions to Bidders**:
    "**8. BIDDER REPRESENTATIONS.** By submittal of a proposal (Bid), the BIDDER represents the following:
        - The Bidder has read and thoroughly examined the project documents
        - The Bidder has a complete understanding of the terms and conditions required for the satisfactory performance of project work.
        - The Bidder has fully informed itself of the Project site, the Project site conditions and the surrounding area.

- The Bidder has familiarized itself of the requirements of working on an operating airport and understands the site conditions that may in any manner affect cost, progress or performance of the Work.
- The Bidder has correlated its observations with that of the Bid Documents.
- The Bidder has found no errors, conflicts, ambiguities or omissions in the Bid Documents, except as previously submitted in writing to the Owner that would affect cost, progress or performance of the Work.
- 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.
- The Bidder has complied with all requirements of these instructions and the associated Bid documents.

9. BID DOCUMENTS/PROJECT MANUAL. The bid documents are comprised of the following; Notice-to-Bidders, Instructions-to-Bidders, General Provisions, Supplementary Provisions, Technical Specifications, Project Drawings, Proposal Form, Performance and Payment Bonds, Form of Contract Agreement, any authorized addenda issued by the Owner and any document incorporated in whole or in part by reference therein.

All documents comprising the Bid Documents are complementary to one another and together establish the complete terms, conditions and obligations of the successful bidder.

Those individual elements of the Contract Documents that are bound together shall also be referred to as the Project Manual. **THE EXECUTED PROPOSAL FORM MUST BE SUBMITTED IN THE ORIGINAL BOUND PROJECT MANUAL. NO INDIVIDUAL ELEMENTS OF THE PROJECT MANUAL MAY BE REMOVED OR DETACHED.**

Prospective bidders may obtain a copy of the project manual and project drawings from the designated office identified within this Notice-to-Bidders.

10. MODIFICATIONS TO PROJECT DOCUMENTS. Modifications to the project documents may only be made by written addendum issued by the Owner or the Engineer. Verbal explanations, interpretations or comments made by the Owner or Owner's representative shall not be binding. Addenda will be transmitted to all known official plan holders. Each bidder shall certify in the Proposal Form at the time of bid submittal, that they acknowledge receipt of all issued addenda.

11. ERRORS AND DISCREPANCIES IN PROJECT DOCUMENTS. Should Bidder find an error, discrepancy, ambiguity or omission in the project documents prior to submittal of a proposal, the Bidder is obligated to contact the Owner or Engineer with written notice of the error, discrepancy, ambiguity or omission. The written notice shall identify the nature and location of the error, discrepancy, ambiguity or omission. Corrections or modifications to the project documents will only be made by written addendum as prescribed herein. By submittal of a Bid

Proposal, Bidder represents that they have thoroughly reviewed the project documents and that they have not identified any error, discrepancy, ambiguity or omission that would affect cost, progress or performance of the project work.

12. CLARIFICATIONS AND INTERPRETATIONS. A bidder requiring a clarification or interpretation of the project documents shall make a written request to the Owner or Engineer. The Owner or Engineer must receive the written request a minimum of seven (7) calendar days prior to the date of the bid opening.

13. BUY AMERICA PREFERENCE. As a matter of bid responsiveness, Bidder must indicate within their proposal how they intend to comply with the Buy America preferences established by Title 49 USC 50101. The bidder may choose to certify it will comply with Buy America preferences by only installing steel and manufactured products that are 100% made in the United States; or the bidder may choose to certify that they cannot fully comply with Buy America preferences and thus requests a waiver to Buy America preferences.

A bidder that certifies they will meet Buy America preferences by requesting a waiver also agrees to prepare and submit a formal waiver request and the associated component cost calculation if selected by the owner as the bidder with the apparent low bid. The successful bidder must submit their formal waiver request and component cost calculation to the owner within the timeframe prescribed on the Buy America certification.

14. GOOD FAITH EFFORTS (DBE). Bidder must demonstrate that they made good faith efforts to achieve participation with DBE firms. This requires that the bidder show that it took all necessary and reasonable steps to secure participation by certified DBE firms. The owner will not consider mere pro forma efforts as a good faith effort.

Actions constituting evidence of good faith efforts are described in appendix A to 49 CFR Part 26. Such actions include but are not limited to:

- Soliciting DBE participation through all reasonable and available means. This may include public advertisements and phone calls/faxes to known certified DBE firms.
- Consult State Department of Transportation office to obtain a list of certified DBE firms.
- Selecting portions of work that increases the likelihood that DBE firms will be available to participate.
- Providing DBE firms with sufficient information and time to review the project plans and specifications.
- Documenting all contacts with DBE firms. This includes name, address, phone number, date of contact and record of conversation/negotiation."

d. **Clarification:** Consider the line "(This sheet intentionally left blank)" removed from page 125 of the project manual.

Drawing Changes:

a. The following Drawing Sheets have been re-issued and are enclosed:
    i. G001A
    ii. G001B
    iii. G200
    iv. C201 thru C204
    v. C301 thru C304
    vi. C401
    vii. C506
    viii. C601 thru C611

END OF ADDENDUM 1

Joe Moses, P.E.
Project Manager

Enc. Attachments

_____
Name of Firm

_____
Signature of Authorized Person of Above Firm

_____
Title

_____
Date

MEETING AGENDA

Midwest National Air Center
Reconstruct T-hangar Taxilanes
MoDOT No. 14-107B-2
Burns & McDonnell Project Number: 81332
Pre-Bid Meeting 06/18/2015

Roll Call 06/18/2015 10:00 am:

Joe Moses
jmoses@burnsmcd.com
816-349-6627

Tom Dowse
tdowse@burnsmcd.com
816.822.3329

MEETING AGENDA

Date: Thursday, June 18, 2015 – 10:00 AM CT

Location: Airport Terminal Building – Midwest National Air Center
13106 Rhodus Road, Excelsior Springs, MO 64024

Sign-in Sheet: all attendees **MUST** sign in

Introductions:

• Owner	Clay County, Missouri	
	Duane Jackson	Airport Manager / Transportation Manager
	Frank Branom	Airport Operations
• Design	Burns & McDonnell	
	Joe Moses	Project Manager
	Tom Dowse	Civil Engineer

Project Description:
The work consists of reconstruction of the existing T-hangar Taxilanes located north of the existing aircraft apron. Site work includes grading, drainage, airfield paving, and demolition of the existing pavement areas.

Project will be funded by a grant from the Missouri Department of Transportation and Clay County Missouri. The project has delineations of AIP and non-AIP eligible paving. These quantities will be tracked separately as shown in the Proposal Forms. The project is intended to be awarded but may be adjusted or not awarded if sufficient funding is not received. A condition of this project is that certain Federal provisions are included as a part of the contract documents. These requirements are outlined in the project manual.

Please note the provisions of the DBE Program that are a requirement of this project. DBE participation goal established for this project is 6.00%. DBE firms are those certified by MoDOT. Please also note the prevailing wage rate requirements that are a part of this project.

Bidding Documents:
Plans, specifications, and bid forms may be viewed and ordered online at:

- Drexel Technologies (www.drexeltech.com)

Complete sets of Bidding Documents shall be used in preparing bids. The Owner and the Engineer do not recognize or allow reproduction of partial sets. Addenda will be sent ONLY to registered plan holders.

Interpretation of Bid Documents:
Only questions answered by written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect. Any questions are to be submitted in writing to the office of the Engineer. Questions must be received prior to 4:00 PM CST on Monday, June 22,

2015 in order for response to be issued in a timely addendum. Questions received after that time may not be answered.

Bid Information/Opening:
Bid Opening is **2:00 P.M. CT, Monday, June 29, 2015** at the Clay County Courthouse – 3rd Floor Hearing Room, 11 S. Water Street, Liberty, MO 64068. Bids must be submitted by this time and at this place. Bids will be publically opened and read aloud at that time.

See **General Provisions Section 20-02** for **Qualification of Bidders**.

Bid is for the furnishing of all services, labor, materials and equipment for the construction of the project as described in the documents. Project award will be pending receipt of federal funds. Award of contract will be based on the lowest aggregate sum proposal submitted from those bidders that are confirmed as being responsive and responsible.

Bid Forms:
Proposal Forms must be complete and responsive. Submission of a Bid is representation by the Bidder that they have examined the complete bidding documents, made visit to the site for their own observation, have familiarized themselves with existing conditions and the requirements of the project, that they have an understanding of the scope and requirements of the project and that they accept the conditions of the project.

Proposal Forms are located in the back of the project manual. Bids are to be completed and submitted on the forms provided within the bidding documents. All items in the Proposal Forms must be responsive, complete, and signed, including all required certifications and forms.

THE EXECUTED PROPOSAL FORM MUST BE SUBMITTED IN THE ORIGINAL BOUND PROJECT MANUAL. NO INDIVIDUAL ELEMENTS OF THE PROJECT MANUAL MAY BE REMOVED OR DETACHED.

Bid Security:
No bid will be considered unless accompanied by a certified check or cashier's check on any bank or trust company insured by the Federal Deposit Insurance Corporation, payable to **Clay County, Missouri**, for not less than **five (5) percent** of the total amount of the bid, or by a bid bond secured by an approved surety or sureties, payable to the owner, for not less than **five (5) percent** of the total amount of the bid.

Bid Hold:
All proposals submitted in accordance with the instructions presented herein will be subject to evaluation. Bids may be held by Clay County for a period not to exceed 90 calendar days from the date of the bid opening for the purpose of conducting the bid evaluation.

MEETING AGENDA

Project Information and Schedule:
The owner has established a contract performance time of **120 calendar days** if **Schedule 1** (Option 1 or 2) is awarded, **165 calendar days** if **Schedule 2** (Option 1 or 2) is awarded, and **210 calendar days** if **Schedule 3** (Option 1 or 2) is awarded, from the date of the Notice-to-Proceed. All project work shall be substantially completed within the stated timeframe. Funding has been set aside for this project, and must be formally approved and distributed for Contract to be executed.

Liquidated Damages:
The Owner will suffer financial loss if the project is not complete by the time set forth in the contract documents. The bidder agrees, if awarded the contract, to pay to the Owner the sum of One Thousand Five Hundred Dollars and No Cents ($ 1,500.00) as fixed, agreed, and liquidated damages for each calendar day of delay until the Work is Substantially Complete.

Project Staging, Safety and Security:
Safety and security for the construction are the responsibility of the successful Contractor. Requirements are outlined in the CSPP, the project manual, and on the Drawings. Additional coordination will occur at the Pre-construction meeting and will be reviewed at all regularly scheduled project meetings.

The project will be completed in 3-5 phases of work, depending on the schedule awarded, as described on drawing G005. Each phase correlates to a specific taxilane area to be reconstructed. Work shall be completed sequentially in alphabetical order. Work shall not begin on the next phase until the current phase has been completed and reopened.

Please note – this is an active and operating airport. Activities and operations will be ongoing during the construction of this project. Federal, State and Airport Authority rules and laws are in effect at all times. Aircraft and Airport Operations always have the right of way. Emergency and Public Safety vehicle access must be maintained at all times. Debris and trash may cause damage to aircraft - the site will be kept clean and trash containers covered at all times.

Review Documents:
Proposal Forms, Agreements, Technical Specifications, and Drawings are complimentary and the intent of the project is described therein.

Review of Site: Site Tour

Clay County Purchasing Department
Sign-In Sheet for Attendees at Pre-Bid

Date: 6/18/15
RFP # 36-15
Title: Taxilane Reconstruction Project at MNAC

	COMPANY	NAME	TITLE	PHONE #	FAX#	EMAIL
1.	Clay County	Jennifer Rogers	Procurement Officer	816-407-3633	816-407-3601	jrogers @claycountymo.gov
2.	Clay County	Stacy Nickerson	Procurement Officer	816-407-3662	816-407-3641	snickerson@claycountymo.gov
3.	Superior Bowen Asphalt	Mike Morrison		816 921-8200	816 921-8251	mmorrison @ superior bowen.com
4.	KAT Excavation	Kevin Simpson	Project Manager	816-66-8079	816 690 7416	KSimpson @ Katexcavation.com
5.	Musselman & Hall	Kirk Short	PM	816-394-8419		Kshort@mandh.net
6.	~~Clark~~					
7.	McConnell & Associates	Jeff Clark	Project Manager	816-425-9469		j.clark @ mcconnellassociates.org
8.	BMcD	Tom Downe	Civil Engineer	816-822-3329		TDOWNE@ BURNSMCD.COM
9.	BMcD	Joe Moses	Project Manager	816-728-8591		Jmoses@burnsmcd.com
10.	Emery Supp & Sons.	Justin Bobenga	PM	816-221-3500	816-421-9333	justin.bobenga @ emerysupp.com
11.		Duanne Jackson				
12.						
13.						
14.						
15.						

SECTION 1
NOTICE TO BIDDERS

CLAY COUNTY, MISSOURI
MIDWEST NATIONAL AIR CENTER
MoDOT Project No. **14-107B-2**
BMcD Project No. **81332**

Sealed bids subject to the conditions and provisions presented herein will be received until **2:00 pm (CT)**, **June 29, 2015,** and then publicly opened and read at the **Clay County Courthouse, 3rd Floor Hearing Room, 11 S. Water Street, Liberty, Missouri, 64068**, for furnishing all labor, materials, equipment and performing all work necessary to R**econstruct the T-hangar Taxilane pavements designated on the contract drawings.**

Copies of the bid documents including project drawings and technical specifications are on file and may be inspected at:

Clay County Courthouse
11 S. Water Street
Liberty, Missouri 64068

Burns & McDonnell Engineering Company, Inc.
(Engineer)
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400

Drexel Technologies
10840 W. 86th Street
Lenexa, KS 66214
913-371-4430
www.drexeltech.com

A complete set of bid documents may be obtained from **Drexel Technologies** for a fee as ordered online at www.drexeltech.com.

A prebid conference for this project will be held at **10:00 am (CT) on June 18, 2015 in the Airport Terminal Building at Midwest National Air Center, 13106 Rhodus Rd, Excelsior Springs, MO 64024**.

Contract Work Items. This project will involve the following work items and estimated quantities. Prospective bidders are hereby advised that the quantities indicated herein are approximate and are subject to change.

SCHEDULE 1 - PHASES E, A, B ; OPTION 1 - ASPHALT PAVEMENT				
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITY
AIP ELIGIBLE ITEMS WITH ASPHALT				
1	SECTION 105	MOBILIZATION	LS	1
2	P-101-5.1	ASPHALT PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" AC)	SY	5,630
3	P-101-5.2	CONCRETE PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" PCC)	SY	4,305
4	P-101-5.3	BASE COURSE REMOVAL VARIABLE DEPTH (8 TO 15")	SY	9,930
5	P-101-5.4	GRATED TRENCH DRAIN REMOVAL	LF	720

6	P-101-5.5	PAINT REMOVAL	SF	525
7	P-101-5.6	SAW CUT FULL DEPTH	LF	1,320
8	P-102-2.1	TRAFFIC CONTROL	LS	1
9	P-152-4.1	EMBANKMENT IN PLACE (FURNISHED BY CONTRACTOR)	CY	1,080
10	P-152-4.2	UNSUITABLE EXCAVATION	CY	835
11	P-156-5.1	TEMPORARY CONSTRUCTION ENTRANCE	EA	2
12	P-156-5.2	INSTALLATION AND REMOVAL OF SILT FENCE	LF	1,175
13	P-156-5.3	SEDIMENT REMOVAL	CY	50
14	P-156-5.4	TURF REINFORCEMENT MAT TYPE 1	SY	3,215
15	P-158-8.1	12 INCH FLY ASH TREATED SUBGRADE	SY	9,750
16	P-158-8.2	FLY ASH	TON	705
17	P-209-5.1	9 INCH CRUSHED AGGREGATE BASE COURSE	SY	5,350
18	P-401-8.1	4 INCH BITUMINOUS SURFACE COURSE (2 - 2 INCH LIFTS)	TON	1,820
19	P-602-5.1	BITUMINOUS PRIME COAT	GAL	785
20	P-603-5.1	BITUMINOUS TACK COAT	GAL	780
21	P-620-5.1	REFLECTORIZED PAVEMENT MARKING (YELLOW)	SF	1,565
22	P-620-5.2	NON-REFLECTORIZED PAVEMENT MARKING (BLACK)	SF	3,125
23	D-701-5.1	6 INCH HDPE OUTLET PIPE	LF	220
24	D-701-5.2	8 INCH HDPE OUTLET PIPE	LF	505
25	D-701-5.3	ROCK REVETMENT	SY	70
26	D-703-5.1	MODULAR POLYMER CONCRETE GRATED TRENCH DRAIN	LF	1,290
27	D-705-5.1	4" PERFORATED PVC UNDERDRAIN (COMPLETE)	LF	1,910
28	D-705-5.2	4" NON-PERFORATED PVC OUTLET PIPE	LF	220
29	D-705-5.3	UNDERDRAIN CLEANOUTS	EA	11
30	D-705-5.4	PRECAST CONCRETE SPLASH PADS	EA	13
31	D-705-5.5	8 INCH CLEANOUT (GRATE LID)	EA	5
32	T-901-5.1	SEEDING	AC	1.2
33	T-904-5.1	SODDING (18" WIDE)	SY	370
34	T-904-5.3	TOPSOILING (FURNISHED FROM OFF THE SITE)	CY	620
35	T-908-5.1	MULCHING	AC	0.50

SCHEDULE 1 - PHASES E, A, B ; OPTION 1 - ASPHALT PAVEMENT				
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITY
NON-AIP ELIGIBLE ITEMS WITH ASPHALT				
36	P-209-5.1	9 INCH CRUSHED AGGREGATE BASE COURSE	SY	4,400
37	P-401-8.1	4 INCH BITUMINOUS SURFACE COURSE (2 - 2 INCH LIFTS)	TON	990
38	P-602-5.1	BITUMINOUS PRIME COAT	GAL	1,540
39	P-603-5.1	BITUMINOUS TACK COAT	GAL	660

SCHEDULE 2 - PHASES E, A, B, C ; OPTION 1 - ASPHALT PAVEMENT				
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITY
AIP ELIGIBLE ITEMS WITH ASPHALT				
1	SECTION 105	MOBILIZATION	LS	1
2	P-101-5.1	ASPHALT PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" AC)	SY	6,870
3	P-101-5.2	CONCRETE PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" PCC)	SY	6,140
4	P-101-5.3	BASE COURSE REMOVAL VARIABLE DEPTH (8 TO 15")	SY	13,005
5	P-101-5.4	GRATED TRENCH DRAIN REMOVAL	LF	720
6	P-101-5.5	PAINT REMOVAL	SF	525
7	P-101-5.6	SAW CUT FULL DEPTH	LF	2,100
8	P-102-2.1	TRAFFIC CONTROL	LS	1
9	P-152-4.1	EMBANKMENT IN PLACE (FURNISHED BY CONTRACTOR)	CY	1,595
10	P-152-4.2	UNSUITABLE EXCAVATION	CY	935
11	P-156-5.1	TEMPORARY CONSTRUCTION ENTRANCE	EA	2
12	P-156-5.2	INSTALLATION AND REMOVAL OF SILT FENCE	LF	1,340
13	P-156-5.3	SEDIMENT REMOVAL	CY	75
14	P-156-5.4	TURF REINFORCEMENT MAT TYPE 1	SY	4,250
15	P-158-8.1	12 INCH FLY ASH TREATED SUBGRADE	SY	12,820
16	P-158-8.2	FLY ASH	TON	930
17	P-209-5.1	9 INCH CRUSHED AGGREGATE BASE COURSE	SY	6,520
18	P-401-8.1	4 INCH BITUMINOUS SURFACE COURSE (2 - 2 INCH LIFTS)	TON	1,430
19	P-602-5.1	BITUMINOUS PRIME COAT	GAL	2,225
20	P-603-5.1	BITUMINOUS TACK COAT	GAL	955
21	P-620-5.1	REFLECTORIZED PAVEMENT MARKING (YELLOW)	SF	1,805
22	P-620-5.2	NON-REFLECTORIZED PAVEMENT MARKING (BLACK)	SF	3,610
23	D-701-5.1	6 INCH HDPE OUTLET PIPE	LF	330
24	D-701-5.2	8 INCH HDPE OUTLET PIPE	LF	505
25	D-701-5.3	ROCK REVETMENT	SY	91
26	D-703-5.1	MODULAR POLYMER CONCRETE GRATED TRENCH DRAIN	LF	1,930
27	D-705-5.1	4" PERFORATED PVC UNDERDRAIN (COMPLETE)	LF	2,595
28	D-705-5.2	4" NON-PERFORATED PVC OUTLET PIPE	LF	290
29	D-705-5.3	UNDERDRAIN CLEANOUTS	EA	15
30	D-705-5.4	PRECAST CONCRETE SPLASH PADS	EA	17
31	D-705-5.5	8 INCH CLEANOUT (GRATE LID)	EA	5
32	T-901-5.1	SEEDING	AC	1.4
33	T-904-5.1	SODDING (18" WIDE)	SY	395
34	T-904-5.3	TOPSOILING (FURNISHED FROM OFF THE SITE)	CY	735
35	T-908-5.1	MULCHING	AC	0.50

SCHEDULE 2 - PHASES E, A, B, C ; OPTION 1 - ASPHALT PAVEMENT				
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITY
NON-AIP ELIGIBLE ITEMS WITH ASPHALT				
36	P-209-5.1	9 INCH CRUSHED AGGREGATE BASE COURSE	SY	6,310
37	P-401-8.1	4 INCH BITUMINOUS SURFACE COURSE (2 - 2 INCH LIFTS)	TON	1,420
38	P-602-5.1	BITUMINOUS PRIME COAT	GAL	1,540
39	P-603-5.1	BITUMINOUS TACK COAT	GAL	945

SCHEDULE 3 - PHASES E, A, B, C, D ; OPTION 1 - ASPHALT PAVEMENT				
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITY
AIP ELIGIBLE ITEMS WITH ASPHALT				
1	SECTION 105	MOBILIZATION	LS	1
2	P-101-5.1	ASPHALT PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" AC)	SY	8,125
3	P-101-5.2	CONCRETE PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" PCC)	SY	7,840
4	P-101-5.3	BASE COURSE REMOVAL VARIABLE DEPTH (8 TO 15")	SY	15,965
5	P-101-5.4	GRATED TRENCH DRAIN REMOVAL	LF	720
6	P-101-5.5	PAINT REMOVAL	SF	525
7	P-101-5.6	SAW CUT FULL DEPTH	LF	2,855
8	P-102-2.1	TRAFFIC CONTROL	LS	1
9	P-152-4.1	EMBANKMENT IN PLACE (FURNISHED BY CONTRACTOR)	CY	2,085
10	P-152-4.2	UNSUITABLE EXCAVATION	CY	1,035
11	P-156-5.1	TEMPORARY CONSTRUCTION ENTRANCE	EA	2
12	P-156-5.2	INSTALLATION AND REMOVAL OF SILT FENCE	LF	1,525
13	P-156-5.3	SEDIMENT REMOVAL	CY	75
14	P-156-5.4	TURF REINFORCEMENT MAT TYPE 1	SY	5,394
15	P-158-8.1	12 INCH FLY ASH TREATED SUBGRADE	SY	15,780
16	P-158-8.2	FLY ASH	TON	1,140
17	P-209-5.1	9 INCH CRUSHED AGGREGATE BASE COURSE	SY	6,765
18	P-401-8.1	4 INCH BITUMINOUS SURFACE COURSE (2 - 2 INCH LIFTS)	TON	1,690
19	P-602-5.1	BITUMINOUS PRIME COAT	GAL	2,630
20	P-603-5.1	BITUMINOUS TACK COAT	GAL	1,130
21	P-620-5.1	REFLECTORIZED PAVEMENT MARKING (YELLOW)	SF	2,050
22	P-620-5.2	NON-REFLECTORIZED PAVEMENT MARKING (BLACK)	SF	4,095
23	D-701-5.1	6 INCH HDPE OUTLET PIPE	LF	395
24	D-701-5.2	8 INCH HDPE OUTLET PIPE	LF	505
25	D-701-5.3	ROCK REVETMENT	SY	112

26	D-703-5.1	MODULAR POLYMER CONCRETE GRATED TRENCH DRAIN	LF	2,620
27	D-705-5.1	4" PERFORATED PVC UNDERDRAIN (COMPLETE)	LF	3,280
28	D-705-5.2	4" NON-PERFORATED PVC OUTLET PIPE	LF	360
29	D-705-5.3	UNDERDRAIN CLEANOUTS	EA	19
30	D-705-5.4	PRECAST CONCRETE SPLASH PADS	EA	21
31	D-705-5.5	8 INCH CLEANOUT (GRATE LID)	EA	5
32	T-901-5.1	SEEDING	AC	1.7
33	T-904-5.1	SODDING (18" WIDE)	SY	425
34	T-904-5.3	TOPSOILING (FURNISHED FROM OFF THE SITE)	CY	865
35	T-908-5.1	MULCHING	AC	0.50

SCHEDULE 3 - PHASES E, A, B, C, D ; OPTION 1 - ASPHALT PAVEMENT				
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITY
NON-AIP ELIGIBLE ITEMS WITH ASPHALT				
36	P-209-5.1	9 INCH CRUSHED AGGREGATE BASE COURSE	SY	8,125
37	P-401-8.1	4 INCH BITUMINOUS SURFACE COURSE (2 - 2 INCH LIFTS)	TON	1,825
38	P-602-5.1	BITUMINOUS PRIME COAT	GAL	1,540
39	P-603-5.1	BITUMINOUS TACK COAT	GAL	1,220

SCHEDULE 1 - PHASES E, A, B ; OPTION 2 - CONCRETE PAVEMENT				
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITY
AIP ELIGIBLE ITEMS WITH CONCRETE				
1	SECTION 105	MOBILIZATION	LS	1
2	P-101-5.1	ASPHALT PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" AC)	SY	5,630
3	P-101-5.2	CONCRETE PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" PCC)	SY	4,305
4	P-101-5.3	BASE COURSE REMOVAL VARIABLE DEPTH (8 TO 15")	SY	9,930
5	P-101-5.4	GRATED TRENCH DRAIN REMOVAL	LF	720
6	P-101-5.5	PAINT REMOVAL	SF	525
7	P-101-5.6	SAW CUT FULL DEPTH	LF	1,320
8	P-102-2.1	TRAFFIC CONTROL	LS	1
9	P-152-4.1	EMBANKMENT IN PLACE (FURNISHED BY CONTRACTOR)	CY	3,265
10	P-152-4.2	UNSUITABLE EXCAVATION	CY	835
11	P-156-5.1	TEMPORARY CONSTRUCTION ENTRANCE	EA	2
12	P-156-5.2	INSTALLATION AND REMOVAL OF SILT FENCE	LF	1,175
13	P-156-5.3	SEDIMENT REMOVAL	CY	50
14	P-156-5.4	TURF REINFORCEMENT MAT TYPE 1	SY	3,215
15	P-158-8.1	12 INCH FLY ASH TREATED SUBGRADE	SY	9,745
16	P-158-8.2	FLY ASH	TON	705
17	P-209-5.2	4 INCH CRUSHED AGGREGATE BASE COURSE	SY	5,345
18	P-501-8.1	6 INCH PORTLAND CEMENT CONCRETE	SY	5,180

		PAVEMENT		
19	P-620-5.1	REFLECTORIZED PAVEMENT MARKING (YELLOW)	SF	1,565
20	P-620-5.2	NON-REFLECTORIZED PAVEMENT MARKING (BLACK)	SF	3,125
21	D-701-5.1	6 INCH HDPE OUTLET PIPE	LF	220
22	D-701-5.2	8 INCH HDPE OUTLET PIPE	LF	505
23	D-701-5.3	ROCK REVETMENT	SY	70
24	D-703-5.1	MODULAR POLYMER CONCRETE GRATED TRENCH DRAIN	LF	1,290
25	D-705-5.1	4" PERFORATED PVC UNDERDRAIN (COMPLETE)	LF	1,910
26	D-705-5.2	4" NON-PERFORATED PVC OUTLET PIPE	LF	220
27	D-705-5.3	UNDERDRAIN CLEANOUTS	EA	11
28	D-705-5.4	PRECAST CONCRETE SPLASH PADS	EA	13
29	D-705-5.5	8 INCH CLEANOUT (GRATE LID)	EA	5
30	T-901-5.1	SEEDING	AC	1.2
31	T-904-5.1	SODDING (18" WIDE)	SY	270
32	T-904-5.3	TOPSOILING (FURNISHED FROM OFF THE SITE)	CY	620
33	T-908-5.1	MULCHING	AC	0.50

SCHEDULE 1 - PHASES E, A, B ; OPTION 2 - CONCRETE PAVEMENT				
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITY
NON-AIP ELIGIBLE ITEMS WITH CONCRETE				
34	P-209-5.2	4 INCH CRUSHED AGGREGATE BASE COURSE	SY	4,400
35	P-501-8.1	6 INCH PORTLAND CEMENT CONCRETE PAVEMENT	SY	4,400

SCHEDULE 2 - PHASES E, A, B, C ; OPTION 2 - CONCRETE PAVEMENT				
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITY
AIP ELIGIBLE ITEMS WITH CONCRETE				
1	SECTION 105	MOBILIZATION	LS	1
2	P-101-5.1	ASPHALT PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" AC)	SY	6,870
3	P-101-5.2	CONCRETE PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" PCC)	SY	6,140
4	P-101-5.3	BASE COURSE REMOVAL VARIABLE DEPTH (8 TO 15")	SY	13,005
5	P-101-5.4	GRATED TRENCH DRAIN REMOVAL	LF	720
6	P-101-5.5	PAINT REMOVAL	SF	525
7	P-101-5.6	SAW CUT FULL DEPTH	LF	2,100
8	P-102-2.1	TRAFFIC CONTROL	LS	1
9	P-152-4.1	EMBANKMENT IN PLACE (FURNISHED BY CONTRACTOR)	CY	4,290
10	P-152-4.2	UNSUITABLE EXCAVATION	CY	935
11	P-156-5.1	TEMPORARY CONSTRUCTION ENTRANCE	EA	2
12	P-156-5.2	INSTALLATION AND REMOVAL OF SILT FENCE	LF	1,340
13	P-156-5.3	SEDIMENT REMOVAL	CY	75

14	P-156-5.4	TURF REINFORCEMENT MAT TYPE 1	SY	4,250
15	P-158-8.1	12 INCH FLY ASH TREATED SUBGRADE	SY	12,820
16	P-158-8.2	FLY ASH	TON	930
17	P-209-5.2	4 INCH CRUSHED AGGREGATE BASE COURSE	SY	6,520
18	P-501-8.1	6 INCH PORTLAND CEMENT CONCRETE PAVEMENT	SY	6,350
19	P-620-5.1	REFLECTORIZED PAVEMENT MARKING (YELLOW)	SF	1,805
20	P-620-5.2	NON-REFLECTORIZED PAVEMENT MARKING (BLACK)	SF	3,610
21	D-701-5.1	6 INCH HDPE OUTLET PIPE	LF	330
22	D-701-5.2	8 INCH HDPE OUTLET PIPE	LF	505
23	D-701-5.3	ROCK REVETMENT	SY	91
24	D-703-5.1	MODULAR POLYMER CONCRETE GRATED TRENCH DRAIN	LF	1,930
25	D-705-5.1	4" PERFORATED PVC UNDERDRAIN (COMPLETE)	LF	2,595
26	D-705-5.2	4" NON-PERFORATED PVC OUTLET PIPE	LF	290
27	D-705-5.3	UNDERDRAIN CLEANOUTS	EA	15
28	D-705-5.4	PRECAST CONCRETE SPLASH PADS	EA	17
29	D-705-5.5	8 INCH CLEANOUT (GRATE LID)	EA	5
30	T-901-5.1	SEEDING	AC	1.4
31	T-904-5.1	SODDING (18" WIDE)	SY	395
32	T-904-5.3	TOPSOILING (FURNISHED FROM OFF THE SITE)	CY	735
33	T-908-5.1	MULCHING	AC	0.50

SCHEDULE 2 - PHASES E, A, B, C ; OPTION 2 - CONCRETE PAVEMENT				
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITY
NON-AIP ELIGIBLE ITEMS WITH CONCRETE				
34	P-209-5.2	4 INCH CRUSHED AGGREGATE BASE COURSE	SY	6,310
35	P-501-8.1	6 INCH PORTLAND CEMENT CONCRETE PAVEMENT	SY	6,300

SCHEDULE 3 - PHASES E, A, B, C, D ; OPTION 2 - CONCRETE PAVEMENT				
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITY
AIP ELIGIBLE ITEMS WITH CONCRETE				
1	SECTION 105	MOBILIZATION	LS	1
2	P-101-5.1	ASPHALT PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" AC)	SY	8,125
3	P-101-5.2	CONCRETE PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" PCC)	SY	7,840
4	P-101-5.3	BASE COURSE REMOVAL VARIABLE DEPTH (8 TO 15")	SY	15,965
5	P-101-5.4	GRATED TRENCH DRAIN REMOVAL	LF	720
6	P-101-5.5	PAINT REMOVAL	SF	525
7	P-101-5.6	SAW CUT FULL DEPTH	LF	2,855
8	P-102-2.1	TRAFFIC CONTROL	LS	1
9	P-152-4.1	EMBANKMENT IN PLACE (FURNISHED BY CONTRACTOR)	CY	2,100

10	P-152-4.2	UNSUITABLE EXCAVATION	CY	1,035
11	P-156-5.1	TEMPORARY CONSTRUCTION ENTRANCE	EA	2
12	P-156-5.2	INSTALLATION AND REMOVAL OF SILT FENCE	LF	1,525
13	P-156-5.3	SEDIMENT REMOVAL	CY	100
14	P-156-5.4	TURF REINFORCEMENT MAT TYPE 1	SY	5,395
15	P-158-8.1	12 INCH FLY ASH TREATED SUBGRADE	SY	15,780
16	P-158-8.2	FLY ASH	TON	1,140
17	P-209-5.2	4 INCH CRUSHED AGGREGATE BASE COURSE	SY	7,670
18	P-501-8.1	6 INCH PORTLAND CEMENT CONCRETE PAVEMENT	SY	7,505
19	P-620-5.1	REFLECTORIZED PAVEMENT MARKING (YELLOW)	SF	2,050
20	P-620-5.2	NON-REFLECTORIZED PAVEMENT MARKING (BLACK)	SF	4,095
21	D-701-5.1	6 INCH HDPE OUTLET PIPE	LF	395
22	D-701-5.2	8 INCH HDPE OUTLET PIPE	LF	505
23	D-701-5.3	ROCK REVETMENT	SY	112
24	D-703-5.1	MODULAR POLYMER CONCRETE GRATED TRENCH DRAIN	LF	2,620
25	D-705-5.1	4" PERFORATED PVC UNDERDRAIN (COMPLETE)	LF	3,280
26	D-705-5.2	4" NON-PERFORATED PVC OUTLET PIPE	LF	360
27	D-705-5.3	UNDERDRAIN CLEANOUTS	EA	19
28	D-705-5.4	PRECAST CONCRETE SPLASH PADS	EA	21
29	D-705-5.5	8 INCH CLEANOUT (GRATE LID)	EA	5
30	T-901-5.1	SEEDING	AC	1.7
31	T-904-5.1	SODDING (18" WIDE)	SY	425
32	T-904-5.3	TOPSOILING (FURNISHED FROM OFF THE SITE)	CY	865
33	T-908-5.1	MULCHING	AC	0.50

SCHEDULE 3 - PHASES E, A, B, C, D ; OPTION 2 - CONCRETE PAVEMENT				
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITY
NON-AIP ELIGIBLE ITEMS WITH CONCRETE				
34	P-209-5.2	4 INCH CRUSHED AGGREGATE BASE COURSE	SY	8,125
35	P-501-8.1	6 INCH PORTLAND CEMENT CONCRETE PAVEMENT	SY	8,110

Contract Time. The owner has established a contract performance time of **120** calendar days if Schedule 1 (Option 1 or 2) is awarded, **165** calendar days if Schedule 2 (Option 1 or 2) is awarded, and **210** calendar days if Schedule 3 (Option 1 or 2) is awarded, from the date of the Notice-to-Proceed. All project work shall be substantially completed within the stated timeframe. This project is subject to liquidated damages as prescribed in the Project Manual.

Bid Security. No bid will be considered unless accompanied by a certified check or cashier's check on any bank or trust company insured by the Federal Deposit Insurance Corporation, payable to **Clay County, Missouri**, for not less than **five (5) percent** of the total amount of the bid, or by a bid bond secured by an approved surety or sureties, payable to the owner, for not less than **five (5) percent** of the total amount of the bid.

Bonding Requirements. The successful bidder will be required to furnish separate performance and payment bonds each in an amount equal to 100% of the contract price at the time of contract execution.

Award of Contract. All proposals submitted in accordance with the instructions presented herein will be subject to evaluation. Bids may be held by **Clay County** for a period not to exceed **90 calendar days** from the date of the bid opening for the purpose of conducting the bid evaluation.

Award of contract will be based on the lowest aggregate sum proposal submitted from those bidders that are confirmed as being responsive and responsible. The various segments of work are divided into multiple schedules on the bid proposal. The bidder shall bid on **Schedule 1, Schedule 2, and Schedule 3 and each accompanying Option, 1 and 2**. The Owner reserves the right to select any one of the combinations of the Schedule(s) and Option(s), which in the judgment of the Owner, best serves the Owner's interest. The right is reserved, as **Clay County** may require, to reject any bid and all bids.

Award of contract is contingent upon the owner receiving State-funding assistance under the State Aviation Trust Fund.

Federal Provisions. This project is subject to the following Federal provisions, statutes and regulations;

Equal Employment Opportunity - Executive Order 11246 and 41 CFR Part 60: The Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth within the supplementary provisions. The successful Bidder shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin.

Goals for Minority and Female Participation – Executive Order 11246 and 41 CFR Part 60:
1. The Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth within the supplementary provisions.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables
Goals for minority participation for each trade: **12.7**%.
Goals for female participation in each trade: **6.9%**.

These goals are applicable to all of the contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the geographical area where the work is actually performed, the contractor also is subject to the goals for both its Federally involved and non-federally involved construction in this secondary area.

Certification of Nonsegregated Facilities – 41 CFR Part 60: A certification of Nonsegregated Facilities must be submitted prior to the award of a federally-assisted construction contract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity Clause.

Contractors receiving federally assisted construction contract awards exceeding $10,000, which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide for the forwarding of the notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed $10,000 and are not exempt from the provisions of the Equal Opportunity Clause. The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

Disadvantaged Business Enterprise – 49 CFR Part 26: The requirements of 49 CFR Part 26, Regulations of the U.S. Department of Transportation, apply to this contract. It is the policy of MoDOT and the sponsor to practice nondiscrimination based on race, color, sex or national origin in the award or performance of this contract. All firms qualifying under this solicitation are encouraged to submit bids/proposals. Awards of this contract will be conditioned upon satisfying the requirements of this section. These requirements apply to all bidders, including those who qualify as a DBE. A DBE contract goal of **six (6) percent** has been established for this contract. The *non-DBE* bidder shall subcontract **six (6) percent** of the dollar value of the base bid(s), excluding any additive alternates, to disadvantaged business enterprises (DBE) or make good faith efforts to meet the DBE contract goal. *The bidder and any subcontractor, who qualifies as a DBE who subcontracts work to another non-DBE firm, must subtract the amount of the non-DBE contract from the total DBE work counted toward the goal, as defined in 49 CFR Part 26.55*.

The apparent successful competitor will be required to submit the following information: (1) the names and addresses of DBE firms that will participate in the contract; (2) a description of the work that each DBE firm will perform; (3) the dollar amount of the participation of each DBE firm participating; (4) written documentation (signed contract proposal) of the bidders commitment to use a DBE subcontractor whose participation it submits to meet the contract goal; and (5) if the contract goal is not met, evidence of good faith efforts, as described *in 49 CFR Part 26*.

Davis-Bacon Act, as amended – 29 CFR Part 5: The Contractor is required to comply with wage and labor provisions and to pay minimum wages in accordance with the current schedule of wage rates established by the United States Department of Labor included in the supplementary provisions.

In addition, the contractor will also be required to comply with the wage and labor requirements and pay minimum wages in accordance with the schedule of wage rates established by the Missouri Division of Labor Standards included in the Supplementary Provisions.

The highest rate between the two (Federal and State) for each job classification shall be considered the prevailing wage.

Debarment, Suspension, Ineligibility and Voluntary Exclusion – 49 CFR Part 29: The bidder certifies, by submission of a proposal or acceptance of a contract, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. Individuals or companies listed in the General Services Administration's "Excluded Parties Listing System" will not be considered for award of contract.

Foreign Trade Restriction – 49 CFR Part 30: The Bidder and Bidder's subcontractors, by submission of an offer and/or execution of a contract, is required to certify that it:

a. 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 (USTR);

b. 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 on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;

c. has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

Buy American Certificate – Aviation Safety and Capacity Act of 1990: This contract is subject to the "Buy American Preferences" of the Aviation Safety and Capacity Act of 1990. Prospective Bidders are required to certify that steel and manufactured products have been produced in the United States and to clearly identify those items produced or manufactured outside of the United States.

Airport Job Special Provision: "Notice to all potential bidders on federally funded airport construction projects: As mandated by Executive Order 12818, issued by President George Bush on October 23, 1992, a Job Special Provision will be inserted into and made part of every contract for federally funded airport construction projects, awarded from this or future notices of lettings."

State Wage Requirements. The contractor will be required to comply with the wage and labor requirements and pay minimum wages in accordance with the schedule of wage rates established by the Missouri Division of Labor Standards included in the Supplementary Provisions.

Additional Provisions.
Modification to the project documents may only be made by written addendum by the Owner or Owner's authorized Representative.

The proposal must be made on the forms provided within the bound project manual. Bidders must supply all required information prior to the time of bid opening.

PROPOSAL FORM

Midwest National Air Center
Clay County, Missouri
State Block Grant Project No. **14-107B-2**

TO: **Clay County, Missouri**

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

Reconstruct T-hangar Taxilanes:

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:

SCHEDULE 1 - PHASES E, A, B ; OPTION 1 - ASPHALT PAVEMENT								
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	UNIT PRICE		EXTENSION	
					DOLLARS	CTS	DOLLARS	CTS
AIP ELIGIBLE ITEMS WITH ASPHALT								
1	SECTION 105	MOBILIZATION	LS	1				
2	P-101-5.1	ASPHALT PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" AC)	SY	5,630				
3	P-101-5.2	CONCRETE PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" PCC)	SY	4,305				
4	P-101-5.3	BASE COURSE REMOVAL VARIABLE DEPTH (8 TO 15")	SY	9,930				
5	P-101-5.4	GRATED TRENCH DRAIN REMOVAL	LF	720				
6	P-101-5.5	PAINT REMOVAL	SF	525				
7	P-101-5.6	SAW CUT FULL DEPTH	LF	1,320				
8	P-102-2.1	TRAFFIC CONTROL	LS	1				
9	P-152-4.1	EMBANKMENT IN PLACE (FURNISHED BY CONTRACTOR)	CY	1,080				
10	P-152-4.2	UNSUITABLE EXCAVATION	CY	835				
11	P-156-5.1	TEMPORARY CONSTRUCTION ENTRANCE	EA	2				
12	P-156-5.2	INSTALLATION AND REMOVAL OF SILT FENCE	LF	1,175				
13	P-156-5.3	SEDIMENT REMOVAL	CY	50				
14	P-156-5.4	TURF REINFORCEMENT MAT TYPE 1	SY	3,215				
15	P-158-8.1	12 INCH FLY ASH TREATED SUBGRADE	SY	9,750				
16	P-158-8.2	FLY ASH	TON	705				

17	P-209-5.1	9 INCH CRUSHED AGGREGATE BASE COURSE	SY	5,350				
18	P-401-8.1	4 INCH BITUMINOUS SURFACE COURSE (2 - 2 INCH LIFTS)	TON	1,820				
19	P-602-5.1	BITUMINOUS PRIME COAT	GAL	785				
20	P-603-5.1	BITUMINOUS TACK COAT	GAL	780				
21	P-620-5.1	REFLECTORIZED PAVEMENT MARKING (YELLOW)	SF	1,565				
22	P-620-5.2	NON-REFLECTORIZED PAVEMENT MARKING (BLACK)	SF	3,125				
23	D-701-5.1	6 INCH HDPE OUTLET PIPE	LF	220				
24	D-701-5.2	8 INCH HDPE OUTLET PIPE	LF	505				
25	D-701-5.3	ROCK REVETMENT	SY	70				
26	D-703-5.1	MODULAR POLYMER CONCRETE GRATED TRENCH DRAIN	LF	1,290				
27	D-705-5.1	4" PERFORATED PVC UNDERDRAIN (COMPLETE)	LF	1,910				
28	D-705-5.2	4" NON-PERFORATED PVC OUTLET PIPE	LF	220				
29	D-705-5.3	UNDERDRAIN CLEANOUTS	EA	11				
30	D-705-5.4	PRECAST CONCRETE SPLASH PADS	EA	13				
31	D-705-5.4	8 INCH CLEANOUT (GRATE LID)	EA	5				
32	T-901-5.1	SEEDING	AC	1.2				
33	T-904-5.1	SODDING (18" WIDE)	SY	370				
34	T-904-5.3	TOPSOILING (FURNISHED FROM OFF THE SITE)	CY	620				
35	T-908-5.1	MULCHING	AC	0.50				

TOTAL SCHEDULE 1, OPTION 1, AIP ELIGIBLE
(Numeral Format)..... $_____.____

TOTAL SCHEDULE 1, OPTION 1, AIP ELIGIBLE
(Written Format)..... _____

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SCHEDULE 1 - PHASES E, A, B ; OPTION 1 - ASPHALT PAVEMENT								
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	UNIT PRICE		EXTENSION	
					DOLLARS	CTS	DOLLARS	CTS
NON-AIP ELIGIBLE ITEMS WITH ASPHALT								
36	P-209-5.1	9 INCH CRUSHED AGGREGATE BASE COURSE	SY	4,400				
37	P-401-8.1	4 INCH BITUMINOUS SURFACE COURSE (2 - 2 INCH LIFTS)	TON	990				
38	P-602-5.1	BITUMINOUS PRIME COAT	GAL	1,540				
39	P-603-5.1	BITUMINOUS TACK COAT	GAL	660				

TOTAL SCHEDULE 1, OPTION 1, NON-AIP ELIGIBLE
(Numeral Format)..... $_____._____

TOTAL SCHEDULE 1, OPTION 1, NON-AIP ELIGIBLE
(Written Format)..... _____

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TOTAL SCHEDULE 1, OPTION 1, AIP & NON-AIP ELIGIBLE
(Numeral Format)..... $_____._____

TOTAL SCHEDULE 1, OPTION 1, AIP & NON-AIP ELIGIBLE
(Written Format)..... _____

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SCHEDULE 2 - PHASES E, A, B, C ; OPTION 1 - ASPHALT PAVEMENT								
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	UNIT PRICE		EXTENSION	
					DOLLARS	CTS	DOLLARS	CTS
AIP ELIGIBLE ITEMS WITH ASPHALT								
1	SECTION 105	MOBILIZATION	LS	1				
2	P-101-5.1	ASPHALT PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" AC)	SY	6,870				
3	P-101-5.2	CONCRETE PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" PCC)	SY	6,140				
4	P-101-5.3	BASE COURSE REMOVAL VARIABLE DEPTH (8 TO 15")	SY	13,005				
5	P-101-5.4	GRATED TRENCH DRAIN REMOVAL	LF	720				
6	P-101-5.5	PAINT REMOVAL	SF	525				
7	P-101-5.6	SAW CUT FULL DEPTH	LF	2,100				
8	P-102-2.1	TRAFFIC CONTROL	LS	1				
9	P-152-4.1	EMBANKMENT IN PLACE (FURNISHED BY CONTRACTOR)	CY	1,595				
10	P-152-4.2	UNSUITABLE EXCAVATION	CY	935				
11	P-156-5.1	TEMPORARY CONSTRUCTION ENTRANCE	EA	2				
12	P-156-5.2	INSTALLATION AND REMOVAL OF SILT FENCE	LF	1,340				
13	P-156-5.3	SEDIMENT REMOVAL	CY	75				
14	P-156-5.4	TURF REINFORCEMENT MAT TYPE 1	SY	4,250				

15	P-158-8.1	12 INCH FLY ASH TREATED SUBGRADE	SY	12,820				
16	P-158-8.2	FLY ASH	TON	930				
17	P-209-5.1	9 INCH CRUSHED AGGREGATE BASE COURSE	SY	6,520				
18	P-401-8.1	4 INCH BITUMINOUS SURFACE COURSE (2 - 2 INCH LIFTS)	TON	1,430				
19	P-602-5.1	BITUMINOUS PRIME COAT	GAL	2,225				
20	P-603-5.1	BITUMINOUS TACK COAT	GAL	955				
21	P-620-5.1	REFLECTORIZED PAVEMENT MARKING (YELLOW)	SF	1,805				
22	P-620-5.2	NON-REFLECTORIZED PAVEMENT MARKING (BLACK)	SF	3,610				
23	D-701-5.1	6 INCH PE OUTLET PIPE	LF	330				
24	D-701-5.2	8 INCH PE OUTLET PIPE	LF	505				
25	D-701-5.3	ROCK REVETMENT	SY	91				
26	D-703-5.1	MODULAR POLYMER CONCRETE GRATED TRENCH DRAIN	LF	1,930				
27	D-705-5.1	4" PERFORATED PVC UNDERDRAIN (COMPLETE)	LF	2,595				
28	D-705-5.2	4" NON-PERFORATED PVC OUTLET PIPE	LF	290				
29	D-705-5.3	UNDERDRAIN CLEANOUTS	EA	15				
30	D-705-5.4	PRECAST CONCRETE SPLASH PADS	EA	17				
31	D-705-5.4	8 INCH CLEANOUT (GRATE LID)	EA	5				
32	T-901-5.1	SEEDING	AC	1.4				
33	T-904-5.1	SODDING (18" WIDE)	SY	395				
34	T-904-5.3	TOPSOILING (FURNISHED FROM OFF THE SITE)	CY	735				
35	T-908-5.1	MULCHING	AC	0.50				

TOTAL SCHEDULE 2, OPTION 1, AIP ELIGIBLE
(Numeral Format)..... $_____._____

TOTAL SCHEDULE 2, OPTION 1, AIP ELIGIBLE
(Written Format)..... _____

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SCHEDULE 2 - PHASES E, A, B, C ; OPTION 1 - ASPHALT PAVEMENT								
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	UNIT PRICE		EXTENSION	
					DOLLARS	CTS	DOLLARS	CTS
NON-AIP ELIGIBLE ITEMS WITH ASPHALT								
36	P-209-5.1	9 INCH CRUSHED AGGREGATE BASE COURSE	SY	6,310				
37	P-401-8.1	4 INCH BITUMINOUS SURFACE COURSE (2 - 2 INCH LIFTS)	TON	1,420				
38	P-602-5.1	BITUMINOUS PRIME COAT	GAL	1,540				
39	P-603-5.1	BITUMINOUS TACK COAT	GAL	945				

TOTAL SCHEDULE 2, OPTION 1, NON-AIP ELIGIBLE
(Numeral Format)..... $_____.____

TOTAL SCHEDULE 2, OPTION 1, NON-AIP ELIGIBLE
(Written Format)..... _____

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TOTAL SCHEDULE 2, OPTION 1, AIP & NON-AIP ELIGIBLE
(Numeral Format)..... $_____.____

TOTAL SCHEDULE 2, OPTION 1, AIP & NON-AIP ELIGIBLE
(Written Format)..... _____

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SCHEDULE 3 - PHASES E, A, B, C, D ; OPTION 1 - ASPHALT PAVEMENT								
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	UNIT PRICE		EXTENSION	
					DOLLARS	CTS	DOLLARS	CTS
AIP ELIGIBLE ITEMS WITH ASPHALT								
1	SECTION 105	MOBILIZATION	LS	1				
2	P-101-5.1	ASPHALT PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" AC)	SY	8,125				
3	P-101-5.2	CONCRETE PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" PCC)	SY	7,840				
4	P-101-5.3	BASE COURSE REMOVAL VARIABLE DEPTH (8 TO 15")	SY	15,965				
5	P-101-5.4	GRATED TRENCH DRAIN REMOVAL	LF	720				

6	P-101-5.5	PAINT REMOVAL	SF	525				
7	P-101-5.6	SAW CUT FULL DEPTH	LF	2,855				
8	P-102-2.1	TRAFFIC CONTROL	LS	1				
9	P-152-4.1	EMBANKMENT IN PLACE (FURNISHED BY CONTRACTOR)	CY	2,085				
10	P-152-4.2	UNSUITABLE EXCAVATION	CY	1,035				
11	P-156-5.1	TEMPORARY CONSTRUCTION ENTRANCE	EA	2				
12	P-156-5.2	INSTALLATION AND REMOVAL OF SILT FENCE	LF	1,525				
13	P-156-5.3	SEDIMENT REMOVAL	CY	75				
14	P-156-5.4	TURF REINFORCEMENT MAT TYPE 1	SY	5,394				
15	P-158-8.1	12 INCH FLY ASH TREATED SUBGRADE	SY	15,780				
16	P-158-8.2	FLY ASH	TON	1,140				
17	P-209-5.1	9 INCH CRUSHED AGGREGATE BASE COURSE	SY	6,765				
18	P-401-8.1	4 INCH BITUMINOUS SURFACE COURSE (2 - 2 INCH LIFTS)	TON	1,690				
19	P-602-5.1	BITUMINOUS PRIME COAT	GAL	2,630				
20	P-603-5.1	BITUMINOUS TACK COAT	GAL	1,130				
21	P-620-5.1	REFLECTORIZED PAVEMENT MARKING (YELLOW)	SF	2,050				
22	P-620-5.2	NON-REFLECTORIZED PAVEMENT MARKING (BLACK)	SF	4,095				
23	D-701-5.1	6 INCH PE OUTLET PIPE	LF	395				
24	D-701-5.2	8 INCH PE OUTLET PIPE	LF	505				
25	D-701-5.3	ROCK REVETMENT	SY	112				
26	D-703-5.1	MODULAR POLYMER CONCRETE GRATED TRENCH DRAIN	LF	2,620				
27	D-705-5.1	4" PERFORATED PVC UNDERDRAIN (COMPLETE)	LF	3,280				
28	D-705-5.2	4" NON-PERFORATED PVC OUTLET PIPE	LF	360				
29	D-705-5.3	UNDERDRAIN CLEANOUTS	EA	19				
30	D-705-5.4	PRECAST CONCRETE SPLASH PADS	EA	21				
31	D-705-5.4	8 INCH CLEANOUT (GRATE LID)	EA	5				
32	T-901-5.1	SEEDING	AC	1.7				
33	T-904-5.1	SODDING (18" WIDE)	SY	425				
34	T-904-5.3	TOPSOILING (FURNISHED FROM OFF THE SITE)	CY	865				
35	T-908-5.1	MULCHING	AC	0.50				

TOTAL SCHEDULE 3, OPTION 1, AIP ELIGIBLE
(Numeral Format)..... $_____._____

TOTAL SCHEDULE 3, OPTION 1, AIP ELIGIBLE
(Written Format)..... _____

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SCHEDULE 3 - PHASES E, A, B, C, D ; OPTION 1 - ASPHALT PAVEMENT								
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	UNIT PRICE		EXTENSION	
					DOLLARS	CTS	DOLLARS	CTS
NON-AIP ELIGIBLE ITEMS WITH ASPHALT								
36	P-209-5.1	9 INCH CRUSHED AGGREGATE BASE COURSE	SY	8,125				
37	P-401-8.1	4 INCH BITUMINOUS SURFACE COURSE (2 - 2 INCH LIFTS)	TON	1,825				
38	P-602-5.1	BITUMINOUS PRIME COAT	GAL	1,540				
39	P-603-5.1	BITUMINOUS TACK COAT	GAL	1,220				

TOTAL SCHEDULE 3, OPTION 1, NON-AIP ELIGIBLE
(Numeral Format)..... $_____._____

TOTAL SCHEDULE 3, OPTION 1, NON-AIP ELIGIBLE
(Written Format)..... _____

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TOTAL SCHEDULE 3, OPTION 1, AIP & NON-AIP ELIGIBLE
(Numeral Format)..... $_____._____

TOTAL SCHEDULE 3, OPTION 1, AIP & NON-AIP ELIGIBLE
(Written Format)..... _____

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SCHEDULE 1 - PHASES E, A, B ; OPTION 2 - CONCRETE PAVEMENT								
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	UNIT PRICE		EXTENSION	
					DOLLARS	CTS	DOLLARS	CTS
AIP ELIGIBLE ITEMS WITH CONCRETE								
1	SECTION 105	MOBILIZATION	LS	1				
2	P-101-5.1	ASPHALT PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" AC)	SY	5,630				
3	P-101-5.2	CONCRETE PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" PCC)	SY	4,305				
4	P-101-5.3	BASE COURSE REMOVAL VARIABLE DEPTH (8 TO 15")	SY	9,930				
5	P-101-5.4	GRATED TRENCH DRAIN REMOVAL	LF	720				
6	P-101-5.5	PAINT REMOVAL	SF	525				
7	P-101-5.6	SAW CUT FULL DEPTH	LF	1,320				
8	P-102-2.1	TRAFFIC CONTROL	LS	1				
9	P-152-4.1	EMBANKMENT IN PLACE (FURNISHED BY CONTRACTOR)	CY	3,265				
10	P-152-4.2	UNSUITABLE EXCAVATION	CY	835				
11	P-156-5.1	TEMPORARY CONSTRUCTION ENTRANCE	EA	2				
12	P-156-5.2	INSTALLATION AND REMOVAL OF SILT FENCE	LF	1,175				
13	P-156-5.3	SEDIMENT REMOVAL	CY	50				
14	P-156-5.4	TURF REINFORCEMENT MAT TYPE 1	SY	3,215				
15	P-158-8.1	12 INCH FLY ASH TREATED SUBGRADE	SY	9,745				
16	P-158-8.2	FLY ASH	TON	705				
17	P-209-5.2	4 INCH CRUSHED AGGREGATE BASE COURSE	SY	5,345				
18	P-501-8.1	6 INCH PORTLAND CEMENT CONCRETE PAVEMENT	SY	5,180				
19	P-620-5.1	REFLECTORIZED PAVEMENT MARKING (YELLOW)	SF	1,565				
20	P-620-5.2	NON-REFLECTORIZED PAVEMENT MARKING (BLACK)	SF	3,125				
21	D-701-5.1	6 INCH PE OUTLET PIPE	LF	220				
22	D-701-5.2	8 INCH PE OUTLET PIPE	LF	505				
23	D-701-5.3	ROCK REVETMENT	SY	70				
24	D-703-5.1	MODULAR POLYMER CONCRETE GRATED TRENCH DRAIN	LF	1,290				
25	D-705-5.1	4" PERFORATED PVC UNDERDRAIN (COMPLETE)	LF	1,910				
26	D-705-5.2	4" NON-PERFORATED PVC OUTLET PIPE	LF	220				

27	D-705-5.3	UNDERDRAIN CLEANOUTS	EA	11				
28	D-705-5.4	PRECAST CONCRETE SPLASH PADS	EA	13				
29	D-705-5.4	8 INCH CLEANOUT (GRATE LID)	EA	5				
30	T-901-5.1	SEEDING	AC	1.2				
31	T-904-5.1	SODDING (18" WIDE)	SY	270				
32	T-904-5.3	TOPSOILING (FURNISHED FROM OFF THE SITE)	CY	620				
33	T-908-5.1	MULCHING	AC	0.50				

TOTAL SCHEDULE 1, OPTION 2, AIP ELIGIBLE
(Numeral Format)..... $_____.____

TOTAL SCHEDULE 1, OPTION 2, AIP ELIGIBLE
(Written Format)..... _____

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SCHEDULE 1 - PHASES E, A, B ; OPTION 2 - CONCRETE PAVEMENT								
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	UNIT PRICE		EXTENSION	
					DOLLARS	CTS	DOLLARS	CTS
NON-AIP ELIGIBLE ITEMS WITH CONCRETE								
34	P-209-5.2	4 INCH CRUSHED AGGREGATE BASE COURSE	SY	4,400				
35	P-501-8.1	6 INCH PORTLAND CEMENT CONCRETE PAVEMENT	SY	4,400				

TOTAL SCHEDULE 1, OPTION 2, NON-AIP ELIGIBLE
(Numeral Format)..... $_____.____

TOTAL SCHEDULE 1, OPTION 2, NON-AIP ELIGIBLE
(Written Format)..... _____

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TOTAL SCHEDULE 1, OPTION 2, AIP & NON-AIP ELIGIBLE
(Numeral Format)..... $_____.____

TOTAL SCHEDULE 1, OPTION 2, AIP & NON-AIP ELIGIBLE
(Written Format)..... _____

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SCHEDULE 2 - PHASES E, A, B, C ; OPTION 2 - CONCRETE PAVEMENT								
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	UNIT PRICE		EXTENSION	
					DOLLARS	CTS	DOLLARS	CTS
AIP ELIGIBLE ITEMS WITH CONCRETE								
1	SECTION 105	MOBILIZATION	LS	1				
2	P-101-5.1	ASPHALT PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" AC)	SY	6,870				
3	P-101-5.2	CONCRETE PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" PCC)	SY	6,140				
4	P-101-5.3	BASE COURSE REMOVAL VARIABLE DEPTH (8 TO 15")	SY	13,005				
5	P-101-5.4	GRATED TRENCH DRAIN REMOVAL	LF	720				
6	P-101-5.5	PAINT REMOVAL	SF	525				
7	P-101-5.6	SAW CUT FULL DEPTH	LF	2,100				
8	P-102-2.1	TRAFFIC CONTROL	LS	1				
9	P-152-4.1	EMBANKMENT IN PLACE (FURNISHED BY CONTRACTOR)	CY	4,290				
10	P-152-4.2	UNSUITABLE EXCAVATION	CY	935				
11	P-156-5.1	TEMPORARY CONSTRUCTION ENTRANCE	EA	2				
12	P-156-5.2	INSTALLATION AND REMOVAL OF SILT FENCE	LF	1,340				
13	P-156-5.3	SEDIMENT REMOVAL	CY	75				
14	P-156-5.4	TURF REINFORCEMENT MAT TYPE 1	SY	4,250				
15	P-158-8.1	12 INCH FLY ASH TREATED SUBGRADE	SY	12,820				
16	P-158-8.2	FLY ASH	TON	930				
17	P-209-5.2	4 INCH CRUSHED AGGREGATE BASE COURSE	SY	6,520				
18	P-501-8.1	6 INCH PORTLAND CEMENT CONCRETE PAVEMENT	SY	6,350				
19	P-620-5.1	REFLECTORIZED PAVEMENT MARKING (YELLOW)	SF	1,805				
20	P-620-5.2	NON-REFLECTORIZED PAVEMENT MARKING (BLACK)	SF	3,610				
21	D-701-5.1	6 INCH PE OUTLET PIPE	LF	330				
22	D-701-5.2	8 INCH PE OUTLET PIPE	LF	505				
23	D-701-5.3	ROCK REVETMENT	SY	91				
24	D-703-5.1	MODULAR POLYMER CONCRETE GRATED TRENCH DRAIN	LF	1,930				
25	D-705-5.1	4" PERFORATED PVC UNDERDRAIN (COMPLETE)	LF	2,595				
26	D-705-5.2	4" NON-PERFORATED PVC OUTLET PIPE	LF	290				

27	D-705-5.3	UNDERDRAIN CLEANOUTS	EA	15				
28	D-705-5.4	PRECAST CONCRETE SPLASH PADS	EA	17				
29	D-705-5.4	8 INCH CLEANOUT (GRATE LID)	EA	5				
30	T-901-5.1	SEEDING	AC	1.4				
31	T-904-5.1	SODDING (18" WIDE)	SY	395				
32	T-904-5.3	TOPSOILING (FURNISHED FROM OFF THE SITE)	CY	735				
33	T-908-5.1	MULCHING	AC	0.50				

TOTAL SCHEDULE 2, OPTION 2, AIP ELIGIBLE
(Numeral Format)..... $_____.____

TOTAL SCHEDULE 2, OPTION 2, AIP ELIGIBLE
(Written Format)..... _____

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SCHEDULE 2 - PHASES E, A, B, C ; OPTION 2 - CONCRETE PAVEMENT								
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	UNIT PRICE		EXTENSION	
					DOLLARS	CTS	DOLLARS	CTS
NON-AIP ELIGIBLE ITEMS WITH CONCRETE								
34	P-209-5.2	4 INCH CRUSHED AGGREGATE BASE COURSE	SY	6,310				
35	P-501-8.1	6 INCH PORTLAND CEMENT CONCRETE PAVEMENT	SY	6,300				

TOTAL SCHEDULE 2, OPTION 2, NON-AIP ELIGIBLE
(Numeral Format)..... $_____.____

TOTAL SCHEDULE 2, OPTION 2, NON-AIP ELIGIBLE
(Written Format)..... _____

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TOTAL SCHEDULE 2, OPTION 2, AIP & NON-AIP ELIGIBLE
(Numeral Format)..... $_____.____

TOTAL SCHEDULE 2, OPTION 2, AIP & NON-AIP ELIGIBLE
(Written Format)..... _____

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SCHEDULE 3 - PHASES E, A, B, C, D ; OPTION 2 - CONCRETE PAVEMENT								
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	UNIT PRICE		EXTENSION	
					DOLLARS	CTS	DOLLARS	CTS
AIP ELIGIBLE ITEMS WITH CONCRETE								
1	SECTION 105	MOBILIZATION	LS	1				
2	P-101-5.1	ASPHALT PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" AC)	SY	8,125				
3	P-101-5.2	CONCRETE PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" PCC)	SY	7,840				
4	P-101-5.3	BASE COURSE REMOVAL VARIABLE DEPTH (8 TO 15")	SY	15,965				
5	P-101-5.4	GRATED TRENCH DRAIN REMOVAL	LF	720				
6	P-101-5.5	PAINT REMOVAL	SF	525				
7	P-101-5.6	SAW CUT FULL DEPTH	LF	2,855				
8	P-102-2.1	TRAFFIC CONTROL	LS	1				
9	P-152-4.1	EMBANKMENT IN PLACE (FURNISHED BY CONTRACTOR)	CY	2,100				
10	P-152-4.2	UNSUITABLE EXCAVATION	CY	1,035				
11	P-156-5.1	TEMPORARY CONSTRUCTION ENTRANCE	EA	2				
12	P-156-5.2	INSTALLATION AND REMOVAL OF SILT FENCE	LF	1,525				
13	P-156-5.3	SEDIMENT REMOVAL	CY	100				
14	P-156-5.4	TURF REINFORCEMENT MAT TYPE 1	SY	5,395				
15	P-158-8.1	12 INCH FLY ASH TREATED SUBGRADE	SY	15,780				
16	P-158-8.2	FLY ASH	TON	1,140				
17	P-209-5.2	4 INCH CRUSHED AGGREGATE BASE COURSE	SY	7,670				
18	P-501-8.1	6 INCH PORTLAND CEMENT CONCRETE PAVEMENT	SY	7,505				
19	P-620-5.1	REFLECTORIZED PAVEMENT MARKING (YELLOW)	SF	2,050				
20	P-620-5.2	NON-REFLECTORIZED PAVEMENT MARKING (BLACK)	SF	4,095				
21	D-701-5.1	6 INCH PE OUTLET PIPE	LF	395				
22	D-701-5.2	8 INCH PE OUTLET PIPE	LF	505				
23	D-701-5.3	ROCK REVETMENT	SY	112				
24	D-703-5.1	MODULAR POLYMER CONCRETE GRATED TRENCH DRAIN	LF	2,620				
25	D-705-5.1	4" PERFORATED PVC UNDERDRAIN (COMPLETE)	LF	3,280				

26	D-705-5.2	4" NON-PERFORATED PVC OUTLET PIPE	LF	360				
27	D-705-5.3	UNDERDRAIN CLEANOUTS	EA	19				
28	D-705-5.4	PRECAST CONCRETE SPLASH PADS	EA	21				
29	D-705-5.4	8 INCH CLEANOUT (GRATE LID)	EA	5				
30	T-901-5.1	SEEDING	AC	1.7				
31	T-904-5.1	SODDING (18" WIDE)	SY	425				
32	T-904-5.3	TOPSOILING (FURNISHED FROM OFF THE SITE)	CY	865				
33	T-908-5.1	MULCHING	AC	0.50				

TOTAL SCHEDULE 3, OPTION 2, AIP
(Numeral Format)..... $_____._____

TOTAL SCHEDULE 3, OPTION 2, AIP
(Written Format)..... _____

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SCHEDULE 3 - PHASES E, A, B, C, D ; OPTION 2 - CONCRETE PAVEMENT								
BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	UNIT PRICE		EXTENSION	
					DOLLARS	CTS	DOLLARS	CTS
NON-AIP ELIGIBLE ITEMS WITH CONCRETE								
34	P-209-5.2	4 INCH CRUSHED AGGREGATE BASE COURSE	SY	8,125				
35	P-501-8.1	6 INCH PORTLAND CEMENT CONCRETE PAVEMENT	SY	8,110				

TOTAL SCHEDULE 3, OPTION 2, NON-AIP ELIGIBLE
(Numeral Format)..... $_____._____

TOTAL SCHEDULE 3, OPTION 2, NON-AIP ELIGIBLE
(Written Format)..... _____

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TOTAL SCHEDULE 3, OPTION 2, AIP & NON-AIP ELIGIBLE
(Numeral Format)..... $_____._____

TOTAL SCHEDULE 3, OPTION 2, AIP & NON-AIP ELIGIBLE
(Written Format)..... _____

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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 **90 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 **120 Calendar Days if Schedule 1 is awarded, 165 Calendar Days if Schedule 2 is awarded, and 210 Calendar Days is Schedule 3 is awarded,** 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 **$1,500 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 **six (6) 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 city 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 David 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 proceeding 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

l. The undersigned acknowledges receipt of the following addenda:

Addendum No. _____, dated _____ Date Received _____

Addendum No. _____, dated _____ Date Received _____

Addendum No. _____, dated _____ Date Received _____

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 of 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 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 CFR Part 30)

The Bidder, by submission of an offer certifies that it:

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 (USTR);

2. has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;

3. has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

d. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion (49 CFR Part 29)

The Bidder certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this proposal that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the Bidder or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this solicitation/proposal.

e. Buy American Certification: (Title 49 U.S.C. Chapter 501)

As a condition of bid responsiveness, the bidder must certify its compliance with the Buy American preferences established under Title 49 U.S.C. Section 50101. Bidders must complete the Buy American certification as follows:

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 on the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (not both) by inserting a checkmark (✓) or the letter "X".

☐ Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:

a) Only installing steel and manufactured products produced in the United States, or;
b) 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;
c) 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:

1. To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
2. To faithfully comply with providing US domestic product
3. To furnish US domestic product for any waiver request that the FAA rejects
4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

☐ The 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:

1. To the 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.
2. That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination may result in rejection of the proposal.
3. To faithfully comply with providing US domestic products at or above the approved US domestic content percentage as approved by the FAA.
4. 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 that 60% of the cost of all components and subcomponents of the "item". The required documentation for a type 3 waiver is:

a) 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)
b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly at place of manufacture.
c) Percentage of non-domestic component and subcomponent cost as compared to total "item" component and subcomponent costs, excluding labor costs associated with final assembly 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 of waiver is:

a) Detailed cost information for total project using US domestic product
b) 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

Instructions for Section 50101(b)(3) Waiver:

1. "Equipment" in Section 50101 shall mean the following:
   a) Individual type "L" items (Airfield Lighting Equipment) as listed in FAA Advisory Circular 150/5345-53.
   b) Individual bid items as established within FAA Advisory Circular 150/5370-10. The bid item application may not be applied for the type "L" items listed in AC 150/5345-53.
   c) A waiver request may only address one specific equipment item. Submit separate requests for each equipment item for which a waiver.
   d) Items listed under the Nationwide Waiver do not require further review. Please refer to the following webpage: http://www.faa.gov/airports/aip/procurement/federal_contract_provisions/media/buy_american_waiver.xls
2. The Bidder must base the U.S. percentage upon the value that results from completing a component cost calculation table similar to the attached format. Bidder shall avoid mere pro forma efforts to establish the waiver request percentage. The Bidder must submit the component cost calculation table as an attachment to the waiver request.
3. Components/subcomponents are the material and products composing the "equipment".
4. The final assembly of the AIP-funded "equipment" must be within the USA (Section 50101(b)(3)(B)). Final assembly is the substantial transformation of the components and subcomponents into the end product.
5. All steel used in the "Equipment" must be produced in the United States.
6. The Buy American requirements apply to all tier contractors and subcontractors. All contractors/subcontractors are required to provide appropriate documentation that indicates origin of manufacturer and percentage of domestic made product.
7. The Bidder is hereby advised there is no implied or expressed guarantee that a requested waiver will be issued by the Federal Aviation Administration (FAA). Less than 60% USA component/subcomponent proposed for this facility CANNOT be waived. Products made with foreign steel are not eligible for a waiver.

Instructions for Section 50101(b)(4) Waiver:

1. The 25% cost increase waiver is rarely applicable. Consult Owner before making this request.

North America Free Trade Act (NAFTA)

e NAFTA **does not** apply to the AIP. Products and material made in Canada or Mexico must be considered as foreign made products.

COMPONENT COST CALCULATION TABLE

- In lieu of completing this table, bidder may prepare a spreadsheet that addresses the same information and calculations as presented herein.
- An authorized person shall attest under signature and date that the submitted information is accurate and complete.
- The bidder/contractor shall submit the signed component cost calculation table to the Owner as an attachment to the waiver request
- The component breakout shall be along major components of the equipment.
- Submit separate calculation for each different equipment types. Do not combine the component cost calculations of different types of equipment.
- For Airfield development projects, equipment is defined as the "L" items (Airfield Lighting Equipment) as listed in FAA Advisory Circular 150/5345-53 and the b) individual bid items as established within FAA Advisory Circular 150/5370-10. The individual bid item method may not be applied to the "L" type items.

Equipment Type: _____

Component/ Subcomponents	**Name of Manufacturer**	**Country of Origin**	**Cost of Foreign Manufactured Components/ Subcomponents**	**Cost of USA Manufactured Components/ Subcomponents**

Sum of US Manufactured Component/Subcomponent Costs:_____

Sum of all Equipment Components and Subcomponents:_____

Percentage of Equipment Components Manufactured in the United States:_____

Place of Final Assembly:_____

Certification Signature

I hereby certify the above information is accurate and complete.

_____ _____

Bidder's Firm Name **Date**

_____

Signature

WORKER ELIGIBILITY VERIFICATION AFFIDAVIT FOR ALL CONTRACT AGREEMENTS IN EXCESS OF $100,000 (Local match in excess of $5,000)

(for joint ventures, a separate affidavit is required for each business entity)

STATE OF _____)
) ss
COUNTY OF _____)

On this _____ day of _____, 20_____, before me appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be a person whose name is subscribed to this affidavit, who being by me duly sworn, deposed as follows:

My name is _____, and I am of sound mind, capable of making this 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 _____ (title) of _____ (business name), 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 DBE's 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:

DBE Name and Address	Bid Item Number(s) Or Work Performed	$ Value of DBE Work	% of **$Value Applicable to DBE Goal	$ Amount Applicable to DBE Goal	% of Total Federal Contract
TOTAL DBE PARTICIPATION				$	%

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

(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:	Address of each:
_____	_____
_____	_____
_____	_____
doing business under the name of:	Address of principal place of business in Missouri:
_____ (If using a fictitious name, show this name above in addition to legal names)	_____
_____ (If a corporation, show its name above)	_____
	_____
ATTEST: (SEAL)	
_____ (Signature) Secretary	_____ (Signature) (Title)
_____ Please print name	_____ Please 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.

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ITEM P-101 SURFACE PREPARATION

DESCRIPTION

101-1.1 This item shall consist of preparation of existing pavement surfaces for overlay, surface treatments, removal of existing pavement, and other miscellaneous items. The work shall be accomplished in accordance with these specifications and the applicable drawings.

EQUIPMENT

101-2.1 All equipment shall be specified here and in the following paragraphs or approved by the Engineer. The equipment shall not cause damage to the pavement to remain in place.

CONSTRUCTION

101-3.1 REMOVAL OF EXISTING PAVEMENT.

a. Concrete pavement. The existing concrete pavement to be removed shall be freed from the pavement to remain by sawing through the complete depth of the slab one foot inside the perimeter of the final removal limits or outside the dowels, whichever is greater when the limits of removal are located on the joints. The pavement between the perimeter of the pavement removal and the saw cut shall be carefully broken up and removed using hand-held jackhammers, weighing 30 pounds or less, or other light-duty equipment which will not cause distress in the pavement which is to remain in place. The Contractor shall have the option of sawing through the dowels at the joint, removing the pavement and installing new dowels. Where the perimeter of the removal limits is not located on the joint and there are no dowels present, then the perimeter shall be saw cut the full depth of the pavement. The pavement inside the saw cut shall be removed by methods suitable to the Engineer which will not cause distress in the pavement which is to remain in place. If the material is to be wasted on the airport site, it shall be reduced to a maximum size designated by the Engineer. The Contractor's removal operation shall not cause damage to cables, utility ducts, pipelines, or drainage structures under the pavement. Concrete slabs that are damaged by under breaking shall be removed. Any damage shall be repaired at the Contractor's expense.

b. Asphalt concrete pavement. Asphalt concrete pavement to be removed shall be cut to the full depth of the bituminous material around the perimeter of the area to be removed. The pavement shall be removed so the joint for each layer of pavement replacement is offset 1 foot from the joint in the preceding layer. This does not apply if the removed pavement is to be replaced with concrete or soil. If the material is to be wasted on the airport site, it shall be broken to the maximum size determined by the Owner.

101-3.2 PREPARATION OF JOINTS AND CRACKS. Not used.

101-3.3 REMOVAL OF PAINT. All paint shall be removed from the surface of the existing pavement as shown on the plans. Chemicals, high-pressure water, heater scarifier (asphaltic concrete only), cold milling, or sandblasting may be used. Any methods used shall not cause major damage to the pavement. Major damage is defined as changing the properties of the pavement or removing pavement over 1/8 inch deep. If chemicals are used, they shall comply with the state's environmental protection regulations. No material shall be deposited on the runway shoulders. All wastes shall be disposed of in areas indicated in this specification or shown on the plans.

101-3.4 CONCRETE SPALL OR FAILED ASPHALTIC CONCRETE PAVEMENT REPAIR.

a. Repair of concrete spalls in areas to be overlaid with asphalt. Not used.

b. Asphaltic concrete pavement repair. Not used.

101-3.5 COLD MILLING. Not used.

a. Patching. Not used.

b. Profiling, grade correction, or surface correction. Not used.

c. Clean-up. Not used.

101-3.6. PREPARATION OF ASPHALT PAVEMENT SURFACES. Not used.

101-3.7 MAINTENANCE. The Contractor shall perform all maintenance work necessary to keep the pavement in a satisfactory condition until the full section is complete and accepted by the Engineer. The surface shall be kept clean and free from foreign material. The pavement shall be properly drained at all times. If cleaning is necessary or if the pavement becomes disturbed, any work repairs necessary shall be performed at the Contractor's expense.

101-3.8 PREPARATION OF JOINTS IN RIGID PAVEMENT.

101-3.8.1 Removal of Existing Joint Sealant. Not used.

101-3.8.2 Cleaning prior to sealing. Not used.

101-3.9 PREPARATION OF CRACKS IN FLEXIBLE PAVEMENT.

101-3.9.1 Preparation of Crack. Not used.

101-3.9.2 Removal of Existing Sealant. Not used.

METHOD OF MEASUREMENT

101-4.1 PAVEMENT REMOVAL. The unit of measurement for pavement removal shall be the number of square yards removed by the Contractor. Any pavement removed outside the limits of removal because the pavement was damaged by negligence on the part of the Contractor shall not be included in the measurement for payment.

101-4.2 BASE COURSE REMOVAL. The unit of measurement for paint removal shall be the square yard. Any base removed outside the limits of removal shall not be included in the measurement for payment.

101-4.3 GRATED TRENCH DRAIN REMOVAL. The unit of measurement for grated trench drain removal shall be the linear foot. *Grated trench drains shall be removed at the locations designated on the plans. Any underdrain piping removed outside of the limits or damaged by negligence on the part of the of the Contractor shall not be included in the measurement for payment and shall be replaced at no cost to the Owner.*

101-4.4 PAINT REMOVAL. The unit of measurement for paint removal shall be the square foot.

BASIS OF PAYMENT

101-5.1 PAYMENT. Payment shall be made at contract unit price for the unit of measurement as specified above. This price shall be full compensation for furnishing all materials and for all preparation,

hauling, and placing of the material and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment will be made under:

Item P-101-5.1	Asphalt Pavement Removal Variable Depth (4 to 5” AC) – Per Square Yard
Item P-101-5.2	Concrete Pavement Removal Variable Depth (4 to 5” PCC) – Per Square Yard
Item P-101-5.3	Base Course Removal Variable Depth (8 to 15") – Per Square Yard
Item P-101-5.4	Grated Trench Drain Removal – Per Linear Foot
Item P-101-5.5	Paint Removal – Per Square Foot
Item P-101-5.6	Saw Cut Full Depth – Per Linear Foot

MATERIAL REQUIREMENTS

ASTM D6690	Standard Specification For Joint And Crack Sealants, Hot Applied, For Concrete And Asphalt Pavements

END OF ITEM P-101

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ITEM P-152 EXCAVATION, SUBGRADE, AND EMBANKMENT

DESCRIPTION

152-1.1 This item covers excavation, disposal, placement, and compaction of all materials within the limits of the work required to construct safety areas, runways, taxiways, aprons, and intermediate areas as well as other areas for drainage, building construction, parking, or other purposes in accordance with these specifications and in conformity to the dimensions and typical sections shown on the plans.

152-1.2 CLASSIFICATION. All material excavated shall be classified as defined below:

a. Unclassified excavation. Unclassified excavation shall consist of the excavation and disposal of all material, regardless of its nature which is not otherwise classified and paid for under one of the following items.

b. Rock excavation. Not used.

c. Muck excavation. Not used.

d. Drainage excavation. Not used.

e. Borrow excavation. Not used.

152-1.3 UNSUITABLE EXCAVATION. Any material containing vegetable or organic matter, such as muck, peat, organic silt, or sod shall be considered unsuitable for use in embankment construction. Material, suitable for topsoil may be used on the embankment slope when approved by the Engineer.

CONSTRUCTION METHODS

152-2.1 GENERAL. The suitability of material to be placed in embankments shall be subject to approval by the Engineer. All unsuitable material shall be disposed of in waste areas shown on the plans. All waste areas shall be graded to allow positive drainage of the area and of adjacent areas. The surface elevation of waste areas shall not extend above the surface elevation of adjacent usable areas of the airport, unless specified on the plans or approved by the Engineer.

When the Contractor's excavating operations encounter artifacts of historical or archaeological significance, the operations shall be temporarily discontinued and the Engineer notified per subsection 70-20. At the direction of the Engineer, the Contractor shall excavate the site in such a manner as to preserve the artifacts encountered and allow for their removal. Such excavation will be paid for as extra work.

Those areas outside of the limits of the pavement areas where the top layer of soil material has become compacted by hauling or other Contractor activities shall be scarified and disked to a depth of 4 inches, to loosen and pulverize the soil.

If it is necessary to interrupt existing surface drainage, sewers or under-drainage, conduits, utilities, or similar underground structures, the Contractor shall be responsible for and shall take all necessary precautions to preserve them or provide temporary services. When such facilities are encountered, the Contractor shall notify the Engineer, who shall arrange for their removal if necessary. The Contractor, at his or her expense, shall satisfactorily repair or pay the cost of all damage to such facilities or structures that may result from any of the Contractor's operations during the period of the contract.

152-2.2 EXCAVATION. No excavation shall be started until the work has been staked out by the Contractor and the Engineer has obtained from the Contractor, the survey notes of the elevations and measurements of the ground surface. All areas to be excavated shall be stripped of vegetation and topsoil. Topsoil shall be stockpiled for future use in areas designated on the plans or by the Engineer. All suitable excavated material shall be used in the formation of embankment, subgrade, or other purposes shown on the plans. All unsuitable material shall be disposed of as shown on the plans.

When the volume of the excavation exceeds that required to construct the embankments to the grades indicated, the excess shall be used to grade the areas of ultimate development or disposed as directed by the Engineer. When the volume of excavation is not sufficient for constructing the embankments to the grades indicated, the deficiency shall be obtained from borrow areas.

The grade shall be maintained so that the surface is well drained at all times. When necessary, temporary drains and drainage ditches shall be installed to intercept or divert surface water that may affect the work.

a. Selective grading. Not used.

b. Undercutting. Rock, shale, hardpan, loose rock, boulders, or other material unsatisfactory for safety areas, subgrades, roads, shoulders, or any areas intended for turf shall be excavated to a minimum depth of 12 inches below the subgrade or to the depth specified by the Engineer. Muck, peat, matted roots, or other yielding material, unsatisfactory for subgrade foundation, shall be removed to the depth specified. Unsuitable materials shall be **disposed off the airport**. The cost is incidental to this item. This excavated material shall be paid for at the contract unit price per cubic yard for **unsuitable excavation**. The excavated area shall be backfilled with suitable material obtained from the grading operations or borrow areas and compacted to specified densities. The necessary backfill will constitute a part of the embankment. Where rock cuts are made, backfill with select material. Any pockets created in the rock surface shall be drained in accordance with the details shown on the plans.

c. Overbreak. Overbreak, including slides, is that portion of any material displaced or loosened beyond the finished work as planned or authorized by the Engineer. All overbreak shall be graded or removed by the Contractor and disposed of as directed by the Engineer. The Engineer shall determine if the displacement of such material was unavoidable and his or her decision shall be final. Payment will not be made for the removal and disposal of overbreak that the Engineer determines as avoidable. Unavoidable overbreak will be classified as "Unclassified Excavation."

d. Removal of utilities. The removal of existing structures and utilities required to permit the orderly progress of work will be accomplished by someone other than the Contractor; for example, the utility unless otherwise shown on the plans. All existing foundations shall be excavated at least 2 feet below the top of subgrade or as indicated on the plans, and the material disposed of as directed by the Engineer. All foundations thus excavated shall be backfilled with suitable material and compacted as specified.

e. Compaction requirements. The subgrade under areas to be paved shall be compacted to a depth of **12-inches** and to a density of not less than **95 percent** of the maximum density as determined by **ASTM D698**. The material to be compacted shall be within *0% to +4%* of optimum moisture content before being rolled to obtain the prescribed compaction (except for expansive soils).

The in-place field density shall be determined in accordance with **ASTM D6938 using Procedure A**, the direct transmission method, and ASTM D6938 shall be used to determine the moisture content of the material. The machine shall be calibrated in accordance with ASTM D6938. Stones or rock fragments larger than 4 inches in their greatest dimension will not be permitted in the top 6 inches of the subgrade. The finished grading operations, conforming to the typical cross-section, shall be completed and maintained at least 1,000 feet ahead of the paving operations or as directed by the Engineer.

All loose or protruding rocks on the back slopes of cuts shall be pried loose or otherwise removed to the slope finished grade line. All cut-and-fill slopes shall be uniformly dressed to the slope, cross-section, and alignment shown on the plans or as directed by the Engineer.

Blasting shall not be allowed.

f. Proof rolling. After compaction is completed, the subgrade area shall be proof rolled with a 20 ton Tandem axle Dual Wheel Dump Truck loaded to the legal limit with tires inflated to 80 psi in the presence of the Engineer. Apply a minimum of **100 percent** coverage, or as specified by the Engineer, to all paved areas. A coverage is defined as the application of one tire print over the designated area. Soft areas of subgrade that deflect more than 1 inch or show permanent deformation greater than 1 inch shall be removed and replaced with suitable material or reworked to conform to the moisture content and compaction requirements in accordance with these specifications.

152-2.3 BORROW EXCAVATION. Not used.

152-2.4 DRAINAGE EXCAVATION. Not used.

152-2.5 PREPARATION OF EMBANKMENT AREA. Where an embankment is to be constructed to a height of 4 feet or less, all sod and vegetative matter shall be removed from the surface upon which the embankment is to be placed. The cleared surface shall be broken up by plowing or scarifying to a minimum depth of 6 inches and shall then be compacted as indicated in paragraph 152-2.6. When the height of fill is greater than 4 feet, sod not required to be removed shall be thoroughly disked and recompacted to the density of the surrounding ground before construction of embankment.

Sloped surfaces steeper than one (1) vertical to four (4) horizontal shall be plowed, stepped, benched, or broken up so that the fill material will bond with the existing material. When the subgrade is part fill and part excavation or natural ground, the excavated or natural ground portion shall be scarified to a depth of 12 inches and compacted as specified for the adjacent fill.

No direct payment shall be made for the work performed under this section. The necessary clearing and grubbing and the quantity of excavation removed will be paid for under the respective items of work.

152-2.6 FORMATION OF EMBANKMENTS. Embankments shall be formed in successive horizontal layers of not more than **8 inches** in loose depth for the full width of the cross-section, unless otherwise approved by the Engineer.

The layers shall be placed, to produce a soil structure as shown on the typical cross-section or as directed by the Engineer. Materials such as brush, hedge, roots, stumps, grass and other organic matter, shall not be incorporated or buried in the embankment.

Earthwork operations shall be suspended at any time when satisfactory results cannot be obtained because of rain, freezing, or other unsatisfactory weather conditions in the field. Frozen material shall not be placed in the embankment nor shall embankment be placed upon frozen material. Material shall not be placed on surfaces that are muddy, frozen, or contain frost. The Contractor shall drag, blade, or slope the embankment to provide surface drainage at all times.

The material in each layer shall be within ±2% of optimum moisture content before rolling to obtain the prescribed compaction. To achieve a uniform moisture content throughout the layer, the material shall be moistened or aerated as necessary. Samples of all embankment materials for testing, both before and after placement and compaction, will be taken for each **1,000 square yards**. Based on these tests, the Contractor shall make the necessary corrections and adjustments in methods, materials or moisture content to achieve the specified embankment density.

Material	ASTM Standard	Minimum Compaction (%)	Moisture Limits of Optimum
Fine-Grained Soil	698	95	0 - +4
Upper 12 Inches of Pavement Subgrade	698	95	0 - +4
Well-Graded Crushed Stone	698	100	0 - +4

Rolling operations shall be continued until the embankment is compacted to not less than 95% of maximum density for noncohesive soils, and 90% of maximum density for cohesive soils as determined by **ASTM D698**. Under all areas to be paved, the embankments shall be compacted to a depth of **12-inches** and to a density of not less than **95 percent** of the maximum density as determined by **ASTM D6938**.

On all areas outside of the pavement areas, no compaction will be required on the top 4 inches.

The in-place field density shall be determined in accordance with **ASTM D6938** using Procedure A, the direct transmission method, and ASTM D6938 shall be used to determine the moisture content of the material. The machine shall be calibrated in accordance with ASTM D6938. The Engineer shall perform all density tests.

Compaction areas shall be kept separate, and no layer shall be covered by another layer until the proper density is obtained.

During construction of the embankment, the Contractor shall route all construction equipment evenly over the entire width of the embankment as each layer is placed. Layer placement shall begin in the deepest portion of the embankment fill. As placement progresses, the layers shall be constructed approximately parallel to the finished pavement grade line.

When rock and other embankment material are excavated at approximately the same time, the rock shall be incorporated into the outer portion of the embankment and the other material shall be incorporated under the future paved areas. Stones or fragmentary rock larger than 4 inches in their greatest dimensions will not be allowed in the top 6 inches of the subgrade. Rockfill shall be brought up in layers as specified or as directed by the Engineer and the finer material shall be used to fill the voids with forming a dense, compact mass. Rock or boulders shall not be disposed of outside the excavation or embankment areas, except at places and in the manner designated on the plans or by the Engineer.

When the excavated material consists predominantly of rock fragments of such size that the material cannot be placed in layers of the prescribed thickness without crushing, pulverizing or further breaking down the pieces, such material may be placed in the embankment as directed in layers not exceeding 2 feet in thickness. Each layer shall be leveled and smoothed with suitable equipment by distribution of spalls and finer fragments of rock. The layer shall not be constructed above an elevation 4 feet below the finished subgrade.

Payment for compacted embankment will be made under embankment in-place and no payment will be made for excavation, borrow, or other items.

152-2.7 FINISHING AND PROTECTION OF SUBGRADE. After the subgrade is substantially complete, the Contractor shall remove any soft or other unstable material over the full width of the subgrade that will not compact properly. All low areas, holes or depressions in the subgrade shall be brought to grade with suitable select material. Scarifying, blading, rolling and other methods shall be performed to provide a thoroughly compacted subgrade shaped to the lines and grades shown on the plans.

Grading of the subgrade shall be performed so that it will drain readily. The Contractor shall protect the subgrade from damage and limit hauling over the finished subgrade to only traffic essential for construction purposes. All ruts or rough places that develop in the completed subgrade shall be graded and recompacted.

No subbase, base, or surface course shall be placed on the subgrade until the subgrade has been approved by the Engineer.

152-2.8 HAUL. All hauling will be considered a necessary and incidental part of the work. The Contractor shall include the cost in the contract unit price for the pay of items of work involved. No payment will be made separately or directly for hauling on any part of the work.

152-2.9 TOLERANCES. In those areas upon which a subbase or base course is to be placed, the top of the subgrade shall be of such smoothness that, when tested with a 12-foot straightedge applied parallel and at right angles to the centerline, it shall not show any deviation in excess of 1/2 inch, or shall not be more than 0.05 feet from true grade as established by grade hubs. Any deviation in excess of these amounts shall be corrected by loosening, adding, or removing materials; reshaping; and recompacting.

On safety areas, intermediate and other designated areas, the surface shall be of such smoothness that it will not vary more than 0.10 feet from true grade as established by grade hubs. Any deviation in excess of this amount shall be corrected by loosening, adding or removing materials, and reshaping.

152-2.10 TOPSOIL. When topsoil is specified or required as shown on the plans or under Item T-905, it shall be salvaged from stripping or other grading operations. The topsoil shall meet the requirements of Item T-905. If, at the time of excavation or stripping, the topsoil cannot be placed in its final section of finished construction, the material shall be stockpiled at approved locations. Stockpiles shall not be placed within **500** feet of runway pavement or **70** feet of taxiway pavement and shall not be placed on areas that subsequently will require any excavation or embankment fill. If, in the judgment of the Engineer, it is practical to place the salvaged topsoil at the time of excavation or stripping, the material shall be placed in its final position without stockpiling or further rehandling.

Upon completion of grading operations, stockpiled topsoil shall be handled and placed as directed, or as required in Item T-905.

No direct payment will be made for topsoil under Item P-152. The quantity removed and placed directly or stockpiled shall be paid for at the contract unit price per cubic yard for "Unclassified Excavation."

When stockpiling of topsoil and later rehandling of such material is directed by the Engineer, the material so rehandled shall be paid for at the contract unit price per cubic yard for "topsoiling," as provided in Item T-905.

METHOD OF MEASUREMENT

152-3.1 The quantity of compacted embankment in-place to be paid for shall be the number of cubic yards measured in its final position.

152-3.2 Not used.

152-3.3 Not used.

152-3.4 For payment specified by the cubic yard, measurement for all embankment shall be computed by the average end area method. The end area is that bound by the original ground line established by field cross-sections and the final theoretical pay line established by embankment cross-sections shown on the plans, subject to verification by the Engineer. After completion of all embankment operations and prior to

the placing of base or subbase material, the final embankment shall be verified by the Engineer by means of field cross-sections taken randomly at intervals not exceeding 500 linear feet.

BASIS OF PAYMENT

152-4.1 "Unsuitable Excavation" payment shall be made at the contract unit price per cubic yard. This price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the item.

152-4.2 For embankment in place, payment shall be made at the contract unit price per cubic yard. This price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item P-152-4.1	Embankment in Place (Furnished by Contractor) – Per Cubic Yard
Item P-152-4.2	Unsuitable Excavation – Per Cubic Yard

TESTING REQUIREMENTS

ASTM D698	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft^3 (600 kN-m/m^3))
ASTM D1556	Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D1557	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft^3 (2700 kN-m/m^3))
ASTM D2167	Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method
ASTM D6938	Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)

END OF ITEM P-152

ITEM P-209 CRUSHED AGGREGATE BASE COURSE

DESCRIPTION

209-1.1 This item consists of a base course composed of crushed aggregate base constructed on a prepared course in accordance with these specifications and in conformity to the dimensions and typical cross-sections shown on the plans.

MATERIALS

209-2.1 CRUSHED AGGREGATE BASE. Crushed aggregate shall consist of clean, sound, durable particles of crushed stone, crushed gravel, and shall be free from coatings of clay, silt, organic material, or other objectionable materials. Aggregates shall contain no clay lumps or balls. Fine aggregate passing the No. 4 sieve shall consist of fines from the coarse aggregate crushing operation. If necessary, fine aggregate may be added to produce the correct gradation. The fine aggregate shall be produced by crushing stone, gravel, that meet the coarse aggregate requirements for wear and soundness.

The coarse aggregate portion, defined as the material retained on the No. 4 sieve, shall not have a loss of greater than 45% when tested per ASTM C131. The sodium sulfate soundness loss shall not exceed 12%, or the magnesium sulfate soundness loss shall not exceed 18%, after five cycles, when tested in accordance with ASTM C88. The aggregate shall contain no more than 15%, by weight, of flat, elongated, or flat and elongated particles per ASTM D4791. A flat particle is one having a ratio of width to thickness greater than 3; an elongated particle is one having a ratio of length to width greater than three (3). The aggregate shall have at least 90% by weight of particles with at least two fractured faces and 100% with at least one fractured face per ASTM D5821. The area of each face shall be equal to at least 75% of the smallest mid-sectional area of the piece. When two fractured faces are contiguous, the angle between the planes of fractures shall be at least 30 degrees to count as two fractured faces.

a. Sampling and testing for initial aggregate base requirements. Samples shall be taken by the Contractor in the presence of the Engineer. Material shall meet the requirements in paragraph 209-2.1 and 209-2.2. This sampling and testing will be the basis for approval of the aggregate base quality requirements.

209-2.2 GRADATION REQUIREMENTS. The gradation of the aggregate base material shall meet the requirements of the gradation given in the following table when tested per ASTM C117 and ASTM C136. The gradation shall be well graded from coarse to fine as defined by ASTM D2487 and shall not vary from the lower limit on one sieve to the high limit on an adjacent sieve or vice versa. The fraction of material passing the No. 200 sieve shall not exceed one-half the fraction passing the No. 40 sieve.

The material finer than 0.02 mm shall be limited to a maximum of 3% and the maximum allowable material passing the No. 200 sieve shall be reduced from 0-8% to 0-5%. Testing per ASTM D422 will be required for the percentage passing the 0.02 mm particle size once per lot.

Requirements For Gradation Of Aggregate Base

Sieve Size	Design Range Percentage by Weight	Contractor's Final Gradation	Job Control Grading Band Tolerances for Contractor's Final Gradation Percent
2 inch	100		0
1-1/2 inch	95-100		±5
1 inch	70-95		±8
3/4 inch	55-85		±8
No. 4	30-60		±8
No. 40	10-30		±5
No. 200	0-8		±3

The "Job Control Grading Band Tolerances for Contractor's Final Gradation" in the table shall be applied to "Contractor's Final Gradation" to establish a job control grading band. The full tolerance still applies if application of the tolerances results in a job control grading band outside the design range.

a. Sampling and testing for gradation. Gradation tests shall be performed by the Engineer per ASTM C136 and sieve analysis on material passing the No. 200 sieve per ASTM C112. The Engineer shall take at least two aggregate base samples per lot to check the final gradation. Sampling shall be per ASTM D75. The lot will be consistent with the lot size used for density. The samples shall be taken from the in-place, un-compacted material in the presence of the Engineer. Sampling points and intervals will be designated by the Engineer.

CONSTRUCTION METHODS

209-3.1 PREPARING UNDERLYING SUBGRADE AND/OR SUBBASE. The underlying subgrade and/or subbase shall be checked and accepted by the Engineer before base course placing and spreading operations begin. Re-proof rolling of the subgrade or proof rolling of the subbase in accordance with P-152, at the Contractor's expense, may be required by the Engineer if the Contractor fails to ensure proper drainage or protect the subgrade and/or subbase. Any ruts or soft, yielding areas due to improper drainage conditions, hauling, or any other cause, shall be corrected before the base course is placed. To ensure proper drainage, the spreading of the base shall begin along the centerline of the pavement on a crowned section or on the high side of the pavement with a one-way slope.

209-3.2 PRODUCTION. The aggregate shall be uniformly blended and, when at a satisfactory moisture content per paragraph 209-3.4, the approved material may be transported directly to the spreading equipment.

209-3.3 PLACING. The aggregate base material shall be placed on the prepared underlying subgrade and/or subbase and compacted in layers to the thickness shown on the plans. Work shall progress without interruption. The material shall be deposited and spread in lanes in a uniform layer without segregation to such loose depth that, when compacted, the layer shall have the specified thickness. The aggregate base course shall be constructed in layers of uniform thickness of not less than 3 inches nor more than 6 inches of compacted thickness. The aggregate as spread shall be of uniform grading with no pockets of fine or coarse materials. The aggregate, unless otherwise permitted by the Engineer, shall not be spread more than 2,000 square yards in advance of the rolling. Any necessary sprinkling shall be kept within these limits. Care shall be taken to prevent cutting into the underlying layer during spreading. No material shall be placed in snow or on a soft, muddy, or frozen course. The aggregate base material shall be spread by spreader boxes or other approved devices. This equipment shall have positive thickness controls that spread the aggregate in the required amount to avoid or minimize the need for hand manipulation.

Dumping from vehicles that require re-handling shall not be permitted. Hauling over the uncompacted base course shall not be permitted.

When more than one layer is required, the construction procedure described herein shall apply similarly to each layer.

209-3.4 COMPACTION. Immediately after completion of the spreading operations, compact each layer of the base course, as specified, with approved compaction equipment. The number, type, and weight of rollers shall be sufficient to compact the material to the required density within the same day that the aggregate is placed on the subgrade. The moisture content of the material during placing operations shall be within ±2 percentage points of the optimum moisture content as determined by ASTM D6938 using Procedure A, the direct transmission method. The machine shall be calibrated per ASTM D6938.

209-3.5 ACCEPTANCE SAMPLING AND TESTING FOR DENSITY. Aggregate base course shall be accepted for density on a lot basis. A lot will consist of one day's production if it does not exceed **2,400 square yards**. A lot will consist of one-half day's production if a day's production consists of between **2,400 and 4,800 square yards**. The Engineer shall perform all density tests.

Each lot shall be divided into **two** equal sublots. One test shall be made for each sublot and shall consist of the average of two random locations for density determination. Sampling locations will be determined by the Engineer on a random basis per ASTM D3665.

Each lot will be accepted for density when the field density is at least **100%** of the maximum density of laboratory specimens. The specimens shall be compacted and tested per **ASTM D698**. The in-place field density shall be determined per **ASTM D6938** using Procedure A, the direct transmission method, and ASTM D6938 shall be used to determine the moisture content of the material. The machine shall be calibrated in accordance with ASTM D6938 If the specified density is not attained, the entire lot shall be reworked and/or recompacted and two additional random tests made at the Contractor's expense. This procedure shall be followed until the specified density is reached.

209-3.6 SURFACE TOLERANCES. After the course has been compacted, the surface shall be tested for smoothness and accuracy of grade and crown. Any portion lacking the required smoothness or failing in accuracy of grade or crown shall be scarified to a depth of at least 3 inches, reshaped and recompacted to grade until the required smoothness and accuracy are obtained and approved by the Engineer. Any deviation in surface tolerances shall be corrected by the Contractor at the Contractor's expense. The smoothness and accuracy requirements specified here apply only to the top layer when base course is constructed in more than one layer.

a. Smoothness. The finished surface shall not vary more than 3/8 inch when tested with a 12-foot straightedge applied parallel with and at right angles to the centerline. The straightedge shall be moved continuously at half the length of the 12-foot straightedge for the full length of each line on a 50-foot grid.

b. Accuracy. The grade and crown shall be measured on a 50-foot grid and shall be within +0 and -1/2 inch of the specified grade.

209-3.7 THICKNESS CONTROL. The thickness of the base course shall be within +0 and -1/2 inch of the specified thickness as determined by depth tests taken by the Contractor in the presence of the Engineer. Tests shall be taken at intervals representing no more than 300 square yards per test. Sampling locations will be determined by the Engineer per ASTM D3665. Where the thickness is deficient by more than 1/2 inch, the Contractor shall correct such areas at no additional cost by scarifying to a depth of at least 3 inches, adding new material of proper gradation, and the material shall be blended and recompacted to grade. Additional test holes may be required to identify the limits of deficient areas. The Contractor shall replace, at his expense, base material where depth tests have been taken.

209-3.8 PROTECTION. Perform construction when the atmospheric temperature is above 35°F. When the temperature falls below 35°F, protect all completed areas by approved methods against detrimental effects of freezing. Correct completed areas damaged by freezing, rainfall, or other weather conditions to meet specified requirements. When the aggregates contain frozen materials or when the underlying course is frozen or wet, the construction shall be stopped. Hauling equipment may be routed over completed portions of the base course, provided no damage results. Equipment shall be routed over the full width of the base course to avoid rutting or uneven compaction. The Engineer will stop all hauling over completed or partially completed base course when, in the Engineer's opinion, such hauling is causing damage. Any damage to the base course shall be repaired by the Contractor at the Contractor's expense.

209-3.9 MAINTENANCE. The Contractor shall maintain the base course in a satisfactory condition until the full pavement section is completed and accepted by the Engineer. The surface shall be kept clean and free from foreign material and properly drained at all times. Maintenance shall include immediate repairs to any defects and shall be repeated as often as necessary to keep the area intact. Any base course that is not paved over prior to the onset of winter shall be retested to verify that it still complies with the requirements of this specification. Any area of base course that is damaged shall be reworked or replaced as necessary to comply with this specification.

Equipment used in the construction of an adjoining section may be routed over completed base course, if no damage results and the equipment is routed over the full width of the base course to avoid rutting or uneven compaction.

The Contractor shall remove all survey and grade hubs from the base courses prior to placing any bituminous surface course.

METHOD OF MEASUREMENT

209-4.1 The quantity of crushed aggregate base course will be determined by measurement of the number of square yards of material actually constructed and accepted by the Engineer as complying with the plans and specifications. Base materials shall not be included in any other excavation quantities.

BASIS OF PAYMENT

209-5.1 Payment shall be made at the contract unit price per square yard for crushed aggregate base course. This price shall be full compensation for furnishing all materials, for preparing and placing these materials, and for all labor, equipment tools, and incidentals necessary to complete the item.

Payment will be made under:

Item P-209-5.1	*9 inch Crushed Aggregate Base Course – Per Square Yard*
Item P-209-5.2	4 inch Crushed Aggregate Base Course – Per Square Yard

TESTING REQUIREMENTS

ASTM C29	Standard Test Method for Bulk Density ("Unit Weight") and Voids in Aggregate
ASTM C88	Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
ASTM C117	Standard Test Method for Materials Finer than 75-μm (No. 200) Sieve in Mineral Aggregates by Washing

ASTM C131	Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
ASTM C136	Standard Test Method for Sieve or Screen Analysis of Fine and Coarse Aggregates
ASTM D75	Standard Practice for Sampling Aggregates
ASTM D422	Standard Test Method for Particle-Size Analysis of Soils
ASTM D698	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft^3 (600 kN-m/m^3))
ASTM D1556	Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D1557	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft^3 (2700 kN-m/m^3))
ASTM D2167	Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method
ASTM D2419	Standard Test Method for Sand Equivalent Value of Soils and Fine Aggregate
ASTM D3665	Standard Practice for Random Sampling of Construction Materials
ASTM D4718	Standard Practice for Correction of Unit Weight and Water Content for Soils Containing Oversize Particles
ASTM D4791	Standard Test Method for Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate
ASTM D5821	Standard Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregate
ASTM D6938	Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)

END OF ITEM P-209

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ITEM D-705 PIPE UNDERDRAINS FOR AIRPORTS

DESCRIPTION

705-1.1 This item shall consist of the construction of pipe drains in accordance with these specifications and in reasonably close conformity with the lines and grades shown on the plans.

MATERIALS

705-2.1 GENERAL. Materials shall meet the requirements shown on the plans and specified below.

705-2.2 PIPE. The pipe shall be of the type called for on the plans or in the proposal and shall be in accordance with the following appropriate requirements.

American Association of State Highway and Transportation Officials (AASHTO) M196 Standard Specification for Corrugated Aluminum Pipe for Sewers and Drains

AASHTO M252 Standard Specification for Corrugated Polyethylene Drainage Pipe

AASHTO M304 Standard Specification for Poly (Vinyl Chloride) (PVC) Profile Wall Drain Pipe and Fittings Based on Controlled Inside Diameter

ASTM F758 Standard Specification for Smooth-Wall Poly (Vinyl Chloride) (PVC) Plastic Underdrain Systems for Highway, Airport, and Similar Drainage

ASTM F794 Standard Specification for Poly (Vinyl Chloride) (PVC) Profile Gravity Sewer Pipe & Fittings Based on Controlled Inside Diameter

ASTM F949 Standard Specification for Poly (Vinyl Chloride)(PVC) Corrugated Sewer Pipe With a Smooth Interior and Fittings

705-2.3 JOINT MORTAR. Pipe joint mortar shall consist of one part by volume of Portland cement and two parts sand. The Portland cement shall conform to the requirements of ASTM C150, Type I. The sand shall conform to the requirements of ASTM C144.

705-2.4 ELASTOMERIC SEALS. Elastomeric seals shall conform to the requirements of ASTM F477.

705-2.5 POROUS BACKFILL. Porous backfill shall be free of clay, humus, or other objectionable matter, and shall conform to the gradation in Table 1 when tested in accordance with ASTM C136.

Table 1. Gradation of Porous Backfill

Sieve Designation (square openings)	Percentage by Weight Passing Sieves
	Porous Material No. 2
1-1/2 inch (38 mm)	100
1 inch (25 mm)	90 - 100
3/8 inch (9 mm)	25 - 60
No. 4 (4.75 mm)	5 - 40
No. 8 (2.36 mm)	0 - 20
No. 16 (1.18 mm)	
No. 50 (0.30 mm)	
No. 100 (0.15 mm)	

705-2.6. GRANULAR MATERIAL. Granular material used for backfilling shall conform to the requirements of ASTM D2321 for Class IA, IB, or II materials, or shall meet the requirements of AASHTO Standard Specification for Highway Bridges Section 30.

705-2.7. FILTER FABRIC. The filter fabric shall conform to the requirements of AASHTO M288 Class 2.

Table 2

Fabric Property	Test Method	Test Requirement
Grab Tensile Strength, lbs	ASTM D4632	125 min
Grab Tensile Elongation %	ASTM D4632	50 min
Burst Strength, psi	ASTM D3785	125 min
Trapezoid Tear Strength, lbs	ASTM D4533	55 min
Puncture Strength, lbs	ASTM D4833	40 min
Abrasion, lbs	ASTM D4886	15 max loss
Equivalent Opening Size	ASTM D4751	70-100
Permittivity sec^{-1}	ASTM D4491	0.80
Accelerated Weathering (UV Stability) (Strength Retained - %)	ASTM D4355 *(500 hrs exposure)	70

705-2.8. CONTROLLED LOW-STRENGTH MATERIAL (CLSM). CLSM is not allowed.

CONSTRUCTION METHODS

705-3.1 EQUIPMENT. All equipment required for the construction of pipe underdrains shall be on the project, in good working condition, and approved by the Engineer before construction is permitted to start.

705-3.2 EXCAVATION. The width of the pipe trench shall be sufficient to permit satisfactory jointing of the pipe and thorough tamping of the bedding material under and around the pipe, but shall not be less than the external diameter of the pipe plus 6 inches on each side of the pipe. The trench walls shall be approximately vertical.

Where rock, hardpan, or other unyielding material is encountered, it shall be removed below the foundation grade for a depth of at least 4 inches. The excavation below grade shall be backfilled with selected fine compressible material, such as silty clay or loam, and lightly compacted in layers not over 6 inches in uncompacted depth to form a uniform but yielding foundation.

Where a firm foundation is not encountered at the grade established, due to soft, spongy, or other unstable soil, the unstable soil shall be removed and replaced with approved granular material for the full trench width. The Engineer shall determine the depth of removal necessary. The granular material shall be compacted to provide adequate support for the pipe.

Excavated material not required or acceptable for backfill shall be disposed of off airport property by the Contractor as directed by the Engineer. The excavation shall not be carried below the required depth; if this occurs, the trench shall be backfilled at the Contractor's expense with material approved by the Engineer and compacted to the density of the surrounding material.

The pipe bed shall be shaped so at least the lower quarter of the pipe shall be in continuous contact with the bottom of the trench. Spaces for the pipe bell shall be excavated to allow the pipe barrel to support the entire weight of the pipe.

The Contractor shall do trench bracing, sheathing, or shoring necessary to perform and protect the excavation as required for safety and conformance to Federal, state and local laws. Unless otherwise

provided, the bracing, sheathing, or shoring shall be removed by the Contractor after the backfill has reached at least 12 inches over the top of the pipe. The sheathing or shoring shall be pulled as the granular backfill is placed and compacted to avoid any unfilled spaces between the trench wall and the backfill material. The cost of bracing, sheathing, or shoring, and the removal of same, shall be included in the unit price bid per foot (meter) for the pipe.

705-3.3 LAYING AND INSTALLING PIPE.

a. Concrete pipe. Not used.

b. Metal pipe. Not used.

c. PVC or polyethylene pipe. PVC or polyethylene pipe shall be installed in accordance with the requirements of ASTM D2321 or AASHTO Standard Specification for Highway Bridges Section 30. Perforations shall meet the requirements of AASHTO M252 or AASHTO M294 Class 2, unless otherwise indicated on the plans. The pipe shall be laid accurately to line and grade.

d. All types of pipe. The upgrade end of pipelines, not terminating in a structure, shall be plugged or capped as approved by the Engineer.

Unless otherwise shown on the plans, a 4 inch bed of granular backfill material shall be spread in the bottom of the trench throughout the entire length under all perforated pipe underdrains.

Pipe outlets for the underdrains shall be constructed when required or shown on the plans. The pipe shall be laid with tight-fitting joints. Porous backfill is not required around or over pipe outlets for underdrains. All connections to other drainage pipes or structures shall be made as required and in a satisfactory manner. If connections are not made to other pipes or structures, the outlets shall be protected and constructed as shown on the plans.

e. Filter fabric. The filter fabric shall be installed in accordance with the manufacturer's recommendations, or in accordance with AASHTO M288 Appendix, unless otherwise shown on the plans.

705-3.4 MORTAR. Not used.

705-3.5 JOINTS IN CONCRETE PIPE. Not used.

705-3.6 BACKFILLING.

a. Earth. All trenches and excavations shall be backfilled soon after the pipes are installed, unless additional protection of the pipe is directed. The backfill material shall be select material from excavation or borrow and shall be approved by the Engineer. The select material shall be placed on each side of the pipe out to a distance of the nominal pipe diameter and one foot over the top of the pipe and shall be readily compacted. It shall not contain stones 3 inches or larger in size, frozen lumps, chunks of highly plastic clay, or any other material that is objectionable to the Engineer. The material shall be moistened or dried, as required to aid compaction. Placement of the backfill shall not cause displacement of the pipe. Thorough compaction under the haunches and along the sides to the top of the pipe shall be obtained.

The backfill shall be placed in loose layers not exceeding 6 inches in depth under and around the pipe, and not exceeding 8 inches over the pipe. Successive layers shall be added and thoroughly compacted by hand and pneumatic tampers, approved by the Engineer, until the trench is completely filled and brought to the planned elevation. Backfilling shall be done to avoid damaging top or side pressures on the pipe.

In embankments and other unpaved areas, the backfill shall be compacted per Item P-152 to the density required for embankments in unpaved areas. Under paved areas, the subgrade and any backfill shall be compacted per Item P-152 to the density required for embankments for paved areas.

b. Granular backfill. When granular backfill is required, placement in the trench and about the pipe shall be as shown on the plans. The granular backfill shall not contain an excessive amount of foreign matter, nor shall soil from the sides of the trench or from the soil excavated from the trench be allowed to filter into the granular backfill. When required by the Engineer, a template shall be used to properly place and separate the two sizes of backfill. The backfill shall be placed in loose layers not exceeding 6 inches in depth. The granular backfill shall be compacted by hand and pneumatic tampers to the requirements as given for embankment. Backfilling shall be done to avoid damaging top or side pressure on the pipe. The granular backfill shall extend to the elevation of the trench or as shown on the plans.

When perforated pipe is specified, granular backfill material shall be placed along the full length of the pipe. The position of the granular material shall be as shown on the plans.

If porous backfill is placed in paved or adjacent to paved areas before grading or subgrade operations is completed, the backfill material shall be placed immediately after laying the pipe. The depth of the granular backfill shall be not less than 12 inches, measured from the top of the underdrain. During subsequent construction operations, a minimum depth of 12 inches of backfill shall be maintained over the underdrains. When the underdrains are to be completed, any unsuitable material shall be removed exposing the porous backfill. Porous backfill containing objectionable material shall be removed and replaced with suitable material. The cost of removing and replacing any unsuitable material shall be at the Contractor's expense.

If a granular subbase blanket course is used which extends several feet beyond the edge of paving to the outside edge of the underdrain trench, the granular backfill material over the underdrains shall be placed in the trench up to an elevation of 2 inches (50 mm) above the bottom surface of the granular subbase blanket course. Immediately prior to the placing of the granular subbase blanket course, the Contractor shall blade this excess trench backfill from the top of the trench onto the adjacent subgrade where it can be incorporated into the granular subbase blanket course. Any unsuitable material that remains over the underdrain trench shall be removed and replaced. The subbase material shall be placed to provide clean contact between the subbase material and the underdrain granular backfill material for the full width of the underdrain trench.

c. Controlled low-strength material (CLSM). CLSM is not allowed.

d. Deflection testing. The Engineer may at any time, notwithstanding previous material acceptance, reject or require re-installation of pipe that exceeds 5% deflection when measured in accordance with ASTM D2321, including Appendices.

705-3.7 CONNECTIONS. When the plans call for connections to existing or proposed pipe or structures, these connections shall be watertight and made to obtain a smooth uniform flow line throughout the drainage system.

705-3.8 CLEANING AND RESTORATION OF SITE. After the backfill is completed, the Contractor shall dispose of all surplus material, soil, and rubbish from the site. Surplus soil may be deposited in embankments, shoulders, or as directed by the Engineer. Except for paved areas of the airport, the Contractor shall restore all disturbed areas to their original condition.

METHOD OF MEASUREMENT

705-4.1 The length of pipe shall be the number of linear feet of pipe underdrains in place, completed, and approved; measured along the centerline of the pipe from end or inside face of structure to the end or

inside face of structure, whichever is applicable. The several classes, types, and sizes shall be measured separately. All fittings shall be included in the footage as typical pipe sections in the pipeline being measured.

705-4.2 Cleanouts shall be measured by the number per each installed and approved by the Engineer. Requisite earthwork, structural Portland cement concrete, reinforcing steel, and other incidentals shall not be measured separately.

705-4.3 Measurement of furnishing and installing of splash pads shall be by the number per each type of installation installed and approved by the Engineer. Excavation required for splash pad installation shall be considered incidental to splash pad installation.

705-4.4 *The porous backfill shall be considered incidental to pipe underdrain installation. Filter fabric used for undrain installation shall be considered incidental to pipe underdrain installation.*

BASIS OF PAYMENT

705-5.1 *Payment will be made at the contract unit price per linear foot for 4 inch non-perforated PVC outlet pipe; at the contract unit price per each for underdrain cleanouts; at the contract unit price per each for splash pads; and at the contract unit price per each for 8 inch cleanout (grated lid). These prices shall be full compensation for furnishing all materials and for all preparation, excavation, and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the items.*

705-5.2 POROUS BACKFILL. Deleted.

705-5.3. FILTER FABRIC. Deleted.

705-5.4 PIPE UNDERDRAINS, COMPLETE. Pipe underdrains, complete (including porous backfill and filter fabric) shall be made at the contract unit price per linear foot COMPLETE (including porous backfill and filter fabric).

These prices shall be full compensation for furnishing all materials and for all preparation, excavation, and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item D-705-5.1	4 inch Perforated PVC Underdrain (Complete) – Per Linear Foot
Item D-705-5.2	4 inch Non-Perforated PVC Outlet Pipe – Per Linear Foot
Item D-705-5.3	Underdrain Cleanouts – Per Each
Item D-705-5.4	Precast Concrete Splash Pads – Per Each
Item D-705-5.5	*8 inch Cleanout (Grate Lid) – Per Each*

MATERIAL REQUIREMENTS

ASTM C136	Standard Test Method for Sieve or Screen Analysis of Fine and Coarse Aggregates
ASTM C150	Standard Specification for Portland Cement

ASTM D3034	Standard Specification for Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings
ASTM F477	Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe
ASTM F758	Standard Specification for Smooth Wall Poly(Vinyl Chloride) (PVC) Plastic Underdrain Systems for Highway, Airport, and Similar Drainage
ASTM F794	Standard Specification for Poly (Vinyl Chloride) (PVC) Profile Gravity Sewer Pipe & Fittings Based on Controlled Inside Diameter
ASTM F949	Standard Specification for Poly (Vinyl Chloride) (PVC) Corrugated Sewer Pipe with a Smooth Interior and Fittings
AASHTO M252	Standard Specification for Corrugated Polyethylene Drainage Pipe
AASHTO M288	Standard Specification for Geotextile Specification for Highway Applications
AASHTO M294	Standard Specification for Corrugated Polyethylene Pipe, 300- to 1500- mm (12- to 60-in.) Diameter
AASHTO M304	Standard Specification for Poly (Vinyl Chloride) (PVC) Profile Wall Drain Pipe and Fittings Based on Controlled Inside Diameter

END OF ITEM D-705

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General Decision Number: MO150001 06/12/2015 MO1

Superseded General Decision Number: MO20140001

State: Missouri

Construction Types: Heavy and Highway

Counties: Missouri Statewide.

HEAVY AND HIGHWAY CONSTRUCTION PROJECTS

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of $10.10 for 2015 that applies to all contracts subject to the Davis-Bacon Act for which the solicitation is issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.10 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/02/2015
1	02/06/2015
2	02/20/2015
3	03/20/2015
4	03/27/2015
5	04/17/2015
6	04/24/2015
7	05/08/2015
8	05/22/2015
9	05/29/2015
10	06/12/2015

CARP0002-002 05/04/2014

ST. LOUIS COUNTY AND CITY

	Rates	Fringes
Carpenters	$ 35.67	15.05

CARP0005-006 04/01/2008

CASS (Richards-Gebauer AFB ONLY), CLAY, JACKSON, PLATTE AND RAY COUNTIES

	Rates	Fringes
Carpenters:		
CARPENTERS & LATHERS	$ 33.00	12.03
MILLWRIGHTS & PILEDRIVERS	$ 33.00	12.03

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* CARP0011-001 05/01/2015

	Rates	Fringes
Carpenter and Piledriver		
ADAIR, AUDRAIN (West of Hwy 19), BOONE, CALLAWAY, CHARITON, COLE, COOPER, HOWARD, KNOX,LINN, MACON, MILLER, MONITEAU,MONROE, OSAGE, PUTNAM, RANDOLPH, SCHUYLER, SHELBY AND SULLIVAN COUNTIES	$ 30.41	15.55
ATCHISON, ANDREW, BATES, CALDWELL, CARROLL,DAVIESS, DEKALB,GENTRY, GRUNDY, HARRISON, HENRY, HOLT, LIVINGSTON, MERCER, NODAWAY,ST. CLAIR, SALINE AND WORTH COUNTIES	$ 29.01	15.55
AUDRAIN (East of Hwy.19), RALLS, MARION, LEWIS, CLARK AND SCOTLAND COUNTIES	$ 30.42	15.55
BARRY, BARTON, CAMDEN, CEDAR, CHRISTIAN, DADE, DALLAS, DOUGLAS, GREENE, HICKORY,JASPER, LACLEDE, LAWRENCE, MCDONALD, NEWTON, OZARK, POLK, STONE, TANEY, VERNON, WEBSTER AND WRIGHT COUNTIES	$ 28.64	15.55
BENTON, MORGAN AND PETTIS	$ 29.06	15.55
BOLLINGER, BUTLER, CAPE GIRARDEAU, DUNKLIN, MISSISSIPPI, NEW MADRID, PEMISCOT, PERRY, STE. GENEVIEVE, SCOTT, STODDARD AND WAYNE COUNTIES	$ 30.27	15.55
BUCHANAN, CLINTON, JOHNSON AND LAFAYETTE COUNTIES	$ 29.68	15.55
CARTER, HOWELL, OREGON AND RIPLEY COUNTIES	$ 29.31	15.55
CRAWFORD, DENT, GASCONADE, IRON, MADISON, MARIES, MONTGOMERY, PHELPS, PULASKI, REYNOLDS, SHANNON AND TEXAS COUNTIES	$ 30.26	15.55
FRANKLIN COUNTY	$ 33.43	15.55
JEFFERSON AND ST. CHARLES COUNTIES	$ 35.68	15.55
LINCOLN COUNTY	$ 31.99	15.55
PIKE, ST. FRANCOIS AND WASHINGTON COUNTIES	$ 31.00	15.55
WARREN COUNTY	$ 32.39	15.55

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* ELEC0001-002 05/31/2015

BOLLINGER, BUTLER, CAPE GIRARDEAU, CARTER, DUNKLIN, FRANKLIN, IRON, JEFFERSON, LINCOLN, MADISON, MISSISSIPPI, NEW MADRID,

PEMISCOT, PERRY,REYNOLDS, RIPLEY, ST. CHARLES, ST. FRANCOIS, ST. LOUIS (City and County), STE. GENEVIEVE, SCOTT, STODDARD, WARREN, WASHINGTON AND WAYNE COUNTIES

	Rates	Fringes
Electricians	$ 34.20	17.44

ELEC0002-001 09/01/2014

ADAIR, AUDRAIN, BOONE, CALLAWAY, CAMDEN, CARTER, CHARITON, CLARK, COLE, COOPER, CRAWFORD, DENT, FRANKLIN, GASCONADE, HOWARD, HOWELL, IRON, JEFFERSON, KNOX, LEWIS, LINCON, LINN, MACON, MARIES, MARION, MILLER, MONITEAU, MONROE, MONTGOMERY, MORGAN, OREGON, OSAGE, PERRY, PHELPS, PIKE, PULASKI, PUTNAM, RALLS, RANDOLPH, REYNOLDS, RIPLEY, ST. CHARLES, ST. FRANCOIS, ST. LOUIS (City and County), STE. GENEVIEVE, SCHUYLER, SCOTLAND, SHANNON, SHELBY, SULLIVAN, TEXAS, WARREN AND WASHINGTON COUNTIES

	Rates	Fringes
Line Construction:		
Equipment Operator	$ 35.46	36.5%+5.00
Groundman & Truck Driver	$ 27.42	36.5%+5.00
Lineman & Cable Splicer	$ 41.08	36.5%+5.00

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* ELEC0053-004 09/01/2014

	Rates	Fringes
Line Construction: (ANDREW, ATCHINSON, BARRY, BARTON, BUCHANAN, CALDWELL, CEDAR, CHRISTIAN, CLINTON, DADE, DALLAS, DAVIES,, DEKALB, DOUGLAS, GENTRY, GREENE, GRUNDY, HARRISON, HICKORY, HOLT, JASPER, LACLEDE, LAWRENCE, LIVINGSTON, MCDONALD, MERCER, NEWTON, NODAWAY, OZARK, POLK, ST. CLAIR, STONE, TANEY, VERNON, WEBSTER, WORTH AND WRIGHT COUNTIES)		
Groundman Powderman	$ 27.84	33%+5.00
Groundman	$ 25.98	33%+5.00
Lineman Operator	$ 37.25	33%+5.00
Lineman	$ 40.31	33%+5.00
Line Construction; (BATES, BENTON, CARROLL, CASS, CLAY, HENRY, JACKSON, JOHNSON, LAFAYETTE, PETTIS, PLATTE, RAY AND SALINE COUNTIES)		
Groundman Powderman	$ 27.84	33%+5.00
Groundman	$ 25.98	33%+5.00
Lineman Operator	$ 37.25	33%+5.00
Lineman	$ 40.31	33%+5.00

ELEC0095-001 06/01/2014

BARRY, BARTON, CEDAR, DADE, JASPER, LAWRENCE, MCDONALD, NEWTON, ST CLAIR, AND VERNON COUNTIES

	Rates	Fringes
Electricians:		
Cable Splicers	$ 25.40	12.19
Electricians	$ 26.05	12.19

ELEC0124-007 09/01/2014

BATES, BENTON, CARROLL, CASS, CLAY, COOPER, HENRY, JACKSON, JOHNSON, LAFAYETTE, MORGAN, PETTIS, PLATTE, RAY AND SALINE COUNTIES:

	Rates	Fringes
Electricians	$ 36.14	19.87

ELEC0257-003 03/01/2015

AUDRAIN (Except Cuivre Township), BOONE, CALLAWAY, CAMDEN, CHARITON, COLE, CRAWFORD, DENT, GASCONADE, HOWARD, MARIES, MILLER, MONITEAU, OSAGE, PHELPS AND RANDOLPH COUNTIES

	Rates	Fringes
Electricians:		
Cable Splicers	$ 30.42	16.085
Electricians	$ 31.35	.94%+12.65

ELEC0350-002 12/01/2013

ADAIR, AUDRAIN (East of Highway 19), CLARK, KNOX, LEWIS, LINN, MACON, MARION, MONROE, MONTGOMERY, PIKE, PUTNAM, RALLS, SCHUYLER, SCOTLAND, SHELBY AND SULLIVAN COUNTIES

	Rates	Fringes
Electricians	$ 29.41	5.67+35%

ELEC0453-001 09/01/2013

	Rates	Fringes
Electricians:		
CHRISITAN, DALLAS, DOUGLAS, GREENE, HICKORY, HOWELL, LACLEDE, OREGON, OZARK, POLK, SHANNON, WEBSTER and WRIGHT COUNTIES.	$ 24.15	14.14
PULASKI and TEXAS COUNTIES..	$ 28.80	14.58
STONE and TANEY COUNTIES....	$ 19.94	13.33

ELEC0545-003 06/01/2014

ANDREW, BUCHANAN, CLINTON, DEKALB, ATCHISON, HOLT, MERCER, GENTRY, HARRISON, DAVIESS, GRUNDY, WORTH, LIVINGSTON, NODAWAY, AND CALDWELL COUNTIES

	Rates	Fringes
Electricians:	$ 31.00	13.90

ELEC0702-004 06/30/2014

BOLLINGER, BUTLER, CAPE GIRARDEAU, DUNKLIN, MADISON, MISSISSIPPI, NEW MADRID, PEMISCOT, SCOTT, STODDARD AND WAYNE COUNTIES

	Rates	Fringes
Line Construction:		
Groundman - Class A	$ 26.41	29%+5.76
Groundman-Equipment Operator Class II (all other equipment)	$ 33.38	29%+5.76
Heavy-Equipment Operator Class I (all crawler type equipment D-4 and larger)	$ 38.01	29%+5.76
Lineman	$ 46.21	29%+5.76

ENGI0101-001 05/01/2015

ANDREW, ATCHISON, BATES, BENTON, BUCHANAN, CALDWELL, CARROLL, CHARITON, CLINTON, COOPER, DAVIESS, DEKALB, GENTRY, GRUNDY, HARRISON, HENRY, HOLT, HOWARD, JOHNSON, LAFAYETTE, LINN, LIVINGSTON, MERCER, NODAWAY, PETTIS, SALINE, SULLIVAN AND WORTH COUNITES

	Rates	Fringes
Power equipment operators:		
GROUP 1	$ 32.79	14.40
GROUP 2	$ 32.39	14.40
GROUP 3	$ 30.39	14.40

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Asphalt roller operator, finish; asphalt paver and spreader; asphalt plant operator; auto grader or trimmer or sub-grader; backhoe; blade operator (all types); boilers - 2; booster pump on dredge; bulldozer operator; boring machine (truck or crane mounted); clamshell operator; concrete mixer paver; concrete plant operator; concrete pump operator; crane operator; derrick or derrick trucks; ditching machine; dragline operator; dredge engineman; dredge operator; drill cat with compressor mounted (self-contained) or similar type self- propelled rotary drill (not air tract); drilling or boring machine

(rotary-self-propelled); finishing machine operator; greaser; high loader-fork lift-skid loader (all types); hoisting engineer (2 active drums); locomotive operator (standard guage); mechanics and welders (field and plants); mucking machine operator; pile drive operator; pitman crane or boom truck (all types); push cat; quad track; scraper operators (all types); shovel operator; sideboom cats; side discharge spreader; skimmer scoop operators; slip form paver operator (CMI, Rex, Gomeco or equal); la tourneau rooter (all tiller types); tow boat operator; truck crane; wood and log chippers (all types).

GROUP 2: A-frame truck operator; articulated dump truck; back filler operator; boilers (1); chip spreader; churn drill operator; compressor; concrete mixer operator, skip loader; concrete saws (self-propelled); conveyor operator; crusher operator; distributor operator; elevating grader operator; farm tractor (all attachments); fireman rig; float operator; form grade operator; hoisting engine (one drum); maintenance operator; multiple compactor; pavement breaker, self-propelled hydra-hammer (or similar type); paymill operator; power shield; pumps; roller operator (with or without blades); screening and washing plant; self-propelled street broom or sweeper; siphons and jets; straw blower; stump cutting machine; siphons and jets; tank car heater operator (combination boiler and booster); welding machine; vibrating machine operator (not hand held); welding machine.

GROUP 3: (a) Oiler;
(b) Oiiler driver
(c) Mechanic.

HOURLY PREMIUMS:

THE FOLLOWING CLASSIFICATIONS SHALL RECEIVE ($ .25) ABOVE GROUP 1 RATE: Dragline operator - 3 yds. & over; shovel 3 yds. & over; clamshell 3 yds. & over; Crane, rigs or piledrivers, 100' of boom or over (incl. jib.), hoist - each additional active drum over 2 drums

THE FOLLOWING CLASSIFICATIONS SHALL RECEIVE ($ .50) ABOVE GROUP 1 RATE: Tandem scoop operator; crane, rigs or piledrivers 150' to 200' of boom (incl. jib.)

THE FOLLOWING CLASSIFICATIONS SHALL RECEIVE ($ .75) ABOVE GROUP 1 RATE: Crane rigs, or piledrivers 200 ft. of boom or over (including jib.)

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* ENGI0101-005 05/01/2015

CASS, CLAY, JACKSON,PLATTE AND RAY COUNTIES

	Rates	Fringes
Power equipment operators:		
GROUP 1	$ 35.23	15.53
GROUP 2	$ 34.19	15.53
GROUP 3	$ 29.72	15.53
GROUP 4	$ 33.07	15.53

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Asphalt roller operator, finish; asphalt paver and spreader; asphalt plant operator; auto grader or trimmer or sub-grader; backhoe; blade operator (all types); boilers-2; booster pump on dredge; boring machine (truck or crane mounted); bulldozer operator; clamshell operator; concrete cleaning decontamination machine operator; concrete mixer paver; concrete plant operator; concrete pump operator; crane operator; derrick or derrick trucks; ditching machine; dragline operator; dredge engineman; dredge operator; drillcat with compressor mounted (self-contained) or similar type self propelled rotary drill (not air tract); drilling or boring machine (rotary - self-propelled); finishing machine operator; greaser; heavy equipment robotics operator/mechanic; horizontal directional drill operator; horizontal directional drill locator; loader-forklift - skid loader (all types); hoisting engineer (2 active drums); locomotive operator (standard guage); master environmental maintenance mechanic; mechanics and welders (field and plants); mucking machine operator; piledrive operator; pitman crane or boom truck (all types); push cat; quad-track; scraper operators (all types); shovel operator; side discharge spreader; sideboom cats; skimmer scoop operator; slip-form paver (CMI, REX, Gomaco or equal); la tourneau rooter (all tiller types); tow boat operator; truck crane; ultra high perssure waterjet cutting tool system operator/mechanic; vacuum blasting machine operator/mechanic; wood and log chippers (all types)

GROUP 2: "A" Frame truck operator; back filler operator; boilers (1); chip spreader;churn drill operator; concrete mixer operator, skip loader; concrete saws (self-propelled); conveyor operator; crusher operator; distributor operator; elevating grader operator; farm tractor (all attachments); fireman rig; float operator; form grader operator; hoisting engine (1 drum); maintenance operator; multiple compactor; pavement breaker, self-propelled hydra- hammer (or similar type); power shield; paymill operator; pumps; siphons and jets; stump cutting machine; tank car heater operator (combination boiler and booster); compressor; roller operator (with or without blades); screening and washing plant; self-propelled street broom or sweeper; straw blower; tank car heater operator (combination boiler and booster); vibrating machine operator (not hand held)

GROUP 3: Oilers

GROUP 4: Oiler Driver (All Types)

FOOTNOTE:
HOURLY PREMIUMS FOLLOWING CLASSIFICATIONS SHALL RECEIVE ($1.00) ABOVE GROUP 1 RATE:
Clamshells - 3 yd. capacity or over; Cranes or rigs, 80 ft. of boom or over (including jib); Draglines, 3 yd. capacity or over;
Piledrivers 80 ft. of boom or over (including jib);

Shovels & backhoes, 3 yd. capacity or over.

ENGI0101-022 05/01/2014

BARRY, BARTON, CAMDEN, CEDAR, CHRISTIAN, DADE, DALLAS, DOUGLAS, GREENE, HICKORY, JASPER, LACLEDE, LAWRENCE, MCDONALD, NEWTON, OZARK, POLK, ST. CLAIR, STONE, TANEY, VERNON, WEBSTER AND WRIGHT COUNTIES and CITY OF SPRINGFIELD

	Rates	Fringes
Power equipment operators:		
GROUP 1	$ 29.43	12.59
GROUP 2	$ 29.08	12.59
GROUP 3	$ 28.88	12.59
GROUP 4	$ 26.83	12.59

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Asphalt finishing machine & trench widening spreader; asphalt plant console operator; autograder; automatic slipform paver; backhoe; blade operator - all types; boat operator - tow; boilers-2; central mix concrete plant operator; clamshell operator; concrete mixer paver; crane operator; derrick or derrick trucks; ditching machine; dozer operator; dragline operator; dredge booster pump; dredge engineman; dredge operator; drill cat with compressor mounted on cat; drilling or boring machine rotary self-propelled; highloader; hoisting engine - 2 active drums; launch hammer wheel; locomotive operator; - standard guage; mechanic and welders; mucking machine; off-road trucks; piledriver operator; pitman crane operator; push cat operator; quad trac; scoop operator - all types; shovel operator; sideboom cats; skimmer scoop operators; trenching machine operator; truck crane.

GROUP 2: A-frame; asphalt hot-mix silo; asphalt plant fireman (drum or boiler); asphalt plant man; asphalt plant man; asphalt plant mixer operator; asphalt roller operator; backfiller operator; barber-greene loader; boat operator (bridges and dams); chip spreader; concrete mixer operator - skip loader; concrete plant operator; concrete pump operator; crusher operator; dredge oiler; elevating grader operator; fork lift; greaser-fleet; hoisting engine - 1; locomotive operator - narrow gauge; multiple compactor; pavement breaker; powerbroom - self-propelled; power shield; rooter; side discharge concrete spreader; slip form finishing machine; stumpcutter machine; throttle man; tractor operator (over 50 h.p.); winch truck.

GROUP 3: Boilers - 1; chip spreader (front man); churn drill operator; clef plane operator; concrete saw operator (self-propelled); curb finishing machine; distributor operator; finishing machine operator; flex plane operator; float operator; form grader operator; pugmill operator; roller operator, other than high type asphalt; screening & washing plant operator; siphons & jets; sub-grading machine operator; spreader box operator, self-propelled (not

asphalt); tank car heater operator (combination boiler & booster); tractor operator (50 h.p. or less); Ulmac, Ulric or similar spreader; vibrating machine operator, not hand;

GROUP 4: Grade checker; Oiler; Oiler-Driver

HOURLY PREMIUMS:

The following classifications shall receive $ .25 above GROUP 1 rate:
Clamshells - 3 yds. or over; Cranes - Rigs or Piledrivers, 100 ft. of boom or over (including jib);
Draglines - 3 yds. or over; Hoists - each additional active drum over 2 drums; Shovels - 3 yds. or over;

The following classifications shall receive $ .50 above GROUP 1 rate:
Tandem scoop operator; Cranes - Rigs or Piledrivers, 150 ft. to 200 ft. of boom (including jib); Tandem scoop.

The following classifications shall receive $ .75 above GROUP 1 rate:
Cranes - Rigs or Piledrivers, 200 ft. of boom or over (including jib.).

ENGI0513-004 05/05/2014

FRANKLIN, JEFFERSON, LINCOLN, ST CHARLES, AND WARREN COUNTIES

	Rates	Fringes
Power equipment operators:		
GROUP 1	$ 31.31	23.66
GROUP 2	$ 31.31	23.66
GROUP 3	$ 30.01	23.66
GROUP 4	$ 29.56	23.66

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Backhoe, Cable; Backhoe, Hydraulic (2 cu yds bucket and under regardless of attachment, one oiler for 2 or 3, two oilers for 4 through 6); Backhoe, Hydraulic over 2 cu yds; Cableway; Crane, Crawler or Truck; Crane, Hydraulic - Truck or Cruiser mounted, 16 tons and over; Crane, Locomotive; crane with boom including jib over 100 ft from pin to pin; Crane using rock socket tool; Derrick, Steam; Derrick Car and Derrick Boat; Dragline, 7 cu yds and over; Dredge; Gradall, Crawler or tire mounted; Locomotive, Gas, Steam & other powers; Pile Driver, Land or Floating; Scoop, Skimmer; Shovel, Power (Electric, Gas, Steam or other powers); Shovel, Power (7 cu yds and over); Switch Boat; Whirley; Air Tugger with air compressor; Anchor Placing Barge; Asphalt Spreaker; Athey Force Feeder Loader, self-propelled; Backfilling Machine; Boat Operator - Push Boat or Tow Boat (job site); Boiler, High Pressure Breaking in Period; Boom Truck, Placing or Erecting; Boring Machine, Footing Foundation; Bullfloat; Cherry Picker; Combination Concrete Hoist and Mixer (such as Mixermobile); Compressor, Two 125 CFM and under; Compressor, Two through Four over

125 CFM; Compressor when operator runs throttle; Concrete Breaker (Truck or Tractor mounted); Concrete Pump (such as Pumpcrete machine); Concrete Saw (self-propelled); Concrete Spreader; Conveyor, Large (not selfpropelled) hoisting or moving brick and concrete into, or into and on floor level, one or both; Crane, Cimbing (such as Linden); Crane, Hydraulic - Rough Terrain, self-propelled; Crane, Hydraulic - Truck or Cruiser mounted - under 16 tons; Drilling machine - Self-powered, used for earth or rock drilling or boring (wagon drills and any hand drills obtaining power from other souces including concrete breakers, jackhammers and Barco equipmnet no engineer required); Elevating Grader; Engine Man, Dredge; Excavator or Powerbelt Machine; Finishing Machine, self- propelled oscillating screed; Forklift; Generators, Two through Six 30 KW or over; Grader, Road with power blade; Greaser; Highlift; Hoist, Concrete and Brick (Brick cages or concrete skips operating or on tower, Towermobile, or similar equipment); Hoist, Three or more drums in use; Hoist, Stack; Hydro-Hammer; Lad-A-Vator, hoisting brick or concrete; Loading Machine such as Barber-Greene; Mechanic on job site

GROUP 2: Air Tugger with plant air; Boiler (for power or heating shell of building or temporary enclosures in connection with construction work); Boiler, Temporary; Compressor, One over 125 CFM; Compressor, truck mounted; Conveyor, Large (not self- propelled); Conveyor, Large (not self- propelled) moving brick and concrete (distributing) on floor level; Curb Finishing Machine; Ditch Paving Machine; Elevator (outside); Endless Chain Hoist; Fireman (as required); Form Grader; Hoist, One Drum regardless of size (except brick or concrete); Lad-A-Vator, other hoisting; Manlift; Mixer, Asphalt, over 8 cu ft capacity; Mixer, one bag capacity or less; Mixer, without side loader, two bag capacity or more; Mixer, with side loader, regardless of size, not Paver; Mud Jack (where mud jack is used in conjenction with an air compressor, operator shall be paid $ .55 per hour in addition to his basic hourly rate for covering both operations); Pug Mill operator; Pump, Sump - self powered, automatic controlled over 2"; Scissor Lift (used for hoisting); Skid Steer Loader; Sweeper, Street; Tractor, small wheel type 50 HP and under with grader blade and similar equipment; Welding Machine, One over 400 amp; Winch, operating from truck

GROUP 3: Boat operator - outboard motor, job site; Conveyors (such as Con-Vay-It) regardless of how used; Elevator (inside); Heater operator, 2 through 6; Sweeper, Floor

GROUP 4: Crane type

HOURLY PREMIUMS:

Backhoe, Hydraulic 2 cu yds or less without oiler - $2.00;
Crane,climbing (such as Linden) - $.50;
Crane, Pile Driving and Extracting - $ .50
Crane with boom (including job) over
100 ft from pin to pin - add $.01 per foot
to maximum of $4.00);
Crane, using rock socket tool - $ .50;

Derrick, diesel, gas or electric hoisting material
and erecting steel (150 ft or more above ground) - $ .50;
Dragline, 7 cu yds and over - $ .50;
Hoist, Three or more drums in use - $ .50;
Scoop, Tandem - $.50;
Shovel, Power - 7 cu yds and over - $ .50;
Tractor, Tandem Crawler - $ .50;
Tunnel, man assigned to work in tunnel or
tunnel shaft - $ .50;
Wrecking, when machines are working on
second floor or higher - $ .50

ENGI0513-006 05/01/2015

ADAIR, AUDRAIN, BOLLINGER, BOONE, BUTLER, CALLAWAY, CAPE GIRARDEAU, CARTER, CLARK, COLE, CRAWFORD, DENT, DUNKLIN, GASCONADE, HOWELL, IRON, KNOX, LEWIS, MACON, MADISON, MARIES, MARION, MILLER, MISSISSIPPI, MONITEAU, MONROE, MONTGOMERY, MORGAN, NEW MADRID, OREGON, OSAGE, PEMISCOT, PERRY, PHELPS, PIKE, PULASKI, PUTNAM, RALLS, RANDOLPH, REYNOLDS, RIPLEY, ST. FRANCOIS, STE. GENEVIEVE, SCHUYLER, SCOTLAND, SCOTT, SHANNON, SHELBY, STODDARD, TEXAS, WASHINGTON, AND WAYNE COUNTIES

	Rates	Fringes
Power equipment operators:		
GROUP 1	$ 27.74	23.91
GROUP 2	$ 27.39	23.91
GROUP 3	$ 27.19	23.91
GROUP 4	$ 23.54	23.91

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Asphalt finishing machine & trench widening spreader, asphalt plant console operator; autograder; automatic slipform paver; back hoe; blade operator - all types; boat operator tow; boiler two; central mix concrete plant operator; clam shell operator; concrete mixer paver; crane operator; derrick or derrick trucks; ditching machine; dozer operator; dragline operator; dredge booster pump; dredge engineman; dredge operator; drill cat with compressor mounted on cat; drilling or boring machine rotary self-propelled; highloader; hoisting engine 2 active drums; launchhammer wheel; locomotive operator standrad guage; mechanics and welders; mucking machine; piledriver operator; pitman crane operator; push cat operator; guad-trac; scoop operator; sideboom cats; skimmer scoop operator; trenching machine operator; truck crane, shovel operator.

GROUP 2: A-Frame; asphalt hot-mix silo; asphalt roller operator asphalt plant fireman (drum or boiler); asphalt plant man; asphalt plant mixer operator; backfiller operator; barber-greene loader; boat operator (bridge & dams); chip spreader; concrete mixer operator skip loader; concrete plant operator; concrete pump operator; dredge oiler; elevating graded operator; fork lift; grease fleet; hoisting engine one; locomotive operator narrow guage;

multiple compactor; pavement breaker; powerbroom self-propelled; power shield; rooter; slip-form finishing machine; stumpcutter machine; side discharge concrete spreader; throttleman; tractor operator (over 50 hp); winch truck; asphalt roller operator; crusher operator.

GROUP 3: Spreader box operator, self-propelled not asphalt; tractor operator (50 h.p. or less); boilers one; chip spreader (front man); churn drill operator; compressor over 105 CFM 2-3 pumps 4" & over; 2-3 light plant 7.5 KWA or any combination thereof; clef plane operator; compressor maintenance operator 2 or 3; concrete saw operator (self-propelled); curb finishing mancine; distributor operator; finishing machine operator; flex plane operator; float operator; form grader operator; pugmill operator; riller operator other than high type asphalt; screening & washing plant operator; siphons & jets; subgrading machine operator; tank car heater (combination boiler & booster); ulmac, ulric or similar spreader; vibrating machine operator; hydrobroom.

GROUP 4: Oiler; grout machine; oiler driver; compressor over 105 CFM one; conveyor operator one; maintenance operator; pump 4" & over one.

FOOTNOTE: HOURLY PREMIUMS

Backhoe hydraulic, 2 cu. yds. or under Without oiler - $2.00
Certified Crane Operator - $1.50;
Certified Hazardous Material Operator $1.50;
Crane, climbing (such as Linden) - $0.50;
Crane, pile driving and extracting - $0.50;
Crane, with boom (including jib) over 100' from pin to pin add $0.01 per foot to maximum of $4.00;
Crane, using rock socket tool - $0.50;
Derrick, diesel, gas or electric, hoisting material and erecting steel (150' or more above the ground) - $0.50;
Dragline, 7 cu. yds, and over - $0.50;
Hoist, three or more drums in use - $0.50; Scoop, Tandem - $0.50;
Shovel, power - 7 cu. yds. or more - $0.50;
Tractor, tandem crawler - $0.50;
Tunnel, man assigned to work in tunnel or tunnel shaft - $0.50;
Wrecking, when machine is working on second floor or higher - $0.50;

ENGI0513-007 05/05/2014

ST. LOUIS CITY AND COUNTY

	Rates	Fringes
Power equipment operators:		
GROUP 1	$ 31.31	23.66
GROUP 2	$ 31.31	23.66
GROUP 3	$ 30.01	23.66
GROUP 4	$ 29.56	23.66

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Backhoe, cable or hydraulic; cableway; crane crawler or truck; crane, hydraulic-truck or cruiser mounted 16 tons & over; crane locomotive; derrick, steam; derrick car & derrick boat; dragline; dredge; gradall, crawler or tire mounted; locomotive, gas, steam & other powers; pile driver, land or floating; scoop, skimmer; shovel, power (steam, gas, electric or other powers); switch boat; whirley.

GROUP 2: Air tugger w/air compressor; anchor-placing barge; asphalt spreader; athey force feeder loader (self-propelled); backfilling machine; backhoe-loader; boat operator-push boat or tow boat (job site); boiler, high pressure breaking in period; boom truck, placing or erecting; boring machine, footing foundation; bull- float; cherry picker; combination concrete hoist & mixer (such as mixer mobile); compressor (when operator runs throttle); concrete breaker (truck or tractor mounted); concrete pump, such as pump-crete machine; concrete saw (self-propelled), concrete spreader; conveyor, large (not self-propelled), hoisting or moving brick and concrete into, or into and on floor level, one or both; crane, hydraulic-rough terrain, self-propelled; crane hydraulic-truck or cruiser mounted-under 16 tons; drilling machines, self-powered use for earth or rock drilling or boring (wagon drills nd any hand drills obtaining power from other sources including concrete breakers, jackhammers and barco equipment-no engineer required); elevating grader; engineman, dredge; excavator or powerbelt machine; finishing machine, self-propelled oscillating screed; forklift; grader, road with power blade; highlift. greaser; hoist, stack, hydro-hammer; loading machine (such as barber-greene); machanic, on job site; mixer, pipe wrapping machines; plant asphalt; plant, concrete producing or ready-mix job site; plant heating-job site; plant mixing-job site; plant power, generating-job site; pumps, two through six self-powered over 2"; pumps, electric submersible, two through six, over 4"; quad-track; roller, asphalt, top or sub-grade; scoop, tractor drawn; spreader box; sub-grader; tie tamper; tractor-crawler, or wheel type with or without power unit, power take-offs and attachments regardless of size; trenching machine; tunnel boring machine; vibrating machine automatic, automatic propelled; welding machines (gasoline or diesel) two through six; well drilling machine

GROUP 3: Conveyor, large (not self-propelled); conveyor, large (not self-propelled) moving brick and concrete distributing) on floor level; mixer two or more mixers of one bag capacity or less; air tugger w/plant air; boiler, for power or heating on construction projects; boiler, temporary; compressor (mounted on truck; curb finishing machine; ditch paving machine; elevator; endless chain hoist; form grader; hoist, one drum regardless of size; lad-a-vator; manlift; mixer, asphalt, over 8 cu. ft. capacity, without side loader, 2 bag capacity or more; mixer, with side loader, regardless of size; pug mill operator; pump, sump-self-powered, automatic controlled over 2" during use in connection with construction work;

sweeper, street; welding machine, one over 400 amp.; winch operating from truck; scissor lift (used for hoisting); tractor, small wheel type 50 h.p. & under with grader blade & similar equipment; Oiler on dredge and on truck crane.

GROUP 4: Boat operator-outboard motor (job site); conveyor (such as con-vay-it) regardless of how used; sweeper, floor

HOURLY PREMIUMS:

Backhoe, hydraulic 2 cu. yds. or under without oiler	$2.00
Certified Crane Operator	1.50
Certified Hazardous Material Operator	1.50
Crane, climbing (such as Linden)	.50
Crane, pile driving and extracting	.50
Crane, with boom (including jib) over 100' (from pin to pin) add $.01 per foot to maximum of	4.00
Crane, using rock socket tool	.50
Derrick, diesel, gas or electric, hoisting material and erecting steel (150' or more above ground)	.50
Dragline, 7 cu. yds. and over	.50
Hoist, three (3) or more drums in use	.50
Scoop, Tandem	.50
Shovel, power - 7 cu. yds. or more	.50
Tractor, tandem crawler	.50
Tunnel, man assigned to work in tunnel or tunnel shaft	.50
Wrecking, when machine is working on second floor or higher	.50

IRON0010-012 04/01/2014

	Rates	Fringes
Ironworkers:		
ANDREW, BARTON, BENTON, CAMDEN, CEDAR, CHARITON, CHRISTIAN, COOPER, DADE, DALLAS, DAVIESS, DE KALB, GENTRY, GREENE, GRUNDY, HARRISON, HICKORY, HOLT, HOWARD, LACLEDE, LINN, LIVINGSTON, MERCER, MONITEAU, MORGAN, NODAWAY, PETTIS, POLK, PUTNAM, RANDLOPH, ST. CLAIR, SULLIVAN, TANEY, VERNON, WEBSTER, WRIGHT and WORTH Counties and portions of ADAIR, BOONE, MACON, MILLER and RANDOLPH Counties.....	$ 27.50	27.05
ATCHISON, BATES, BUCHANAN, CALDWELL, CARROLL, CASS, CLAY, CLINTON, HENRY, JACKSON, JOHNSON, LAFAYETTE, PETTIS, PLATTE,		

SALINE, AND RAY COUNTIES....$ 30.50 27.05

IRON0321-002 08/01/2012

DOUGLAS, HOWELL and OZARK COUNTIES

	Rates	Fringes
Ironworker.....$	18.40	14.68

IRON0396-004 08/01/2012

ST. LOUIS (City and County), ST. CHARLES, JEFFERSON, IRON, FRANKLIN, LINCOLN, WARREN, WASHINGTON, ST. FRANCOIS, STE. GENEVIEVE, and REYNOLDS Counties; and portions of MADISON, PERRY, BOLLINGER, WAYNE, and CARTER Counties

	Rates	Fringes
Ironworker.....$	32.28	20.31

IRON0396-009 08/01/2013

AUDRAIN, CALLAWAY, COLE, CRAWFORD, DENT, GASCONADE, MARIES, MONTGOMERY, OSAGE, PHELPS, PIKE, PULASKI, TEXAS and WRIGHT Counties; and portions of BOONE, CAMDEN, DOUGLAS, HOWELL, LACLEDE, MILLER, MONROE, OREGON, SHANNON and RALLS Counties

	Rates	Fringes
Ironworker.....$	27.91	21.75

IRON0577-005 08/01/2012

ADAIR, CLARK, KNOX, LEWIS, MACON, MARION, MONROE, RALLS, SCHUYLER, SCOTLAND, AND SHELBY COUNTIES

	Rates	Fringes
Ironworker.....$	24.44	17.31

IRON0584-004 06/01/2013

BARRY, JASPER, LAWRENCE, MCDONALD, NEWTON AND STONE Counties

	Rates	Fringes
Ironworkers:.....$	23.10	12.88

IRON0782-003 08/01/2013

CAPE GIRARDEAU, MISSISSIPPI, NEW MADRID, SCOTT, & STODDARD Counties; and portions of BOLLINGER, BUTLER, CARTER, DUNKLIN, MADISON, PEMISCOT, PERRY, RIPLEY, and WAYNE Counties

Rates Fringes

Ironworkers:
Locks, Dams, Bridges and other major work on the Mississippi and Ohio River only.....$ 29.39 18.79
All Other Work.....$ 24.12 18.79

LABO0042-003 03/04/2015

ST. LOUIS (City and County)

	Rates	Fringes
LABORER		
Plumber Laborer.....	$ 30.57	14.02

LABO0042-005 03/04/2015

ST. LOUIS (City and County)

	Rates	Fringes
LABORER		
Dynamiter, Powderman.....	$ 29.90	13.22
Laborers, Flaggers.....	$ 30.57	14.02
Wrecking.....	$ 29.40	13.22

LABO0424-002 05/01/2014

	Rates	Fringes
LABORER		
ADAIR, AUDRAIN, BOONE, CALLAWAY, CHARITON, CLARK, COLE, COOPER, HOWARD, IRON, KNOX, LEWIS, LINN, MACON, MADISON, MARION, MILLER, MONITEAU, MONROE, PERRY, PIKE, PUTNAM, RALLS, RANDOLPH, REYNOLDS, ST. FRANCOIS, STE. GENEVIEVE, SCHUYLER, SCOTLAND, SHELBY AND SULLIVAN COUNTIES		
GROUP 1.....	$ 26.81	12.47
GROUP 2.....	$ 26.81	12.47
BOLLINGER, BUTLER, CAPE GIRARDEAU, CARTER, CRAWFORD, DENT, DUNKLIN, GASCONADE, HOWELL, MARIES, MISSISSIPPI, NEW MADRID, OREGON, OSAGE, PEMISCOT, PHELPS, PULASKI, RIPLEY, SCOTT, SHANNON, STODDARD, TEXAS, WASHINGTON AND WAYNE COUNTIES		
GROUP 1.....	$ 26.81	12.47
GROUP 2.....	$ 26.81	12.47
FRANKLIN COUNTY		

GROUP 1	$ 28.46	12.47
GROUP 2	$ 29.06	12.47
JEFFERSON COUNTY		
GROUP 1	$ 28.51	12.47
GROUP 2	$ 29.11	12.47
LINCOLN, MONTGOMERY AND WARREN COUNTIES		
GROUP 1	$ 27.26	12.47
GROUP 2	$ 27.86	12.47
ST.CHARLES COUNTY		
GROUP 1	$ 29.93	12.47
GROUP 2	$ 29.93	12.47

LABORERS CLASSIFICATIONS

GROUP 1 - General laborer-flagman, carpenter tenders; salamander Tenders; Dump Man; Ticket Takers; loading trucks under bins, hoppers, and conveyors; track man; cement handler; dump man on earth fill; georgie buggie man; material batch hopper man; spreader on asphalt machine; material mixer man (except on manholes); coffer dams; riprap pavers rock, block or brick; scaffolds over ten feet not self-supported from ground up; skip man on concrete paving; wire mesh setters on concrete paving; all work in connection with sewer, water, gas, gasoling, oil, drainage pipe, conduit pipe, tile and duct lines and all other pipe lines; power tool operator; all work in connection with hydraulic or general dredging operations; form setters, puddlers (paving only); straw blower nozzleman; asphalt plant platform man; chuck tender; crusher feeder; men handling creosote ties or creosote materials; men working with and handling epoxy material; topper of standing trees; feeder man on wood pulverizers, board and willow mat weavers and cabelee tiers on river work; deck hands; pile dike and revetment work; all laborers working on underground tunnels less than 25 ft. where compressed air is not used; abutement and pier hole men working six (6) ft. or more below ground; men working in coffer dams for bridge piers and footing in the river; barco tamper; jackson or any other similar tamp; cutting torch man; liners, curb, gutters, ditch lines; hot mastic kettlemen; hot tar applicator; hand blade operator; mortar men or brick or block manholes; rubbing concrete, air tool operator under 65 lbs.; caulker and lead man; chain or concrete saw under 15 h.p.; signal Gan; Guard rail and sign erectors.

GROUP 2 - Skilled laborers - Vibrator man; asphalt raker; head pipe layer on sewer work; batterboard man on pipe and ditch work; cliff scalers working from bosun's chairs; scaffolds or platforms on dams or power plants over 10 ft. high; air tool operator over 65 lbs.; stringline man on concrete paving; sandblast man; laser beam man; wagon drill; churn drill; air track drill and all other similar type drills, gunite nozzle man; pressure grout man; screed man on asphalt; concrete saw 15 h.p. and over; grade checker; strigline man on electronic grade control; manhole builder; dynamite man; powder man; welder; tunnel man; waterblaster - 1000 psi or over; asbestos and/or hazardous waste removal and/or disposal

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LABO0579-005 05/01/2015

	Rates	Fringes
LABORER (ANDREW, ATCHISON, BUCHANAN, CALDWELL, CLINTON, DAVIESS, DEKALB, GENTRY, GRUNDY, HARRISON, HOLT, LIVINGSTON, MERCER, NODAWAY and WORTH COUNTIES.)		
GROUP 1	$ 24.92	13.01
GROUP 2	$ 25.27	13.01
LABORER (BARRY, BARTON, BATES, BENTON, CAMDEN, CARROLL, CEDAR, CHRISTIAN, DADE, DALLAS, DOUGLAS, GREENE, HENRY. HICKORY, JASPER, JOHNSON, LACLEDE, LAWRENCE, MCDONALD, MORGAN, NEWTON, OZARK, PETTIS, POLK, ST.CLAIR, SALINE, STONE, TANEY, VERNON, WEBSTER and WRIGHT COUNTIES)		
GROUP 1	$ 23.82	12.31
GROUP 2	$ 24.37	12.31
LABORER (LAFAYETTE COUNTY)		
GROUP 1	$ 25.37	12.56
GROUP 2	$ 25.72	12.56

LABORERS CLASSIFICATIONS

GROUP 1: General Laborers - Carpenter tenders; salamander tenders; loading trucks under bins; hoppers & conveyors; track men & all other general laborers; air tool operator; cement handler-bulk or sack; dump man on earth fill; georgie buggie man; material batch hopper man; material mixer man (except on manholes); coffer dams; riprap pavers - rock, block or brick; signal man; scaffolds over ten feet not self-supported from ground up; skipman on concrete paving; wire mesh setters on concrete paving; all work in connection with sewer, water, gas, gasoline, oil drainage pipe, conduit pipe, tile and duct lines and all other pipe lines; power tool operator, all work in connection with hydraulic or general dredging operations; puddlers (paving only); straw blower nozzleman; asphalt plant platform man; chuck tender; crusher feeder; men handling creosote ties or creosote materials; men working with and handling epoxy material or materials (where special protection is required); rubbing concrete; topper of standing trees; batter board man on pipe and ditch work; feeder man on wood pulverizers; board and willow mat weavers and cable tiers on river work; deck hands; pile dike and revetment work; all laborers working on underground tunnels less than 25 feet where compressed air is not used; abutment and pier hole men working six (6) feet or more below ground; men working in coffer dams for bridge piers and footings in the river; ditchliners; pressure groutmen; caulker; chain or concrete saw; cliffscalers working from scaffolds, bosuns'

chairs or platforms on dams or power plants over (10) feet above ground; mortarmen on brick or block manholes; toxic and hazardous waste work.

GROUP 2: Skilled Laborers - Head pipe layer on sewer work; laser beam man; Jackson or any other similar tamp; cutting torch man; form setters; liners and stringline men on concrete paving, curb, gutters; hot mastic kettleman; hot tar applicator; sandblasting and gunite nozzlemen; air tool operator in tunnels; screed man on asphalt machine; asphalt raker; barco tamper; churn drills; air track drills and all similar drills; vibrator man; stringline man for electronic grade control; manhole builders-brick or block; dynamite and powder men; grade checker.

LABO0663-002 04/01/2015

CASS, CLAY, JACKSON, PLATTE AND RAY COUNTIES

	Rates	Fringes
LABORER		
GROUP 1	$ 28.57	14.57
GROUP 2	$ 29.75	14.57

LABORERS CLASSIFICATIONS

GROUP 1: General laborers, Carpenter tenders, salamander tenders, loading trucks under bins, hoppers and conveyors, track men and all other general laborers, air tool operator, cement handler (bulk or sack), chain or concrete saw, deck hands, dump man on earth fill, Georgie Buggies man, material batch hopper man, scale man, material mixer man (except on manholes), coffer dams, abutments and pier hole men working below ground, riprap pavers rock, black or brick, signal man, scaffolds over ten feet not self-supported from ground up, skipman on concrete paving, wire mesh setters on concrete paving, all work in connection with sewer,water, gas, gasoling, oil, drainage pipe, conduit pipe, tile and duct lines and all other pipelines, power tool operator, all work in connection with hydraulic or general dredging operations, straw blower nozzleman,asphalt plant platform man, chuck tender, crusher feeder, men handling creosote ties on creosote materials, men working with and handling epoxy material or materials (where special protection is required), topper of standing trees, batter board man on pipe and ditch work, feeder man on wood pulverizers, board and willow mat weavers and cable tiers on river work, deck hands, pile dike and revetment work, all laborers working on underground tunnels less than 25 feet where compressed air is not used, abutment and pier hole men working six (6) feet or more below ground, men working in coffer dams for bridge piers and footings in the river, ditchliners, pressure groutmen, caulker and chain or concrete saw, cliffscalers working from scaffolds, bosuns' chairs or platforms on dams or power plants over (10) feet above ground, mortarmen on brick or block manholes, signal man.

GROUP 2: Skilled Laborer - spreader or screed man on asphalt machine, asphalt raker, grade checker, vibrator man, concrete saw over 5 hp., laser beam man, barco tamper, jackson or any other similar tamp, wagon driller, churn drills, air track drills and other similar drills, cutting torch man, form setters, liners and stringline men on concrete paving, curb, gutters and etc., hot mastic kettleman, hot tar applicator, hand blade operators, mortar men on brick or block manholes, sand blasting and gunnite nozzle men, rubbing concrete, air tool operator in tunnels, head pipe layer on sewer work, manhole builder (brick or block), dynamite and powder men.

PAIN0002-002 09/01/2007

CLARK, FRANKLIN, JEFFERSON, LEWIS, LINCOLN, MARION, PIKE, RALLS, ST. CHARLES, ST. LOUIS (CITY & COUNTY), AND WARREN COUNTIES

	Rates	Fringes
Painters:		
Brush and Roller; Taper	$ 28.61	10.24
High work over 60 feet	$ 29.11	10.24
Lead Abatement	$ 29.36	10.24
Pressure Roller; High work under 60 ft	$ 28.86	10.24
Spray & Abrasive Blasting; Water Blasting (Over 5000 PSI)	$ 30.61	10.24
Taper (Ames Tools & Bazooka)	$ 30.21	10.24

PAIN0002-006 04/01/2014

ADAIR, AUDRAIN, BOONE, CALLAWAY, CHARITON, COLE, GASCONADE, HOWARD, KNOX, LINN, MACON, MONROE, MONTGOMERY, OSAGE, PUTNAM, RANDOLPH, SCHUYLER, SCOTLAND, SHELBY AND SULLIVAN COUNTIES and the City of Booneville.

	Rates	Fringes
Painters:		
Bridges, Dams, Locks or Powerhouses	$ 24.00	11.72
Brush and Roll; Taping, Paperhanging	$ 22.00	11.72
Epoxy or Any Two Part Coating; Sandblasting; Stage or other Aerial Work - Platforms over 50 feet high; Lead Abatement	$ 23.00	11.72
Spray; Structural Steel (over 50 feet)	$ 23.50	11.72
Tapers using Ames or Comparable Tools	$ 22.50	11.72

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* PAIN0003-004 04/01/2015

CASS, CLAY, CLINTON, JACKSON, JOHNSON, LAFAYETTE, PLATTE & RAY COUNTIES

	Rates	Fringes
Painters:		
Bridgeman; Lead Abatement; Sandblast; Storage Bin & Tanks	$ 30.33	15.94
Brush & Roller	$ 27.71	15.94
Drywall	$ 27.93	15.94
Paper Hanger	$ 28.21	15.94
Stageman; Beltman; Steelman; Elevator Shaft; Bazooka, Boxes and Power Sander; Sprayman; Dipping	$ 29.33	15.94
Steeplejack	$ 33.90	15.94

PAIN0003-011 04/01/2011

BATES, BENTON, CALDWELL, CARROLL, COOPER, DAVIESS, GRUNDY, HARRISON, HENRY, LIVINGSTON, MERCER, MONITEAU, MORGAN, PETTIS & SALINE COUNTIES

	Rates	Fringes
Painters:		
Bridgeman; Lead Abatement; Sandblast; Storage Bin & Tanks	$ 24.06	14.04
Brush & Roller	$ 22.67	14.04
Drywall	$ 22.84	14.04
Paper Hanger	$ 23.07	14.04
Stageman; Beltman; Steelman; Elevator Shaft; Bazooka, Boxes and Power Sander; Sprayman; Dipping	$ 23.56	14.04
Steeplejack	$ 26.82	14.04

PAIN0203-001 04/01/2012

BARRY, BARTON, CEDAR, CHRISTIAN, DADE, DALLAS, DOUGLAS, GREENE, HICKORY, HOWELL, JASPER, LAWRENCE, MCDONALD, NEWTON, OZARK, POLK, ST. CLAIR, STONE, TANEY, VERNON, WEBSTER, and WRIGHT COUNTIES

	Rates	Fringes
Painters:		
Finisher	$ 20.18	11.33
Painter	$ 19.75	11.76
Sandblaster, High Man, Spray Man, Vinyl Hanger, Tool Operator	$ 21.18	11.33

PAIN1265-003 07/01/2013

CAMDEN, CRAWFORD, DENT, LACLEDE, MARIES, MILLER, PHELPS, PULASKI AND TEXAS COUNTIES

	Rates	Fringes
Painters:		
Brush and Roller	$ 25.64	13.27
Floor Work	$ 26.14	13.27
Lead Abatement	$ 27.89	13.27
Spray	$ 27.14	13.27
Structural Steel, Sandblasting and All Tank Work	$ 26.89	13.27
Taping, Paperhanging	$ 26.64	13.27

PAIN1292-002 09/01/2014

BOLLINGER, BUTLER, CAPE GIRARDEAU, CARTER, DUNKLIN, MISSISSIPPI, NEW MADRID, OREGON, PEMISCOT, PERRY, REYNOLDS, RIPLEY, SCOTT, SHANNON, STODDARD and WAYNE COUNTIES

	Rates	Fringes
Painters:		
Bridges, Stacks & Tanks	$ 29.99	11.96
Brush & Roller	$ 24.49	11.96
Spray & Abrasive Blasting; Waterblasting (over 5000 PSI)	$ 26.49	11.96

Height Rates (All Areas):
Over 60 ft. $0.50 per hour.
Under 60 ft. $0.25 per hour.

PAIN1292-003 09/01/2014

IRON, MADISON, ST. FRANCOIS, STE. GENEVIEVE and WASHINGTON COUNTIES

	Rates	Fringes
Painters:		
Bridges, Stacks & Tanks	$ 29.99	11.96
Brush & Roller	$ 25.64	11.96
Spray & Abrasive Blasting; Waterblasting (Over 5000 PSI)	$ 27.64	11.96

Height Rates (All Areas):
0ver 60 ft. $0.50 per hour
Under 60 ft. $0.25 per hour.

PAIN2012-001 05/01/2012

ANDREW, ATCHISON, BUCHANAN, DE KALB, GENTRY, HOLT, NODAWAY & WORTH COUNTIES

	Rates	Fringes
Painters:		
Brush & Roller	$ 22.93	11.51
Sandblaster	$ 23.93	11.51
Steeplejack	$ 25.93	11.51

PLAS0518-006 04/01/2014

BARRY, BARTON, CEDAR, CHRISTIAN, DADE, DALLAS, DOUGLAS, GREENE, HICKORY, JASPER, LACLEDE, LAWRENCE, MCDONALD, NEWTON, OZARK, POLK, ST. CLAIR, STONE, TANEY, VERNON, WEBSTER, AND WRIGHT COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	$ 30.34	20.23

PLAS0518-007 04/01/2015

CASS (Richards-Gebaur AFB only), CLAY, JACKSON, PLATTE AND RAY COUNTIES

	Rates	Fringes
Cement Masons:	$ 30.57	16.20

PLAS0518-011 04/01/2015

ANDREW, ATCHISON, BATES, BUCHANNAN, CLINTON, DEKALB, GENTRY, HENRY, HOLT, JOHNSON, LAFAYETTE, NODAWAY & WORTH COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	$ 30.57	16.20

PLAS0527-001 04/01/2014

	Rates	Fringes
CEMENT MASON		
FRANKLIN, LINCOLN AND WARREN COUNTIES	$ 29.03	16.43
JEFFERSON, ST. CHARLES COUNTIES AND ST.LOUIS (City and County)	$ 30.20	16.51

PLAS0527-004 06/01/2014

CRAWFORD, DENT, IRON, MADISON, MARION, PHELPS, PIKE, PULASKI, RALLS, REYNOLDS, ST. FRANCOIS, STE. GENEVIEVE, SHANNON, TEXAS, WASHINGTON COUNTIES

	Rates	Fringes
CEMENT MASON.....	$ 27.04	16.43

PLAS0908-001 05/01/2012

BOLLINGER, BUTLER, CAPE GIRARDEAU, CARTER, DUNKLIN, HOWELL, MISSISSIPPI, NEW MADRID, OREGON, PEMISCOT, PERRY, RIPLEY, SCOTT, STODDARD, AND WAYNE COUNTIES

	Rates	Fringes
CEMENT MASON.....	$ 25.25	12.55

PLAS0908-005 05/01/2012

BENTON, CALDWELL, CALLAWAY, CAMDEN, CARROLL, COLE, DAVIESS, GASCONADE, GRUNDY, HARRISON, LIVINGSTON, MACON, MARIES, MERCER, MILLER, MONTGOMERY, MORGAN, OSAGE, PETTIS & SALINE COUNTIES

	Rates	Fringes
CEMENT MASON.....	$ 25.25	12.55

* PLUM0008-003 06/01/2015

CASS, CLAY, JACKSON, JOHNSON, AND PLATTE COUNTIES

	Rates	Fringes
Plumbers.....	$ 41.64	20.34

* PLUM0008-017 06/01/2015

BATES, BENTON, CARROLL, HENRY, LAFAYETTE, MORGAN, PETTIS, RAY, ST. CLAIR, SALINE AND VERNON COUNTIES

	Rates	Fringes
Plumbers.....	$ 37.48	20.34

PLUM0045-003 09/01/2014

ANDREW, ATCHISON, BUCHANAN, CALDWELL, CLINTON, DAVIESS, DEKALB, GENTRY, HARRISON, HOLT, NODAWAY AND WORTH COUNTIES

	Rates	Fringes
Plumbers and Pipefitters.....	$ 34.50	19.05

PLUM0178-003 11/01/2013

BARRY, CEDAR, CHRISTIAN, DADE, DALLAS, DOUGLAS, GREENE, HICKORY, LACLEDE, LAWRENCE, POLK, STONE, TANEY, WEBSTER AND

WRIGHT COUNTIES

	Rates	Fringes
Plumbers and Pipefitters	$ 28.00	14.45

PLUM0178-006 11/01/2013

BARTON, JASPER, MCDONALD AND NEWTON COUNTIES

	Rates	Fringes
Plumbers and Pipefitters		
Projects $750,000 & under	$ 25.03	14.45
Projects over $750,000	$ 28.00	14.45

PLUM0533-004 06/01/2014

BATES, BENTON, CARROLL, CASS, CLAY, HENRY, HICKORY, JACKSON, JOHNSON, LAFAYETTE, MORGAN, PETTIS, PLATTE, RAY, SALINE, ST. CLAIR AND VERNON COUNTIES

	Rates	Fringes
Pipefitters	$ 41.83	19.32

PLUM0562-004 07/01/2014

ADAIR, AUDRAIN, BOLLINGER, BOONE, BUTLER, CALLAWAY,CAMDEN, CAPE GIRARDEAU,CARTER, CHARITON, CLARK, COLE, COOPER, CRAWFORD, DENT, DUNKLIN, FRANKLIN, GASCONADE, GRUNDY, HOWARD, HOWELL, IRON, JEFFERSON, KNOX, LEWIS, LINCOLN, LINN, LIVINGSTON, MACON, MADISON, MARIES, MARION, MERCER, MILLER, MISSISSIPPI, MONITEAU, MONROE, MONTGOMERY, NEW MADRID, OREGON, OSAGE, PEMISCOTT, PERRY, PHELPS, PIKE, PULASKI, PUTNAM, RALLS, RANDOLPH, REYNOLDS, RIPLEY, ST. CHARLES, ST.FRANCOIS, STE. GENEVIEVE, ST. LOUIS, SCHUYLER, SCOTLAND, SCOTT, SHANNON, SHELBY, STODDARD, SULLIVAN, TEXAS, WARREN, WASHINGTON,AND WAYNE COUNTIES.

	Rates	Fringes
Plumbers and Pipefitters		
Mechanical Contracts including all piping and temperature control work $7.0 million & under	$ 34.41	20.44
Mechanical Contracts including all piping and temperature control work over $7.0 million	$ 35.75	25.83

PLUM0562-016 07/01/2014

CAMDEN, COLE, CRAWFORD, FRANKLIN, JEFFERSON, MARIES, MILLER, MONITEAU, OSAGE, PHELPS, PULASKI, ST. CHARLES, ST. LOUIS (City and County), WARREN and WASHINGTON COUNTIES

	Rates	Fringes
Plumbers		
Mechanical Contracts including all piping and temperature control work $7.0 million & under	$ 34.41	20.44
Mechanical Contracts including all piping and temperature control work over $7.0 million	$ 35.75	25.83

TEAM0013-001 05/01/2010

	Rates	Fringes
Truck drivers (ADAIR, BUTLER, CLARK, DUNKIN, HOWELL, KNOX, LEWIS, OREGON, PUTNAM, RIPLEY, SCHUYLER AND SCOTLAND COUNTIES)		
GROUP 1	$ 25.84	9.85
GROUP 2	$ 26.00	9.85
GROUP 3	$ 25.99	9.85
GROUP 4	$ 26.11	9.85
Truck drivers (AUDRAIN, BOLLINGER, BOONE, CALLAWAY, CAPE GIRARDEAU, CARTER, COLE, CRAWFORD, DENT, GASCONADE, IRON, MACON, MADISON, MARIES, MARION, MILLER, MISSISSIPPI, MONROE, MONTGOMERY, NEW MADRID, OSAGE, PEMISCOT, PERRY, PHELPS, PIKE, PULASKI, RALLS, REYNOLDS, ST. FRANCOIS, STE. GENEVIEVE, SCOTT, SHANNON, SHELBY, STODDARD, TEXAS, WASHINGTON AND WAYNE COUNTIES)		
GROUP 1	$ 26.57	9.85
GROUP 2	$ 26.73	9.85
GROUP 3	$ 26.72	9.85
GROUP 4	$ 26.84	9.85
Truck drivers (FRANKLIN, JEFFERSON and ST. CHARLES COUNTIES)		
GROUP 1	$ 28.93	9.85
GROUP 2	$ 29.04	9.85
GROUP 3	$ 29.08	9.85
GROUP 4	$ 29.15	9.85
Truck drivers (LINCOLN and WARREN COUNTIES)		
GROUP 1	$ 27.58	9.85
GROUP 2	$ 27.69	9.85
GROUP 3	$ 28.73	9.85
GROUP 4	$ 27.80	9.85

TRUCK DRIVERS CLASSIFICATIONS:

GROUP 1: Flat Bed Trucks, Single Axle; Station Wagons; Pickup Trucks; Material Trucks, Single Axle; Tank Wagon, Single Axle

GROUP 2: Agitator and Transit Mix Trucks

GROUP 3: Flat Bed Trucks, Tandem Axle; Articulated Dump Trucks; Material Trucks, Tandem Axle; Tank Wagon, Tandem Axle

GROUP 4: Semi and/or Pole Trailers; Winch, Fork & Steel Trucks; Distributor Drivers and Operators; Tank Wagon, Semi-Trailer; Insley Wagons, Dumpsters, Half-Tracks, Speedace, Euclids and other similar equipment; A-Frame and Derrick Trucks; Float or Low Boy

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TEAM0056-001 09/01/2014

	Rates	Fringes
Truck drivers (ANDREW, BARTON, BATES, BENTON, CALDWELL, CAMDEN, CARROLL, CEDAR, CHARITON, CHRISTIAN, CLINTON, COOPER, DADE, DALLAS, DAVIESS, DEKALB, DOUGLAS, GREENE, HENRY, HICHKORY, HOWARD, JASPER, LACLEDE, LAWRENCE, LINN, LIVINGSTON, MONITEAU, MORGAN, NEWTON, PETTIS, POLK, RANDOLPH, ST. CLAIR, SALINE, VERNON, WEBSTER AND WRIGHT COUNTIES)		
GROUP 1	$ 28.22	11.75
GROUP 2	$ 28.38	11.75
GROUP 3	$ 28.37	11.75
GROUP 4	$ 28.49	11.75
Truck drivers: (ATCHISON, BARRY, GENTRY, GRUNDY, HARRISON, HOLT, MCDONALD, MERCER, NODAWAY, OZARK, STONE, SULLIVAN, TANEY AND WORTH COUNTIES)		
GROUP 1	$ 27.49	11.75
GROUP 2	$ 27.65	11.75
GROUP 3	$ 27.64	11.75
GROUP 4	$ 27.76	11.75
Truck drivers; (BUCHANAN, JOHNSON AND LAFAYETTE COUNTIES)		
GROUP 1	$ 29.43	11.75
GROUP 2	$ 29.54	11.75
GROUP 3	$ 29.58	11.75
GROUP 4	$ 29.65	11.75

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Flat bed trucks single axle; station wagons; pickup

trucks; material trucks single axle; tank wagons single axle.

GROUP 2: Agitator and transit mix-trucks.

GROUP 3: Flat bed trucks tandem axle; articulated dump trucks; material trucks tandem axle; tank wagons tandem axle.

GROUP 4: Semi and/or pole trailers; winch, fork & steel trucks; distributor drivers & operators; tank wagons semi-trailer; insley wagons, dumpsters, half-tracks, speedace, euclids & other similar equipment; A-frames and derrick trucks; float or low boy.

TEAM0245-001 03/26/2012

BARRY, BARTON, CAMDEN, CEDAR, CHRISTIAN, DALLAS, DENT, DOUGLAS, GREENE, HICKORY, HOWELL, JASPER, LACLEDE, LAWRENCE, MCDONALD, MILLER, NEWTON, OZARK, PHELPS, POLK, PULASKI, SHANNON, STONE, TANEY, TEXAS, VERNON, WEBSTER AND WRIGHT COUNTIES

	Rates	Fringes
Truck drivers:		
Traffic Control Service Driver	$ 20.45	0.00

PAID HOLIDAYS: New Year's Day, Decoration Day, July 4th, Labor Day, Thanksgiving Day, Christmas Day, employee's birthday and 2 personal days.

TEAM0541-001 04/01/2015

CASS, CLAY, JACKSON, PLATTE AND RAY COUNTIES

	Rates	Fringes
Truck drivers:		
GROUP 1	$ 31.06	13.60
GROUP 2	$ 30.49	13.60
GROUP 3	$ 29.97	13.60

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Mechanics and Welders, Field; A-Frame Low Boy-Boom ruck Driver.

GROUP 2: Articulated Dump Truck; Insley Wagons: Dump Trucks, Excavating, 5 cu yds and over; Dumpsters; Half-Tracks: Speedace: Euclids & similar excavating equipment Material trucks, Tandem Two teams; Semi-Trailers; Winch trucks-Fork trucks; Distributor Drivers and Operators; Agitator and Transit Mix; Tank Wagon Drivers, Tandem or Semi; One Team; Station Wagons; Pickup Trucks; Material Trucks, Single Axle; Tank Wagon Drivers, Single Axle

GROUP 3: Oilers and Greasers - Field

TEAM0682-002 05/01/2012

ST LOUIS CITY AND COUNTY

	Rates	Fringes
Truck drivers:		
GROUP 1	$ 30.605	8.69+a+b+c+d
GROUP 2	$ 30.805	8.69+a+b+c+d
GROUP 3	$ 30.69	8.69+a+b+c+d

a. PENSION: 5/1/2012 - $182.20 per week.

b. HAZMAT PREMIUM: If Hazmat certification on a job site is required by a state or federal agency or requested by project owner or by the employer, employees on that job site shall receive $1.50 premium pay.

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1 - Pick-up trucks; forklift, single axle; flatbed trucks; job site ambulance, and trucks or trailers of a water level capacity of 11.99 cu. yds. or less

GROUP 2 - Trucks or trailers of a water level capacity of 12.0 cu yds. up to 22.0 cu yds. including euclids, speedace and similar equipment of same capacity and compressors

GROUP 3 - Trucks or trailers of a water level capacity of 22.0 cu. yds & over including euclids, speedace & all floats, flatbed trailers, boom trucks, winch trucks, including small trailers, farm wagons tilt-top trailers, field offices, tool trailers, concrete pumps, concrete conveyors & gasoline tank trailers and truck mounted mobile concrete mixers

FOOTNOTE FOR TRUCK DRIVERS:

c. PAID HOLIDAYS: Christmas Day, Independence Day, Labor Day, Memorial Day, Veterans Day, New Years Day, Thanksgiving Day

d. PAID VACATION: 3 days paid vacation for 600 hours of service in any one contract year; 4 days paid vacation for 800 hours of service in any one contract year; 5 days paid vacation for 1,000 hours of service in any one contract year. When such an employee has completed 3 years of continuous employment with the same employer and then works the above required number of hours, he shall receive double the number of days of vacation specified above. When such an employee has completed 10 years of continuous employment with the same employer and then works the above required number of hours, he shall receive triple the number of days of vacation specified above. When such an employee has completed 15 years of continuous employment with the same employer and then works the above required number of hours, he shall receive 4 times the number of days of vacation

specified above.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which

these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request

review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID

SCHEDULE 1 - PHASES E, A, B ; OPTION 1 - ASPHALT PAVEMENT

BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	AS-BUILT QUANTITY
AIP ELIGIBLE ITEMS					
1	SECTION 105	MOBILIZATION	LS	1	
2	P-101-5.1	ASPHALT PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" AC)	SY	5,630	
3	P-101-5.2	CONCRETE PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" PCC)	SY	4,305	
4	P-101-5.3	BASE COURSE REMOVAL VARIABLE DEPTH (8 TO 15")	SY	9,930	
5	P-101-5.4	GRATED TRENCH DRAIN REMOVAL	LF	720	
6	P-101-5.5	PAINT REMOVAL	SF	525	
7	P-101-5.6	SAW CUT FULL DEPTH	LF	1,320	
8	P-102-2.1	TRAFFIC CONTROL	LS	1	
9	P-152-4.1	EMBANKMENT IN PLACE (FURNISHED BY CONTRACTOR)	CY	1,080	
10	P-152-4.2	UNSUITABLE EXCAVATION	CY	835	
11	P-156-5.1	TEMPORARY CONSTRUCTION ENTRANCE	EA	2	
12	P-156-5.2	INSTALLATION AND REMOVAL OF SILT FENCE	LF	1,175	
13	P-156-5.3	SEDIMENT REMOVAL	CY	50	
14	P-156-5.4	TURF REINFORCEMENT MAT TYPE 1	SY	3,215	
15	P-158-8.1	12 INCH FLY ASH TREATED SUBGRADE	SY	9,750	
16	P-158-8.2	FLY ASH	TON	705	
17	P-209-5.1	9 INCH CRUSHED AGGREGATE BASE COURSE	SY	5,350	
18	P-401-8.1	4 INCH BITUMINOUS SURFACE COURSE (2 - 2 INCH LIFTS)	TON	1,820	
19	P-602-5.1	BITUMINOUS PRIME COAT	GAL	785	
20	P-603-5.1	BITUMINOUS TACK COAT	GAL	780	
21	P-620-5.1	REFLECTORIZED PAVEMENT MARKING (YELLOW)	SF	1,565	
22	P-620-5.2	NON-REFLECTORIZED PAVEMENT MARKING (BLACK)	SF	3,125	
23	D-701-5.1	6 INCH HDPE OUTLET PIPE	LF	220	
24	D-701-5.2	8 INCH HDPE OUTLET PIPE	LF	505	
25	D-701-5.3	ROCK REVETMENT	SY	70	
26	D-703-5.1	MODULAR POLYMER CONCRETE GRATED TRENCH DRAIN	LF	1,290	
27	D-705-5.1	4" PERFORATED PVC UNDERDRAIN (COMPLETE)	LF	1,910	
28	D-705-5.2	4" NON-PERFORATED PVC OUTLET PIPE	LF	220	
29	D-705-5.3	UNDERDRAIN CLEANOUTS	EA	11	
30	D-705-5.4	PRECAST CONCRETE SPLASH PADS	EA	13	
31	D-705-5.5	8 INCH CLEANOUT (GRATE LID)	EA	5	
32	T-901-5.1	SEEDING	AC	1	
33	T-904-5.1	SODDING (18" WIDE)	SY	370	
34	T-904-5.3	TOPSOILING (FURNISHED FROM OFF THE SITE)	CY	620	
35	T-908-5.1	MULCHING	AC	1	

SCHEDULE 1 - PHASES E, A, B ; OPTION 1 - ASPHALT PAVEMENT

BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	AS-BUILT QUANTITY
NON-AIP ELIGIBLE ITEMS					
36	P-209-5.1	9 INCH CRUSHED AGGREGATE BASE COURSE	SY	4,400	
37	P-401-8.1	4 INCH BITUMINOUS SURFACE COURSE (2 - 2 INCH LIFTS)	TON	990	
38	P-602-5.1	BITUMINOUS PRIME COAT	GAL	1,540	
39	P-603-5.1	BITUMINOUS TACK COAT	GAL	660	

SCHEDULE 2 - PHASES E, A, B, C ; OPTION 1 - ASPHALT PAVEMENT

BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	AS-BUILT QUANTITY
AIP ELIGIBLE ITEMS					
1	SECTION 105	MOBILIZATION	LS	1	
2	P-101-5.1	ASPHALT PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" AC)	SY	6,870	
3	P-101-5.2	CONCRETE PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" PCC)	SY	6,140	
4	P-101-5.3	BASE COURSE REMOVAL VARIABLE DEPTH (8 TO 15")	SY	13,005	
5	P-101-5.4	GRATED TRENCH DRAIN REMOVAL	LF	720	
6	P-101-5.5	PAINT REMOVAL	SF	525	
7	P-101-5.6	SAW CUT FULL DEPTH	LF	2,100	
8	P-102-2.1	TRAFFIC CONTROL	LS	1	
9	P-152-4.1	EMBANKMENT IN PLACE (FURNISHED BY CONTRACTOR)	CY	1,595	
10	P-152-4.2	UNSUITABLE EXCAVATION	CY	935	
11	P-156-5.1	TEMPORARY CONSTRUCTION ENTRANCE	EA	2	
12	P-156-5.2	INSTALLATION AND REMOVAL OF SILT FENCE	LF	1,340	
13	P-156-5.3	SEDIMENT REMOVAL	CY	75	
14	P-156-5.4	TURF REINFORCEMENT MAT TYPE 1	SY	4,250	
15	P-158-8.1	12 INCH FLY ASH TREATED SUBGRADE	SY	12,820	
16	P-158-8.2	FLY ASH	TON	930	
17	P-209-5.1	9 INCH CRUSHED AGGREGATE BASE COURSE	SY	6,520	
18	P-401-8.1	4 INCH BITUMINOUS SURFACE COURSE (2 - 2 INCH LIFTS)	TON	1,430	
19	P-602-5.1	BITUMINOUS PRIME COAT	GAL	2,225	
20	P-603-5.1	BITUMINOUS TACK COAT	GAL	955	
21	P-620-5.1	REFLECTORIZED PAVEMENT MARKING (YELLOW)	SF	1,805	
22	P-620-5.2	NON-REFLECTORIZED PAVEMENT MARKING (BLACK)	SF	3,610	
23	D-701-5.1	6 INCH HDPE OUTLET PIPE	LF	330	
24	D-701-5.2	8 INCH HDPE OUTLET PIPE	LF	505	
25	D-701-5.3	ROCK REVETMENT	SY	91	
26	D-703-5.1	MODULAR POLYMER CONCRETE GRATED TRENCH DRAIN	LF	1,930	
27	D-705-5.1	4" PERFORATED PVC UNDERDRAIN (COMPLETE)	LF	2,595	
28	D-705-5.2	4" NON-PERFORATED PVC OUTLET PIPE	LF	290	
29	D-705-5.3	UNDERDRAIN CLEANOUTS	EA	15	
30	D-705-5.4	PRECAST CONCRETE SPLASH PADS	EA	17	
31	D-705-5.5	8 INCH CLEANOUT (GRATE LID)	EA	5	
32	T-901-5.1	SEEDING	AC	1	
33	T-904-5.1	SODDING (18" WIDE)	SY	395	
34	T-904-5.3	TOPSOILING (FURNISHED FROM OFF THE SITE)	CY	735	
35	T-908-5.1	MULCHING	AC	1	

SCHEDULE 2 - PHASES E, A, B, C ; OPTION 1 - ASPHALT PAVEMENT

BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	AS-BUILT QUANTITY
NON-AIP ELIGIBLE ITEMS					
36	P-209-5.1	9 INCH CRUSHED AGGREGATE BASE COURSE	SY	6,310	
37	P-401-8.1	4 INCH BITUMINOUS SURFACE COURSE (2 - 2 INCH LIFTS)	TON	1,420	
38	P-602-5.1	BITUMINOUS PRIME COAT	GAL	1,540	
39	P-603-5.1	BITUMINOUS TACK COAT	GAL	945	

SCHEDULE 3 - PHASES E, A, B, C, D ; OPTION 1 - ASPHALT PAVEMENT

BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	AS-BUILT QUANTITY
AIP ELIGIBLE ITEMS					
1	SECTION 105	MOBILIZATION	LS	1	
2	P-101-5.1	ASPHALT PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" AC)	SY	8,125	
3	P-101-5.2	CONCRETE PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" PCC)	SY	7,840	
4	P-101-5.3	BASE COURSE REMOVAL VARIABLE DEPTH (8 TO 15")	SY	15,965	
5	P-101-5.4	GRATED TRENCH DRAIN REMOVAL	LF	720	
6	P-101-5.5	PAINT REMOVAL	SF	525	
7	P-101-5.6	SAW CUT FULL DEPTH	LF	2,855	
8	P-102-2.1	TRAFFIC CONTROL	LS	1	
9	P-152-4.1	EMBANKMENT IN PLACE (FURNISHED BY CONTRACTOR)	CY	2,085	
10	P-152-4.2	UNSUITABLE EXCAVATION	CY	1,035	
11	P-156-5.1	TEMPORARY CONSTRUCTION ENTRANCE	EA	2	
12	P-156-5.2	INSTALLATION AND REMOVAL OF SILT FENCE	LF	1,525	
13	P-156-5.3	SEDIMENT REMOVAL	CY	75	
14	P-156-5.4	TURF REINFORCEMENT MAT TYPE 1	SY	5,394	
15	P-158-8.1	12 INCH FLY ASH TREATED SUBGRADE	SY	15,780	
16	P-158-8.2	FLY ASH	TON	1,140	
17	P-209-5.1	9 INCH CRUSHED AGGREGATE BASE COURSE	SY	6,765	
18	P-401-8.1	4 INCH BITUMINOUS SURFACE COURSE (2 - 2 INCH LIFTS)	TON	1,690	
19	P-602-5.1	BITUMINOUS PRIME COAT	GAL	2,630	
20	P-603-5.1	BITUMINOUS TACK COAT	GAL	1,130	
21	P-620-5.1	REFLECTORIZED PAVEMENT MARKING (YELLOW)	SF	2,050	
22	P-620-5.2	NON-REFLECTORIZED PAVEMENT MARKING (BLACK)	SF	4,095	
23	D-701-5.1	6 INCH HDPE OUTLET PIPE	LF	395	
24	D-701-5.2	8 INCH HDPE OUTLET PIPE	LF	505	
25	D-701-5.3	ROCK REVETMENT	SY	112	
26	D-703-5.1	MODULAR POLYMER CONCRETE GRATED TRENCH DRAIN	LF	2,620	
27	D-705-5.1	4" PERFORATED PVC UNDERDRAIN (COMPLETE)	LF	3,280	
28	D-705-5.2	4" NON-PERFORATED PVC OUTLET PIPE	LF	360	
29	D-705-5.3	UNDERDRAIN CLEANOUTS	EA	19	
30	D-705-5.4	PRECAST CONCRETE SPLASH PADS	EA	21	
31	D-705-5.5	8 INCH CLEANOUT (GRATE LID)	EA	5	
32	T-901-5.1	SEEDING	AC	2	
33	T-904-5.1	SODDING (18" WIDE)	SY	425	
34	T-904-5.3	TOPSOILING (FURNISHED FROM OFF THE SITE)	CY	865	
35	T-908-5.1	MULCHING	AC	1	

SCHEDULE 3 - PHASES E, A, B, C, D ; OPTION 1 - ASPHALT PAVEMENT

BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	AS-BUILT QUANTITY
NON-AIP ELIGIBLE ITEMS					
36	P-209-5.1	9 INCH CRUSHED AGGREGATE BASE COURSE	SY	8,125	
37	P-401-8.1	4 INCH BITUMINOUS SURFACE COURSE (2 - 2 INCH LIFTS)	TON	1,825	
38	P-602-5.1	BITUMINOUS PRIME COAT	GAL	1,540	
39	P-603-5.1	BITUMINOUS TACK COAT	GAL	1,220	

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date 6/22/2015 | detailed A. EWIGMAN
designed T. DOWSE | checked K. WACHIRA

MIDWEST NATIONAL AIR CENTER
13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

SUMMARY OF QUANTITIES
OPTION 1

project 81332 | MoDOT # 14-107B-2
drawing G001 A – rev. 0
sheet of sheets
file 81332G001.DWG

no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID

SCHEDULE 1 - PHASES E, A, B ; OPTION 2 - CONCRETE PAVEMENT

BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	AS-BUILT QUANTITY
AIP ELIGIBLE ITEMS					
1	SECTION 105	MOBILIZATION	LS	1	
2	P-101-5.1	ASPHALT PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" AC)	SY	5,630	
3	P-101-5.2	CONCRETE PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" PCC)	SY	4,305	
4	P-101-5.3	BASE COURSE REMOVAL VARIABLE DEPTH (8 TO 15")	SY	9,930	
5	P-101-5.4	GRATED TRENCH DRAIN REMOVAL	LF	720	
6	P-101-5.5	PAINT REMOVAL	SF	525	
7	P-101-5.6	SAW CUT FULL DEPTH	LF	1,320	
8	P-102-2.1	TRAFFIC CONTROL	LS	1	
9	P-152-4.1	EMBANKMENT IN PLACE (FURNISHED BY CONTRACTOR)	CY	3,265	
10	P-152-4.2	UNSUITABLE EXCAVATION	CY	835	
11	P-156-5.1	TEMPORARY CONSTRUCTION ENTRANCE	EA	2	
12	P-156-5.2	INSTALLATION AND REMOVAL OF SILT FENCE	LF	1,175	
13	P-156-5.3	SEDIMENT REMOVAL	CY	50	
14	P-156-5.4	TURF REINFORCEMENT MAT TYPE 1	SY	3,215	
15	P-158-8.1	12 INCH FLY ASH TREATED SUBGRADE	SY	9,745	
16	P-158-8.2	FLY ASH	TON	705	
17	P-209-5.2	4 INCH CRUSHED AGGREGATE BASE COURSE	SY	5,345	
18	P-501-8.1	6 INCH PORTLAND CEMENT CONCRETE PAVEMENT	SY	5,180	
19	P-620-5.1	REFLECTORIZED PAVEMENT MARKING (YELLOW)	SF	1,565	
20	P-620-5.2	NON-REFLECTORIZED PAVEMENT MARKING (BLACK)	SF	3,125	
21	D-701-5.1	6 INCH HDPE OUTLET PIPE	LF	220	
22	D-701-5.2	8 INCH HDPE OUTLET PIPE	LF	505	
23	D-701-5.3	ROCK REVETMENT	SY	70	
24	D-703-5.1	MODULAR POLYMER CONCRETE GRATED TRENCH DRAIN	LF	1,290	
25	D-705-5.1	4" PERFORATED PVC UNDERDRAIN (COMPLETE)	LF	1,910	
26	D-705-5.2	4" NON-PERFORATED PVC OUTLET PIPE	LF	220	
27	D-705-5.3	UNDERDRAIN CLEANOUTS	EA	11	
28	D-705-5.4	PRECAST CONCRETE SPLASH PADS	EA	13	
29	D-705-5.5	8 INCH CLEANOUT (GRATE LID)	EA	5	
30	T-901-5.1	SEEDING	AC	1	
31	T-904-5.1	SODDING (18" WIDE)	SY	270	
32	T-904-5.3	TOPSOILING (FURNISHED FROM OFF THE SITE)	CY	620	
33	T-908-5.1	MULCHING	AC	1	

SCHEDULE 1 - PHASES E, A, B ; OPTION 2 - CONCRETE PAVEMENT

BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	AS-BUILT QUANTITY
NON-AIP ELIGIBLE ITEMS					
34	P-209-5.2	4 INCH CRUSHED AGGREGATE BASE COURSE	SY	4,400	
35	P-501-8.1	6 INCH PORTLAND CEMENT CONCRETE PAVEMENT	SY	4,400	

SCHEDULE 2 - PHASES E, A, B, C ; OPTION 2 - CONCRETE PAVEMENT

BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	AS-BUILT QUANTITY
AIP ELIGIBLE ITEMS					
1	SECTION 105	MOBILIZATION	LS	1	
2	P-101-5.1	ASPHALT PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" AC)	SY	6,870	
3	P-101-5.2	CONCRETE PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" PCC)	SY	6,140	
4	P-101-5.3	BASE COURSE REMOVAL VARIABLE DEPTH (8 TO 15")	SY	13,005	
5	P-101-5.4	GRATED TRENCH DRAIN REMOVAL	LF	720	
6	P-101-5.5	PAINT REMOVAL	SF	525	
7	P-101-5.6	SAW CUT FULL DEPTH	LF	2,100	
8	P-102-2.1	TRAFFIC CONTROL	LS	1	
9	P-152-4.1	EMBANKMENT IN PLACE (FURNISHED BY CONTRACTOR)	CY	4,290	
10	P-152-4.2	UNSUITABLE EXCAVATION	CY	935	
11	P-156-5.1	TEMPORARY CONSTRUCTION ENTRANCE	EA	2	
12	P-156-5.2	INSTALLATION AND REMOVAL OF SILT FENCE	LF	1,340	
13	P-156-5.3	SEDIMENT REMOVAL	CY	75	
14	P-156-5.4	TURF REINFORCEMENT MAT TYPE 1	SY	4,250	
15	P-158-8.1	12 INCH FLY ASH TREATED SUBGRADE	SY	12,820	
16	P-158-8.2	FLY ASH	TON	930	
17	P-209-5.2	4 INCH CRUSHED AGGREGATE BASE COURSE	SY	6,520	
18	P-501-8.1	6 INCH PORTLAND CEMENT CONCRETE PAVEMENT	SY	6,350	
19	P-620-5.1	REFLECTORIZED PAVEMENT MARKING (YELLOW)	SF	1,805	
20	P-620-5.2	NON-REFLECTORIZED PAVEMENT MARKING (BLACK)	SF	3,610	
21	D-701-5.1	6 INCH HDPE OUTLET PIPE	LF	330	
22	D-701-5.2	8 INCH HDPE OUTLET PIPE	LF	505	
23	D-701-5.3	ROCK REVETMENT	SY	91	
24	D-703-5.1	MODULAR POLYMER CONCRETE GRATED TRENCH DRAIN	LF	1,930	
25	D-705-5.1	4" PERFORATED PVC UNDERDRAIN (COMPLETE)	LF	2,595	
26	D-705-5.2	4" NON-PERFORATED PVC OUTLET PIPE	LF	290	
27	D-705-5.3	UNDERDRAIN CLEANOUTS	EA	15	
28	D-705-5.4	PRECAST CONCRETE SPLASH PADS	EA	17	
29	D-705-5.5	8 INCH CLEANOUT (GRATE LID)	EA	5	
30	T-901-5.1	SEEDING	AC	1	
31	T-904-5.1	SODDING (18" WIDE)	SY	395	
32	T-904-5.3	TOPSOILING (FURNISHED FROM OFF THE SITE)	CY	735	
33	T-908-5.1	MULCHING	AC	1	

SCHEDULE 2 - PHASES E, A, B, C ; OPTION 2 - CONCRETE PAVEMENT

BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	AS-BUILT QUANTITY
NON-AIP ELIGIBLE ITEMS					
34	P-209-5.2	4 INCH CRUSHED AGGREGATE BASE COURSE	SY	6,310	
35	P-501-8.1	6 INCH PORTLAND CEMENT CONCRETE PAVEMENT	SY	6,300	

SCHEDULE 3 - PHASES E, A, B, C, D ; OPTION 2 - CONCRETE PAVEMENT

BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	UNIT PRICE
AIP ELIGIBLE ITEMS					
1	SECTION 105	MOBILIZATION	LS	1	
2	P-101-5.1	ASPHALT PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" AC)	SY	8,125	
3	P-101-5.2	CONCRETE PAVEMENT REMOVAL VARIABLE DEPTH (4 TO 5" PCC)	SY	7,840	
4	P-101-5.3	BASE COURSE REMOVAL VARIABLE DEPTH (8 TO 15")	SY	15,965	
5	P-101-5.4	GRATED TRENCH DRAIN REMOVAL	LF	720	
6	P-101-5.5	PAINT REMOVAL	SF	525	
7	P-101-5.6	SAW CUT FULL DEPTH	LF	2,855	
8	P-102-2.1	TRAFFIC CONTROL	LS	1	
9	P-152-4.1	EMBANKMENT IN PLACE (FURNISHED BY CONTRACTOR)	CY	2,100	
10	P-152-4.2	UNSUITABLE EXCAVATION	CY	1,035	
11	P-156-5.1	TEMPORARY CONSTRUCTION ENTRANCE	EA	2	
12	P-156-5.2	INSTALLATION AND REMOVAL OF SILT FENCE	LF	1,525	
13	P-156-5.3	SEDIMENT REMOVAL	CY	100	
14	P-156-5.4	TURF REINFORCEMENT MAT TYPE 1	SY	5,395	
15	P-158-8.1	12 INCH FLY ASH TREATED SUBGRADE	SY	15,780	
16	P-158-8.2	FLY ASH	TON	1,140	
17	P-209-5.2	4 INCH CRUSHED AGGREGATE BASE COURSE	SY	7,670	
18	P-501-8.1	6 INCH PORTLAND CEMENT CONCRETE PAVEMENT	SY	7,505	
19	P-620-5.1	REFLECTORIZED PAVEMENT MARKING (YELLOW)	SF	2,050	
20	P-620-5.2	NON-REFLECTORIZED PAVEMENT MARKING (BLACK)	SF	4,095	
21	D-701-5.1	6 INCH HDPE OUTLET PIPE	LF	395	
22	D-701-5.2	8 INCH HDPE OUTLET PIPE	LF	505	
23	D-701-5.3	ROCK REVETMENT	SY	112	
24	D-703-5.1	MODULAR POLYMER CONCRETE GRATED TRENCH DRAIN	LF	2,620	
25	D-705-5.1	4" PERFORATED PVC UNDERDRAIN (COMPLETE)	LF	3,280	
26	D-705-5.2	4" NON-PERFORATED PVC OUTLET PIPE	LF	360	
27	D-705-5.3	UNDERDRAIN CLEANOUTS	EA	19	
28	D-705-5.4	PRECAST CONCRETE SPLASH PADS	EA	21	
29	D-705-5.5	8 INCH CLEANOUT (GRATE LID)	EA	5	
30	T-901-5.1	SEEDING	AC	2	
31	T-904-5.1	SODDING (18" WIDE)	SY	425	
32	T-904-5.3	TOPSOILING (FURNISHED FROM OFF THE SITE)	CY	865	
33	T-908-5.1	MULCHING	AC	1	

SCHEDULE 3 - PHASES E, A, B, C, D ; OPTION 2 - CONCRETE PAVEMENT

BID ITEM	FAA SPEC.	ITEM DESCRIPTION	UNITS	APPROX. QUANTITY	UNIT PRICE
NON-AIP ELIGIBLE ITEMS					
34	P-209-5.2	4 INCH CRUSHED AGGREGATE BASE COURSE	SY	8,125	
35	P-501-8.1	6 INCH PORTLAND CEMENT CONCRETE PAVEMENT	SY	8,110	

STATE OF MISSOURI
JOSEPH M. MOSES
NUMBER E-27476
REGISTERED PROFESSIONAL ENGINEER
6-22-15

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

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date	detailed
6/22/2015	A. EWIGMAN
designed	checked
T. DOWSE	K. WACHIRA

MIDWEST NATIONAL AIR CENTER
13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

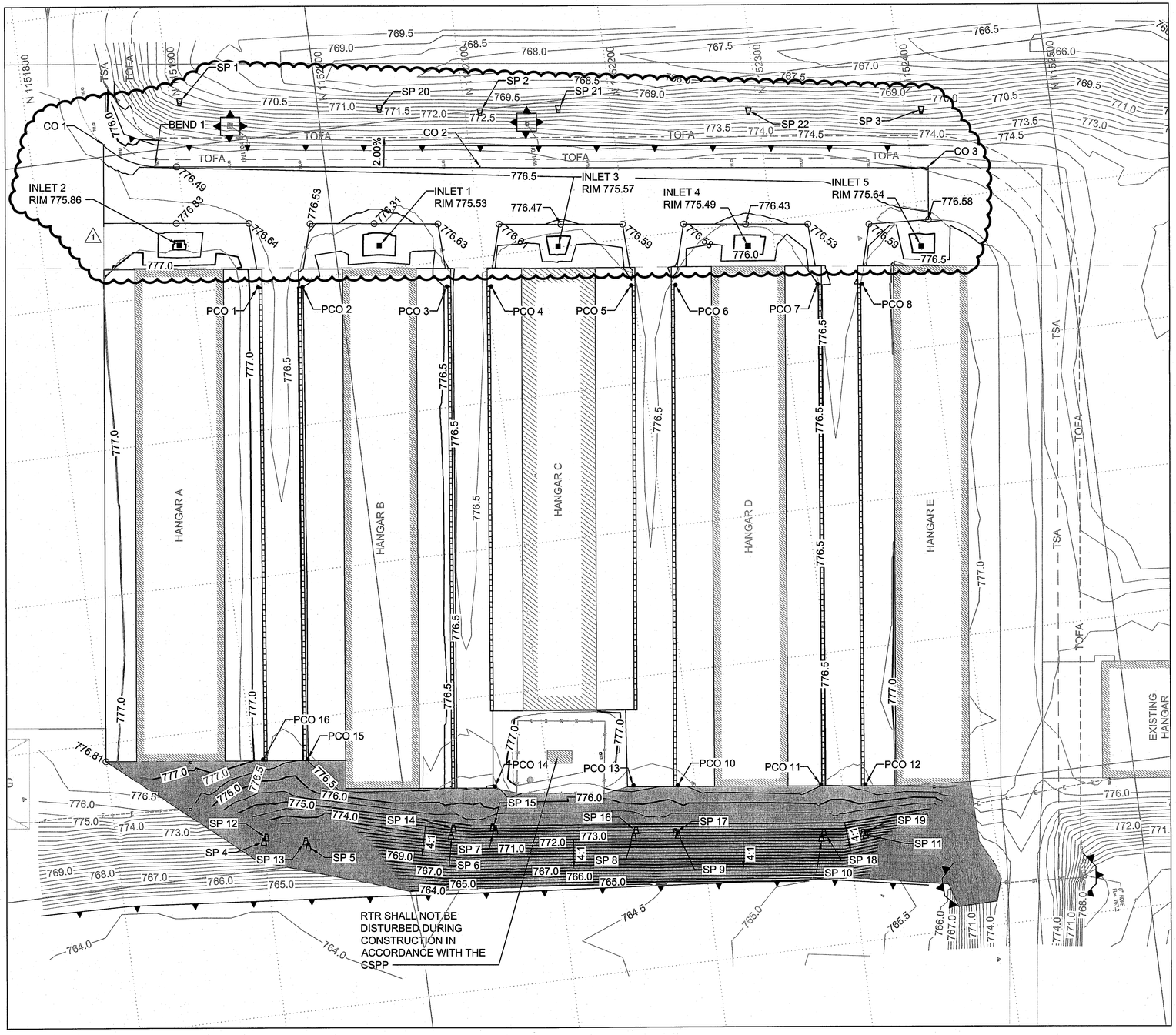
SUMMARY OF QUANTITIES
OPTION 2

project	MoDOT #
81332	14-107B-2

drawing G001 B — rev. 0

sheet of sheets

file 81332G001.DWG



GRADING AND EROSION CONTROL PLAN

0 20' 40' 80'
SCALE IN FEET

NORTH

GRADING NOTES:

1. PROPOSED ELEVATIONS INDICATED ARE FOR TOP OF FINAL GRADE, PAVEMENT, OR STRUCTURE UNLESS INDICATED OTHERWISE.
2. ELEVATION DENOTED AS "MATCH" ARE INTENDED TO MEET EXISTING GRADE ELEVATIONS. CONTRACTOR SHALL VERIFY ELEVATIONS AT TIE-INS AND MATCH POINTS PRIOR TO BEGINNING CONSTRUCTION.
3. ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. ANY DRAINAGE FEATURE OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITIONS OR BETTER SUBJECT TO THE APPROVAL OF THE ENGINEER AND AT NO COST TO THE OWNER.
4. CONTRACTOR SHALL REMOVE STANDING WATER FROM THE PROJECT WORK LIMITS AS NECESSARY TO PROTECT SUBGRADE, SUBBASE, AND/OR BASE COURSE OF NEW PAVEMENT, SURROUNDING PAVEMENT-TO-REMAIN, OR OTHER COMPLETED WORKS.
5. CONTRACTOR SHALL PLACE EROSION CONTROL DEVICES AS SHOWN PRIOR TO BEGINNING WORK. THE DEVICES SHALL BE PLACED DOWN-SLOPE OF DISTURBED AREAS WHERE SHEET EROSION WOULD OCCUR. SILT FENCE SHALL BE CLEANED AND REPAIRED WHEN SEDIMENT BUILD-UP REACHES ONE-THIRD OF SILT FENCE HEIGHT. AFTER SIGNIFICANT RUNOFF EVENTS, THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL STRUCTURES FOR SILT BUILD-UP THAT INTERFERES WITH THE PERFORMANCE OF THE EROSION CONTROL STRUCTURE AND REPAIR OR REPLACE THOSE STRUCTURES, AS NECESSARY.
6. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE RE-VEGETATED IN ACCORDANCE WITH THE SPECIFICATIONS.
7. SEE DETAIL SHEETS FOR PAVEMENT SECTIONS.
8. CONTRACTOR SHALL INSTALL SILT FENCE AROUND STAGING AREA AS SHOWN ON G003.
9. THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) THAT DESCRIBERS THE STRATEGIES AND STEPS TAKEN TO PREVENT NONPRINT SOURCE POLLUTION DISCHARGING FROM THE CONSTRUCTION SITE WILL BE ISSUED TO THE SUCCESSFUL BIDDER WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT. THE CONTRACTOR SHALL MAINTAIN THIS SWPPP DURING CONSTRUCTION. (1)

LEGEND:

- 885 — PROPOSED GRADING
- 885 - - - EXISTING GRADING
- +884.39 PROPOSED SPOT ELEVATION
- +884.39 EXISTING SPOT ELEVATION
- DITCH FLOW ARROWS
- TURF REINFORCEMENT MAT (TYPE 1)
- INLET PROTECTION (2 C504 / 1 C504 (1))
- SILT FENCE
- GRADING LIMITS

STATE OF MISSOURI
JOSEPH M. MOSES, JR.
NUMBER E-27476
REGISTERED PROFESSIONAL ENGINEER
6-22-15

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID
(1)	6/22/15	TJD	KTW	ADDENDUM NO. 1

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designed	checked
T. DOWSE	K. WACHIRA

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RECONSTRUCT T-HANGAR TAXILANES

GRADING AND EROSION CONTROL PLAN

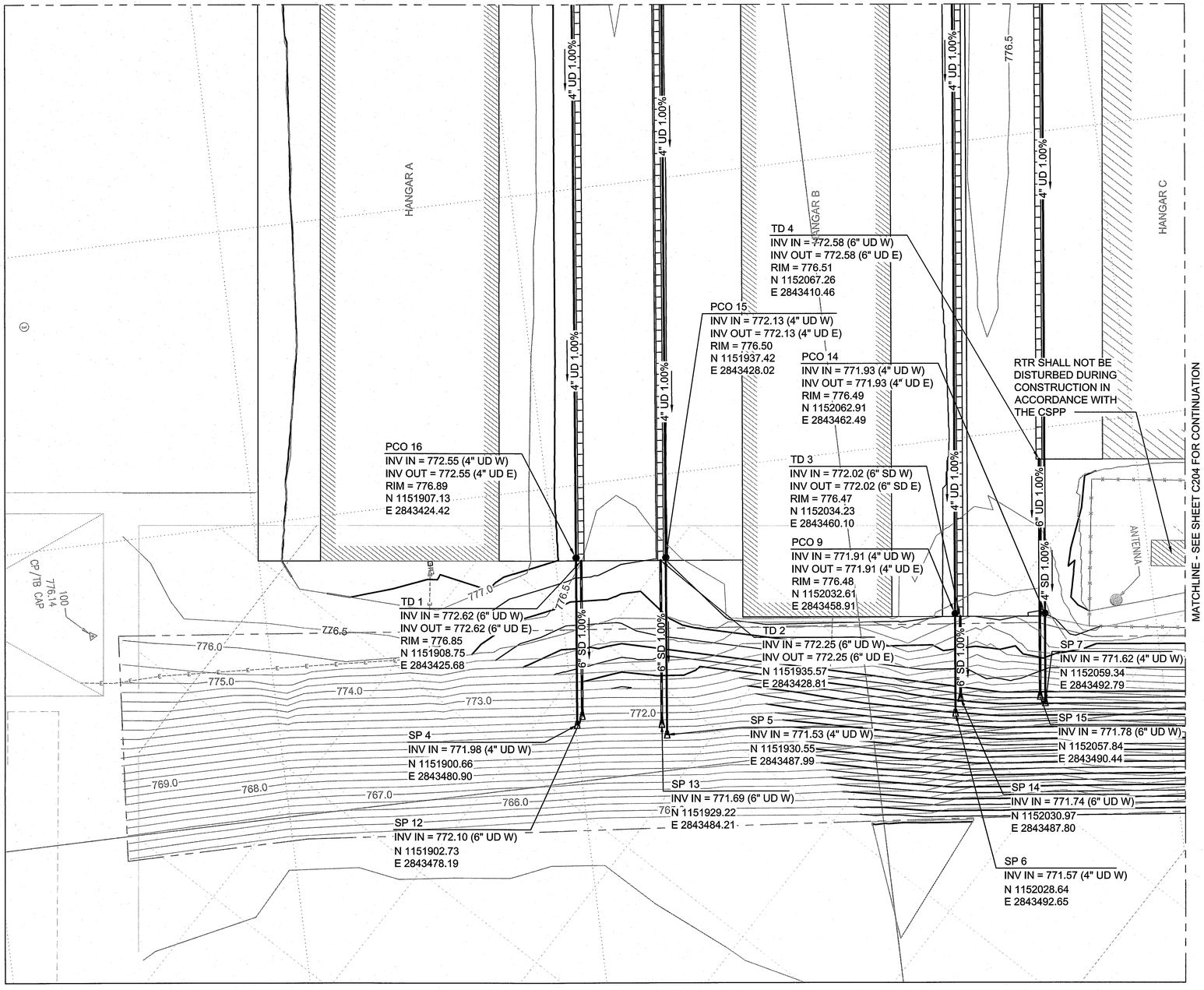
project	MoDOT #
81332	14-107B-2

drawing **C200** rev. **1**

sheet of sheets

file 81332C200.DWG

MATCHLINE - SEE SHEET C201 FOR CONTINUATION



UTILITY PLAN

0 10' 20' 40'
SCALE IN FEET

NORTH

UTILITY NOTES:

1. CONTRACTOR SHALL SUBMIT A COMPLETE DESIGN AND SHOP DRAWING FOR THE MODULAR POLYMER CONCRETE GRATED TRENCH SYSTEM IN ACCORDANCE WITH D-703.
2. THE 4" PVC UNDERDRAINS HAVE BEEN DESIGNED TO BE BELOW THE MODULAR POLYMER CONCRETE-GRATED TRENCH SYSTEM. THE FINAL ELEVATIONS WILL BE DETERMINED ONCE THE MODULAR POLYMER CONCRETE GRATED TRENCH SYSTEM HAS BEEN DESIGNED.
3. THE OUTLET PIPE FOR THE 4" PVC UNDERDRAIN SHALL BE CAST MONOTHICALLY WITH THE OUTLET FOR THE MODULAR POLYMER CONCRETE GRATED TRENCH SYSTEM ONCE IT HAS BEEN DESIGNED AND APPROVED. (1)

LEGEND:

- CLEANOUT OUTSIDE PAVEMENT — CO 1 — 1 / C506
- CLEANOUT WITHIN PAVEMENT — PCO 1 — 2 / C506
- GRATE INLET — INLET 1 — 3 / C506
- HDPE PIPE — 6" SD 1.00% — 1 / C505
- UNDERDRAIN — 4" UD 1.00% — 4 / C505
- UNDERDRAIN OUTLET PIPE/SPLASH PAD — SP 1 — 3 / C505
- TRENCH DRAIN (SEE NOTE 1)

no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID
1	6/22/15	TJD	KTW	ADDENDUM NO. 1

JOSEPH MOSES
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date	detailed
6/22/2015	A. EWIGMAN
designed	checked
T. DOWSE	K. WACHIRA

MIDWEST NATIONAL AIR CENTER
13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

UTILITY PLAN
SHEET 1 OF 4

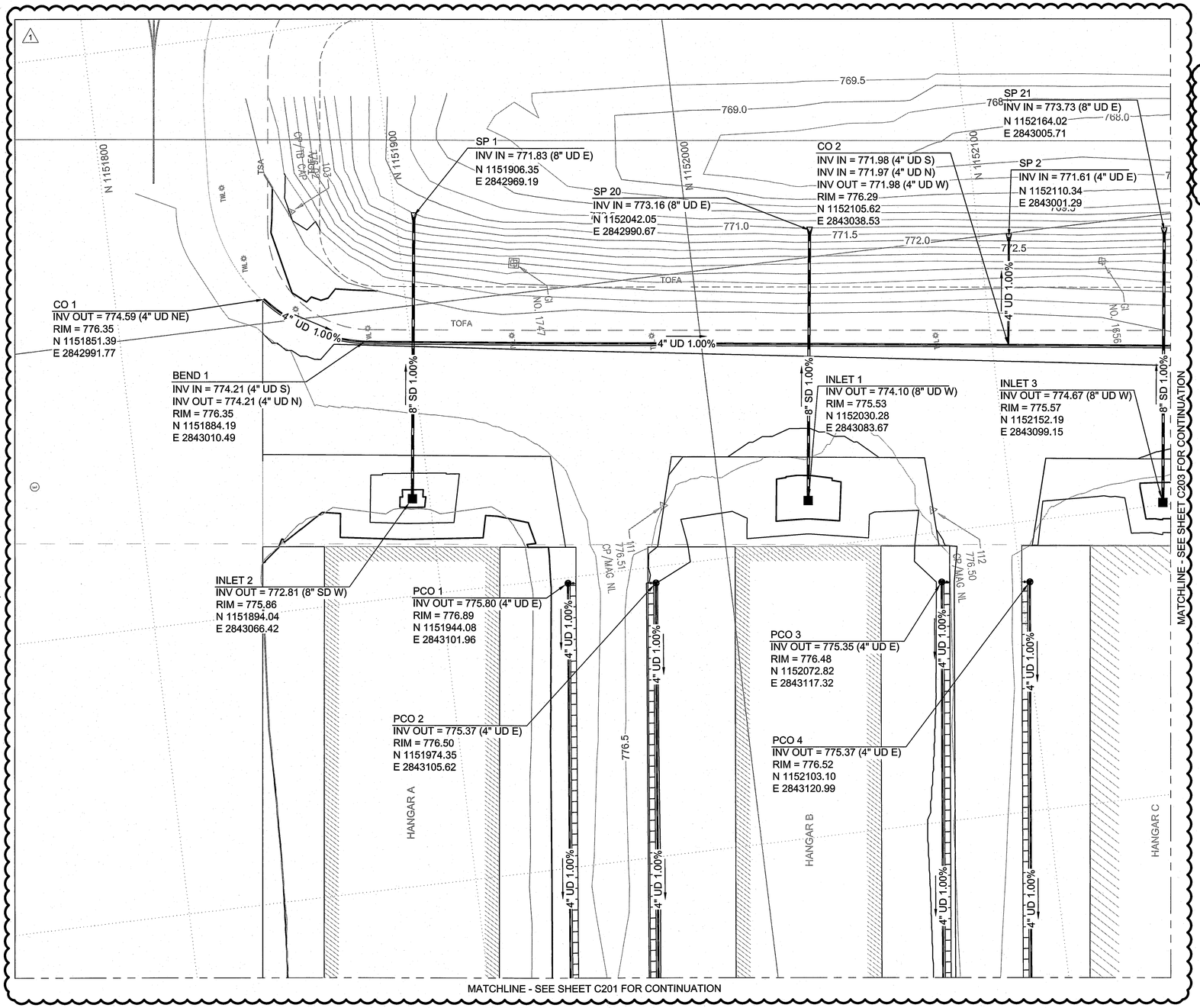
project	MoDOT #
81332	14-107B-2

drawing C201 — rev. 1

sheet of sheets

file 81332C201.DWG

Scale For Microfilming
Inches



UTILITY PLAN

0 10' 20' 40'
SCALE IN FEET

NORTH

UTILITY NOTES:

1. CONTRACTOR SHALL SUBMIT A COMPLETE DESIGN AND SHOP DRAWING FOR THE MODULAR POLYMER CONCRETE GRATED TRENCH SYSTEM IN ACCORDANCE WITH D-703.
2. THE 4" PVC UNDERDRAINS HAVE BEEN DESIGNED TO BE BELOW THE MODULAR POLYMER CONCRETE-GRATED TRENCH SYSTEM. THE FINAL ELEVATIONS WILL BE DETERMINED ONCE THE MODULAR POLYMER CONCRETE GRATED TRENCH SYSTEM HAS BEEN DESIGNED.
3. THE OUTLET PIPE FOR THE 4" PVC UNDERDRAIN SHALL BE CAST MONOTHICALLY WITH THE OUTLET FOR THE MODULAR POLYMER CONCRETE GRATED TRENCH SYSTEM ONCE IT HAS BEEN DESIGNED AND APPROVED. (1)

LEGEND:

- CLEANOUT OUTSIDE PAVEMENT — CO 1 — 1 / C506
- CLEANOUT WITHIN PAVEMENT — PCO 1 — 2 / C506
- GRATE INLET — INLET 1 — 3 / C506
- HDPE PIPE — 6" SD 1.00% — 1 / C505
- UNDERDRAIN — 4" UD 1.00% — 4 / C505
- UNDERDRAIN OUTLET PIPE/SPLASH PAD — SP 1 — 3 / C505
- TRENCH DRAIN (SEE NOTE 1)

no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID
1	6/22/15	TJD	KTW	ADDENDUM NO. 1

STATE OF MISSOURI — JOSEPH M. MOSES, JR. — NUMBER E-27476 — REGISTERED PROFESSIONAL ENGINEER
6-22-15

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. 000165

date	detailed
6/22/2015	A. EWIGMAN
designed	checked
T. DOWSE	K. WACHIRA

MIDWEST NATIONAL AIR CENTER
13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

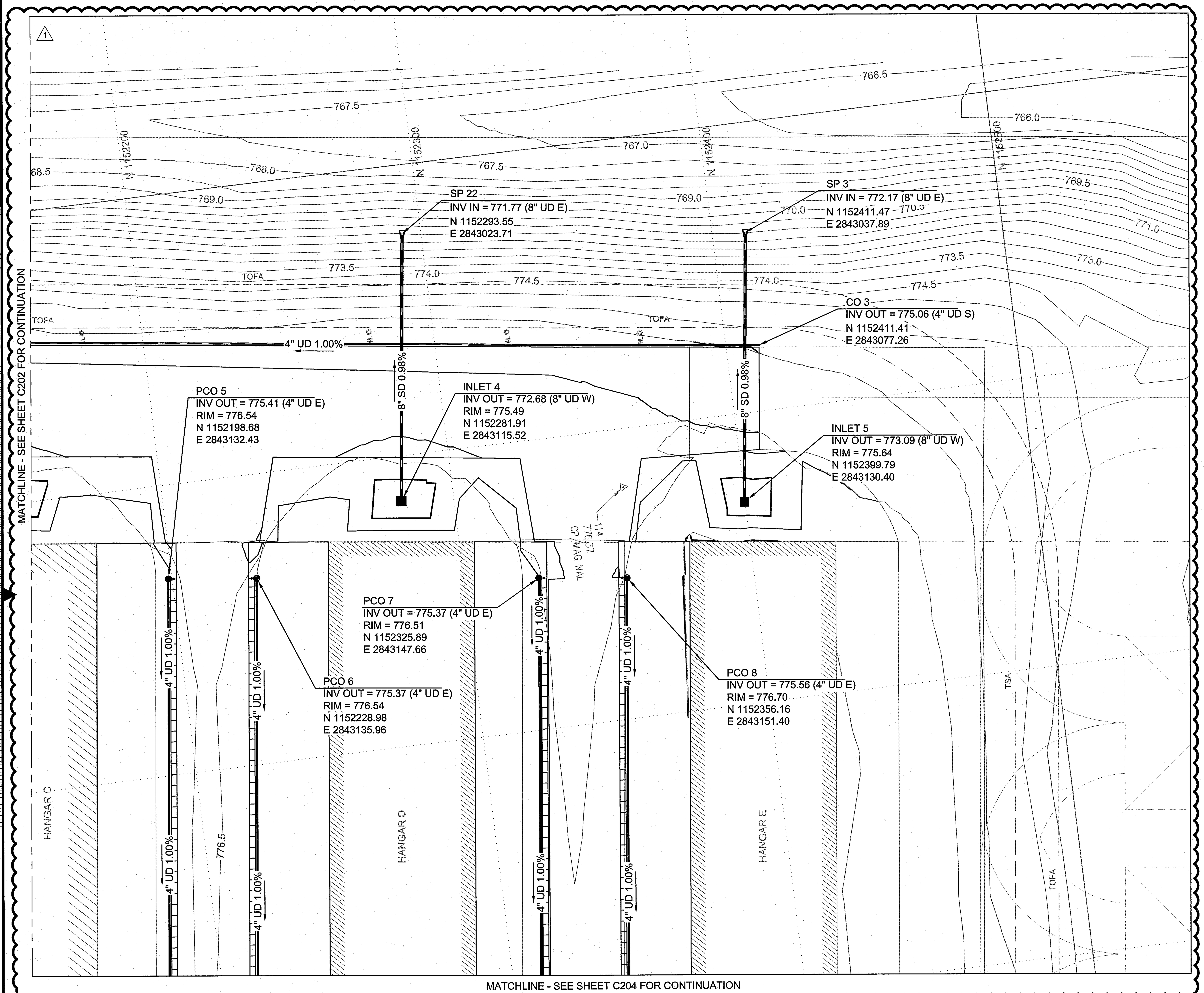
RECONSTRUCT T-HANGAR TAXILANES

UTILITY PLAN
SHEET 2 OF 4

project	MoDOT #
81332	14-107B-2

drawing C202 — rev. 1

sheet of sheets
file 81332C201.DWG



UTILITY PLAN

0 10' 20' 40'
SCALE IN FEET
NORTH

UTILITY NOTES:

1. CONTRACTOR SHALL SUBMIT A COMPLETE DESIGN AND SHOP DRAWING FOR THE MODULAR POLYMER CONCRETE GRATED TRENCH SYSTEM IN ACCORDANCE WITH D-703.
2. THE 4" PVC UNDERDRAINS HAVE BEEN DESIGNED TO BE BELOW THE MODULAR POLYMER CONCRETE-GRATED TRENCH SYSTEM. THE FINAL ELEVATIONS WILL BE DETERMINED ONCE THE MODULAR POLYMER CONCRETE GRATED TRENCH SYSTEM HAS BEEN DESIGNED.
3. THE OUTLET PIPE FOR THE 4" PVC UNDERDRAIN SHALL BE CAST MONOTHICALLY WITH THE OUTLET FOR THE MODULAR POLYMER CONCRETE GRATED TRENCH SYSTEM ONCE IT HAS BEEN DESIGNED AND APPROVED.

LEGEND:

Item	Symbol	Detail
CLEANOUT OUTSIDE PAVEMENT	CO 1	1 / C506
CLEANOUT WITHIN PAVEMENT	PCO 1	2 / C506
GRATE INLET	INLET 1	3 / C506
HDPE PIPE	6" SD 1.00%	1 / C505
UNDERDRAIN	4" UD 1.00%	4 / C505
UNDERDRAIN OUTLET PIPE/SPLASH PAD	SP 1	3 / C505
TRENCH DRAIN (SEE NOTE 1)		

no.	date	by	ckd	description
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1	6/22/15	TJD	KTW	ADDENDUM NO. 1

BURNS McDONNELL
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designed	**checked**
T. DOWSE	K. WACHIRA

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RECONSTRUCT T-HANGAR TAXILANES

UTILITY PLAN
SHEET 3 OF 4

project	MoDOT #
81332	14-107B-2

drawing **C203** – rev. **1**

sheet of sheets

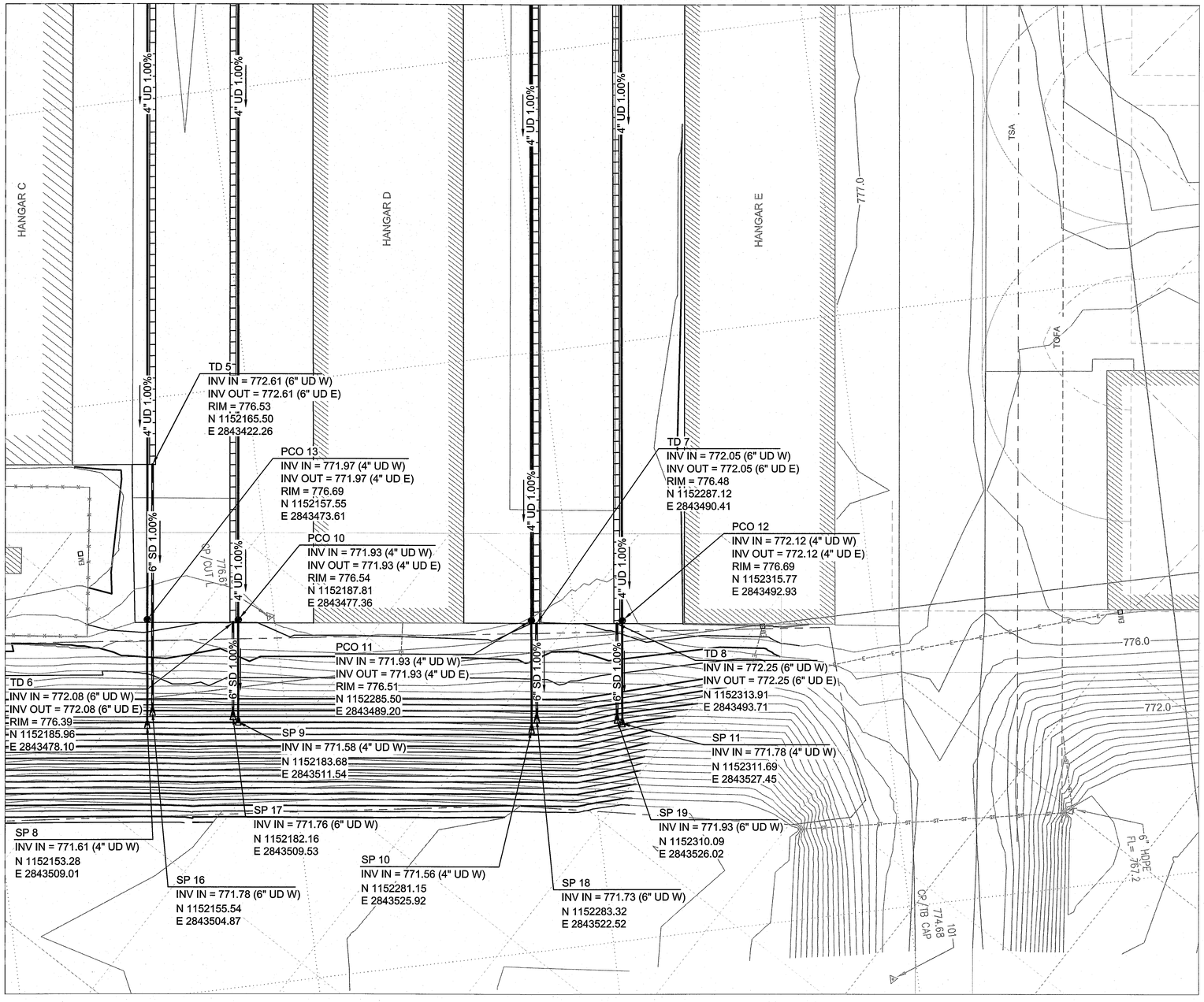
file 81332C201.DWG

STATE OF MISSOURI JOSEPH M. MOSES, JR. NUMBER E-27476 REGISTERED PROFESSIONAL ENGINEER
6-22-15

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

MATCHLINE - SEE SHEET C203 FOR CONTINUATION

MATCHLINE - SEE SHEET C201 FOR CONTINUATION



UTILITY PLAN

0 10' 20' 40'
SCALE IN FEET

NORTH

UTILITY NOTES:

1. CONTRACTOR SHALL SUBMIT A COMPLETE DESIGN AND SHOP DRAWING FOR THE MODULAR POLYMER CONCRETE GRATED TRENCH SYSTEM IN ACCORDANCE WITH D-703.
2. THE 4" PVC UNDERDRAINS HAVE BEEN DESIGNED TO BE BELOW THE MODULAR POLYMER CONCRETE-GRATED TRENCH SYSTEM. THE FINAL ELEVATIONS WILL BE DETERMINED ONCE THE MODULAR POLYMER CONCRETE GRATED TRENCH SYSTEM HAS BEEN DESIGNED.
3. THE OUTLET PIPE FOR THE 4" PVC UNDERDRAIN SHALL BE CAST MONOTHICALLY WITH THE OUTLET FOR THE MODULAR POLYMER CONCRETE GRATED TRENCH SYSTEM ONCE IT HAS BEEN DESIGNED AND APPROVED. (1)

LEGEND:

- CLEANOUT OUTSIDE PAVEMENT — CO 1 — 1 / C506
- CLEANOUT WITHIN PAVEMENT — PCO 1 — 2 / C506
- GRATE INLET — INLET 1 — 3 / C506
- HDPE PIPE — 6" SD 1.00% — 1 / C505
- UNDERDRAIN — 4" UD 1.00% — 4 / C505
- UNDERDRAIN OUTLET PIPE/SPLASH PAD — SP 1 — 3 / C505
- TRENCH DRAIN (SEE NOTE 1)

no.	date	by	ckd	description
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1	6/22/15	TJD	KTW	ADDENDUM NO. 1

BURNS McDONNELL
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816-333-9400
LICENSEE NO. 000165

date	detailed
6/22/2015	A. EWIGMAN
designed	checked
T. DOWSE	K. WACHIRA

MIDWEST NATIONAL AIR CENTER
13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

UTILITY PLAN
SHEET 4 OF 4

project	MoDOT #
81332	14-107B-2

drawing C204 — rev. 1

sheet of sheets

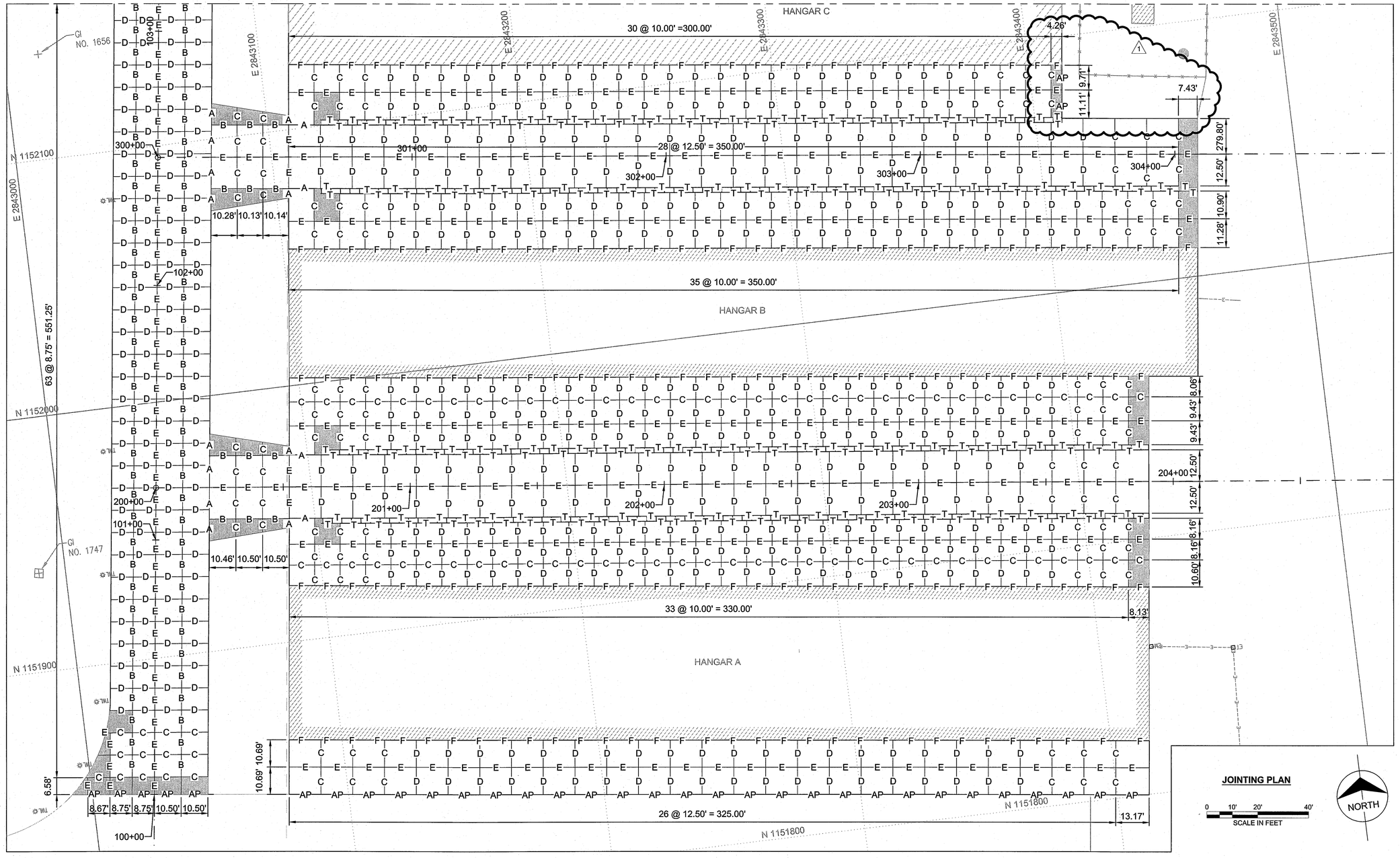
file 81332C201.DWG

STATE OF MISSOURI — JOSEPH M. MOSES, JR. — NUMBER E-027476 — NOTARIAL PROFESSIONAL ENGINEER
6-22-15

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

Scale For Microfilming: Millimeters / Inches

MATCHLINE - SEE SHEET C303 FOR CONTINUATION



JOINTING PLAN

0 10' 20' 40'
SCALE IN FEET

NORTH

NOTES:

1. ALL CONCRETE PANELS THAT SUPPORT UTILITY STRUCTURES OR ARE IRREGULAR IN SHAPE SHALL BE REINFORCED. SEE PAVEMENT SECTIONS ON DETAIL SHEETS FOR REINFORCEMENT REQUIREMENTS.
2. ALL JOINT CHANGES SHALL BE APPROVED BY IN WRITING BY THE ENGINEER.
3. CONTRACTOR SHALL USE DOWELED CONSTRUCTION JOINT WHERE PAVEMENT OPERATIONS ARE DELAYED OR STOPPED.

LEGEND:

- A — THICKENED ISOLATION JOINT — A C502
- AP — THICKENED EDGE ISOLATION JOINT — AP C502
- B — HINGED CONTRACTION JOINT — B C502
- C — DOWELED CONTRACTION JOINT — C C502
- D — DUMMY CONTRACTION JOINT — D C502
- E — DOWELED CONSTRUCTION JOINT — E C502
- F — ISOLATION JOINT AT BUILDING — F C502
- T — JUNCTURE OF TRENCH DRAIN AND NEW RIGID PAVEMENT — T C501
- REINFORCED SLAB — R C503

STATE OF MISSOURI — JOSEPH M. MOSES, JR. — NUMBER E-27476 — REGISTERED PROFESSIONAL ENGINEER
6-22-15

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID
1	6/22/15	TJD	KTW	ADDENDUM NO. 1

BURNS McDONNELL
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date	detailed
6/22/2015	A. EWIGMAN
designed	checked
T. DOWSE	K. WACHIRA

MIDWEST NATIONAL AIR CENTER
13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

JOINTING PLAN
SHEET 1 OF 2

project	MoDOT #
81332	14-107B-2

drawing C301 — rev. 0

sheet of sheets

file 81332C301.DWG

Scale For Microfilming: Inches 0 1 2 3 4 5 6 7 8 9 10 11 12 13 Millimeters

MATCHLINE - SEE SHEET C303 FOR CONTINUATION

HANGAR A

HANGAR B

HANGAR C

ELEVATION PLAN

SCALE IN FEET 0 10' 20' 40'

NORTH

NOTES:

1. PROPOSED ELEVATIONS INDICATED ARE FOR TOP OF FINAL PAVEMENT UNLESS INDICATED OTHERWISE.
2. ELEVATIONS DENOTED AS "MATCH" ARE INTENDED TO MEET EXISTING PAVEMENT ELEVATIONS. CONTRACTOR SHALL VERIFY ELEVATIONS AT TIE-INS AND MATCH POINTS PRIOR TO BEGINNING CONSTRUCTION.

no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID
1	6/22/15	TJD	KTW	ADDENDUM NO. 1

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designed	checked
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MIDWEST NATIONAL AIR CENTER
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EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

ELEVATION PLAN
SHEET 1 OF 2

project	MoDOT #
81332	14-107B-2

drawing C302 – rev. 1

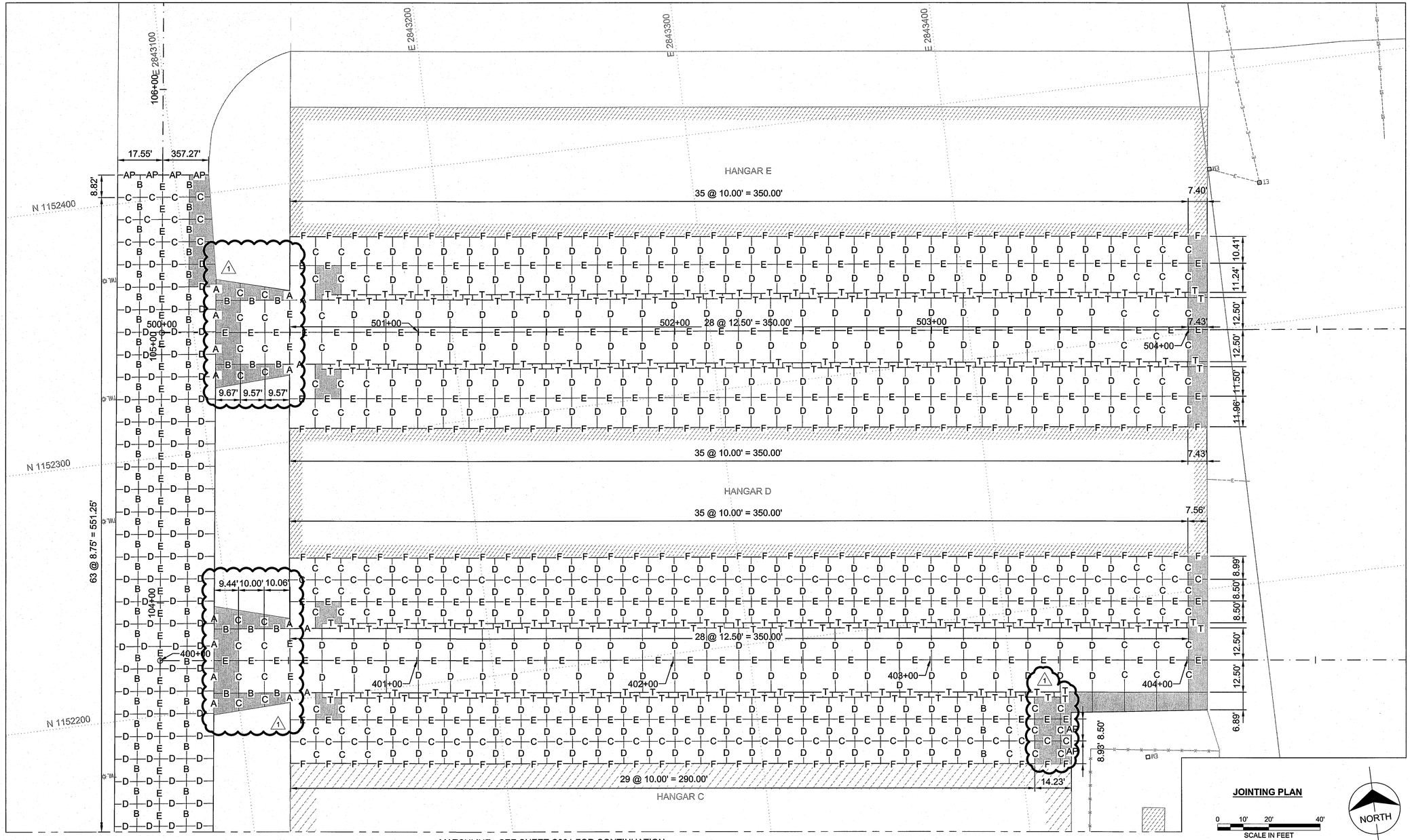
sheet of sheets

file 81332C301.DWG

STATE OF MISSOURI
JOSEPH M. MOSES, JR.
NUMBER E-27476
REGISTERED PROFESSIONAL ENGINEER
6-22-15

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

Scale For Microfilming
Millimeters
Inches



NOTES:

1. ALL CONCRETE PANELS THAT SUPPORT UTILITY STRUCTURES OR ARE IRREGULAR IN SHAPE SHALL BE REINFORCED. SEE PAVEMENT SECTIONS ON DETAIL SHEETS FOR REINFORCEMENT REQUIREMENTS.
2. ALL JOINT CHANGES SHALL BE APPROVED BY IN WRITING BY THE ENGINEER.
3. CONTRACTOR SHALL USE DOWELED CONSTRUCTION JOINT WHERE PAVEMENT OPERATIONS ARE DELAYED OR STOPPED.

LEGEND:

- A — THICKENED ISOLATION JOINT — A / C502
- AP — THICKENED EDGE ISOLATION JOINT — AP / C502
- B — HINGED CONTRACTION JOINT — B / C502
- C — DOWELED CONTRACTION JOINT — C / C502
- D — DUMMY CONTRACTION JOINT — D / C502
- E — DOWELED CONSTRUCTION JOINT — E / C502
- F — ISOLATION JOINT AT BUILDING — F / C502
- T — JUNCTURE OF TRENCH DRAIN AND NEW RIGID PAVEMENT — T / C501
- REINFORCED SLAB — R / C503

no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID
1	6/22/15	TJD	KTW	ADDENDUM NO. 1

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

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date	detailed
6/22/2015	A. EWIGMAN
designed	checked
T. DOWSE	K. WACHIRA

MIDWEST NATIONAL AIR CENTER
13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

JOINTING PLAN
SHEET 2 OF 2

project	MoDOT #
81332	14-107B-2

drawing C303 — rev. 1

sheet of sheets

file 81332C301.DWG

ELEVATION PLAN

0 10' 20' 40'
SCALE IN FEET

NORTH

NOTES:

1. PROPOSED ELEVATIONS INDICATED ARE FOR TOP OF FINAL PAVEMENT UNLESS INDICATED OTHERWISE.
2. ELEVATIONS DENOTED AS "MATCH" ARE INTENDED TO MEET EXISTING PAVEMENT ELEVATIONS. CONTRACTOR SHALL VERIFY ELEVATIONS AT TIE-INS AND MATCH POINTS PRIOR TO BEGINNING CONSTRUCTION.

no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID
1	6/22/15	TJD	KTW	ADDENDUM NO. 1

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

BURNS McDONNELL
9400 WARD PARKWAY
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LICENSEE NO. 000165

date	detailed
6/22/2015	A. EWIGMAN
designed	checked
T. DOWSE	K. WACHIRA

MIDWEST NATIONAL AIR CENTER
13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

ELEVATION PLAN
SHEET 2 OF 2

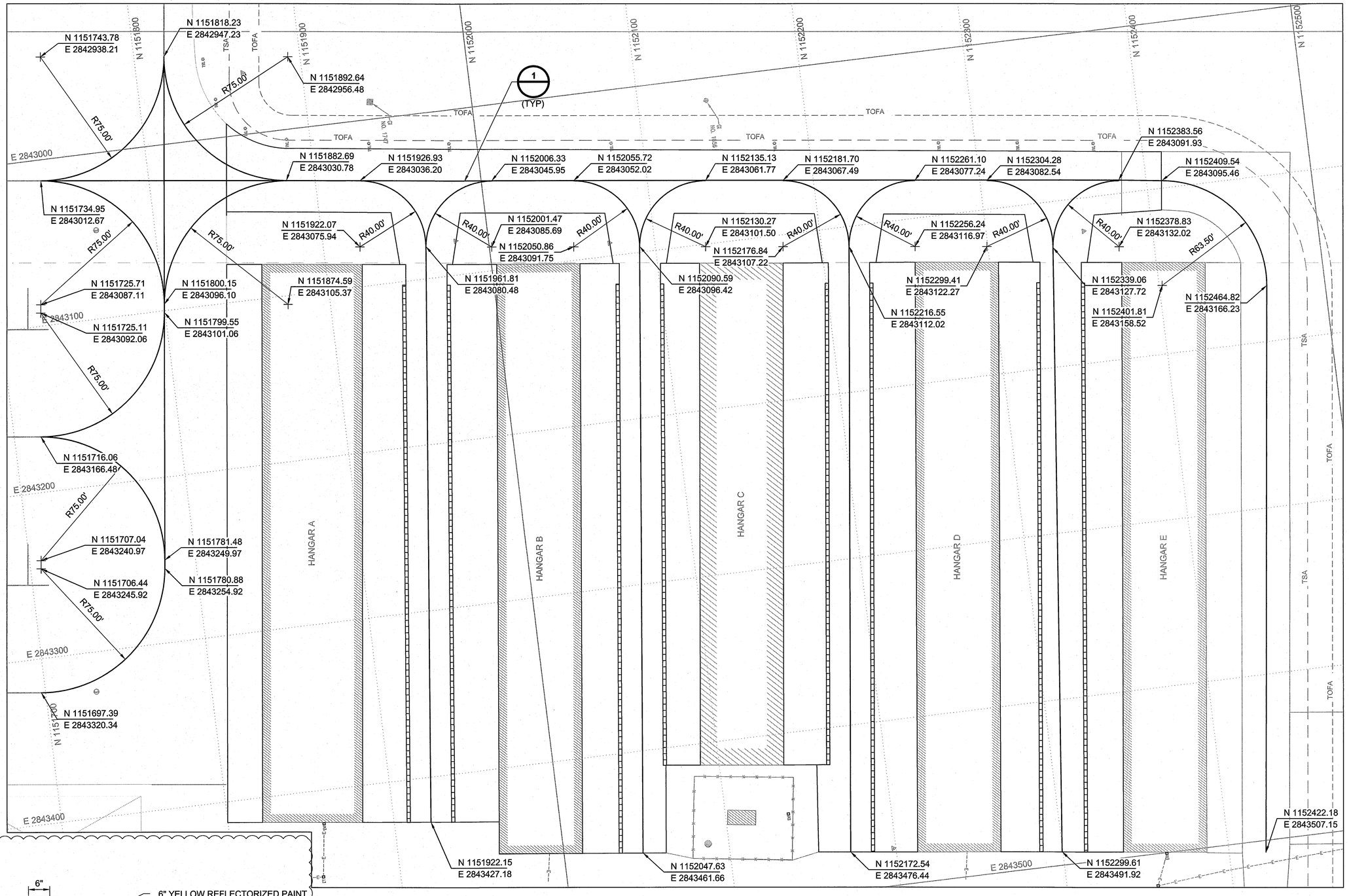
project	MoDOT #
81332	14-107B-2

drawing **C304** – rev. **1**

sheet of sheets

file 81332C301.DWG

Scale For Microfilming: Millimeters / Inches



no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID
1	6/22/15	TJD	KTW	ADDENDUM NO. 1

6"

6" YELLOW REFLECTORIZED PAINT WITH 6" WIDE BLACK OUTLINE CENTERED ON TW CL.

1

TAXIWAY CENTERLINE MARKING

DETAIL 1
NOT TO SCALE

NOTES:

1. ALL PAVEMENT SURFACES TO RECEIVE NEW PAVEMENT MARKINGS SHALL BE PREPARED ACCORDING TO SPECIFICATIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING LIMITS OF EXISTING PAVEMENT MARKINGS PRIOR TO START OF SURFACE PAVEMENT REMOVAL.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF ALL NEW PAVEMENT MARKINGS. LAYOUT SHALL BE APPROVED BY THE ENGINEER PRIOR TO THE APPLICATION OF NEW MARKINGS.
4. CONTRACTOR SHALL REMOVE AND REPLACE ALL EXISTING PAVEMENT MARKINGS THAT ARE DISTURBED DURING CONSTRUCTION PER SPECIFICATIONS. LIMITS OF REMOVAL AND REPLACEMENT SHALL BE APPROVED BY THE ENGINEER.

TAXILANE PAVEMENT MARKING

0 30' 60'
SCALE IN FEET

NORTH

STATE OF MISSOURI
JOSEPH III. MOSES, JR.
NUMBER E-27476
REGISTERED PROFESSIONAL ENGINEER
6-22-15

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

BURNS McDONNELL
9400 WARD PARKWAY
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816-333-9400
LICENSEE NO. 000165

date	detailed
6/22/2015	A. EWIGMAN
designed	checked
T. DOWSE	K. WACHIRA

MIDWEST NATIONAL AIR CENTER
13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

TAXILANE PAVEMENT MARKING

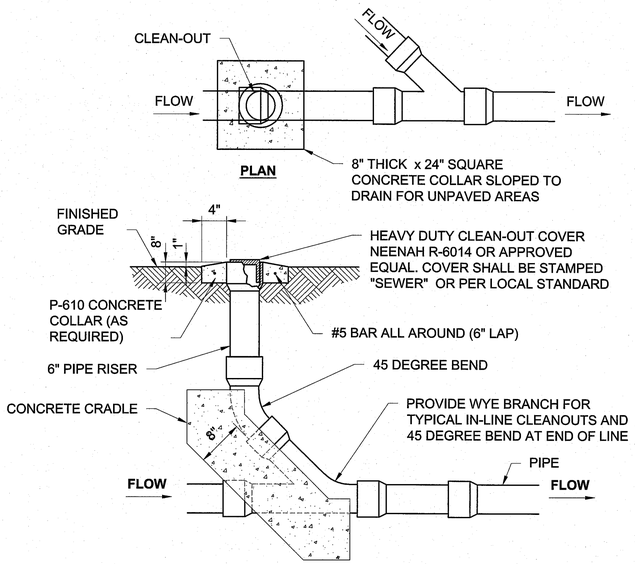
project	MoDOT #
81332	14-107B-2

drawing C401 – rev. 1

sheet of sheets

file 81332C401.DWG

Scale For Microfilming: Millimeters / Inches



NOTES:

1. CLEANOUTS SHALL BE DUCTILE IRON DESIGNED TO MEET HEAVY AIRCRAFT LOADINGS.
2. CLEANOUTS LOCATED IN PAVED AREAS SHALL BE INSTALLED FLUSH WITH FINAL GRADING.
3. CONCRETE COLLAR MAY BE LOWERED ON RISER ASSEMBLY TO ACCOMMODATE SPECIAL FINISH GRADE.
4. NO LOAD SHALL BE TRANSFERRED FROM FRAME AND COVER TO 6" PVC UNDERDRAIN STRUCTURE.
5. ALL CLEANOUT COVERS SHALL BE BOLT DOWN TYPE WITH A MINIMUM OF 2 BOLT FASTENER LOCATIONS PER LID AND MANUFACTURED BY THE FOUNDRY.

CLEANOUT OUTSIDE PAVEMENT LIMITS

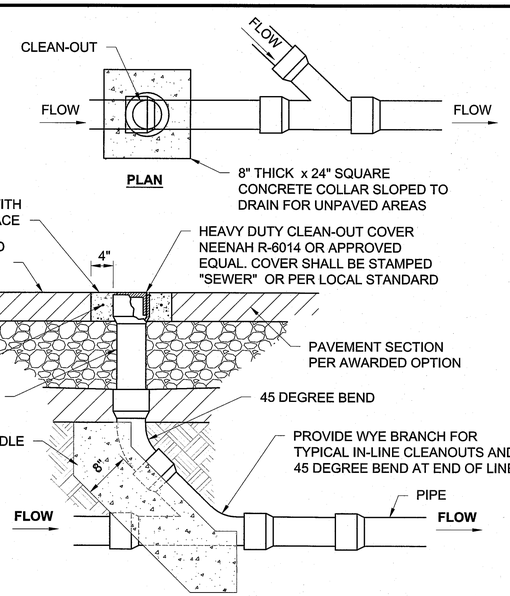
DETAIL NOT TO SCALE — 1 — C201, C202, C203

NOTES:

1. INLET SHALL BE DUCTILE IRON DESIGNED TO MEET HEAVY AIRCRAFT LOADINGS.
2. CONCRETE COLLAR MAY BE LOWERED ON RISER ASSEMBLY TO ACCOMMODATE SPECIAL FINISH GRADE.
3. NO LOAD SHALL BE TRANSFERRED FROM FRAME AND COVER TO 6" HDPE UNDERDRAIN STRUCTURE. (1)
4. ALL INLET COVERS SHALL BE BOLT DOWN TYPE WITH A MINIMUM OF 2 BOLT FASTENER LOCATIONS PER LID AND MANUFACTURED BY THE FOUNDRY.

INLET DETAIL

DETAIL NOT TO SCALE — 1 — C201, C202, C203



NOTES:

1. CLEANOUTS SHALL BE DUCTILE IRON DESIGNED TO MEET HEAVY AIRCRAFT LOADINGS.
2. CLEANOUTS LOCATED IN PAVED AREAS SHALL BE INSTALLED FLUSH WITH FINAL GRADING.
3. CONCRETE COLLAR MAY BE LOWERED ON RISER ASSEMBLY TO ACCOMMODATE SPECIAL FINISH GRADE.
4. NO LOAD SHALL BE TRANSFERRED FROM FRAME AND COVER TO 6" PVC UNDERDRAIN STRUCTURE.
5. ALL CLEANOUT COVERS SHALL BE BOLT DOWN TYPE WITH A MINIMUM OF 2 BOLT FASTENER LOCATIONS PER LID AND MANUFACTURED BY THE FOUNDRY.

CLEANOUT WITHIN PAVEMENT LIMITS

DETAIL NOT TO SCALE — 2 — C201, C202, C203

no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID
1	6/22/15	TJD	KTW	ADDENDUM NO. 1

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
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LICENSEE NO. 000165

date	detailed
6/22/2015	A. EWIGMAN
designed	checked
T. DOWSE	K. WACHIRA

MIDWEST NATIONAL AIR CENTER
13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

UTILITY DETAILS
SHEET 2 0F 2

project	MoDOT #
81332	14-107B-2

drawing **C506** — rev. **0**

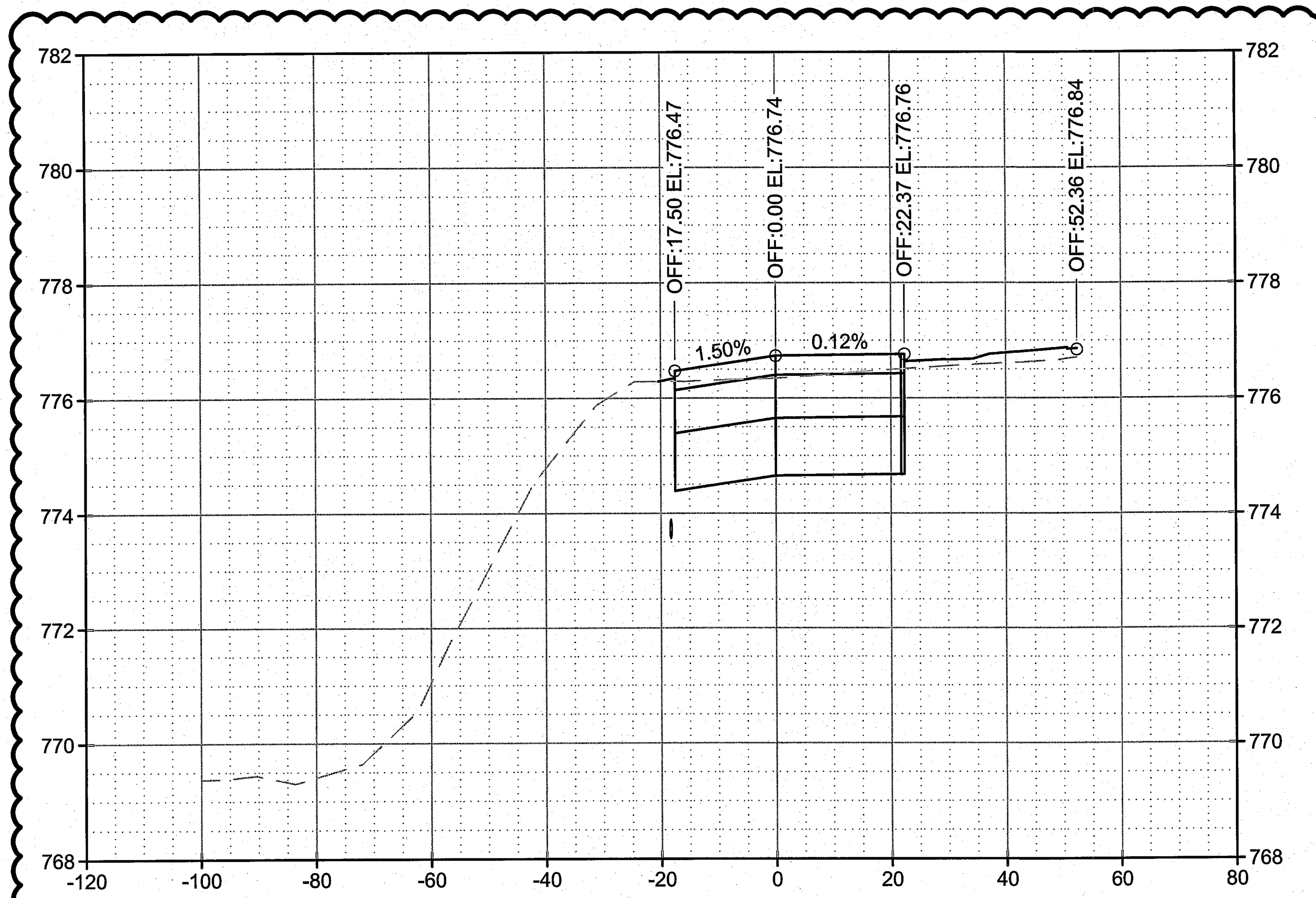
sheet of sheets

file 81332C501.DWG

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

Millimeters
Inches
Scale For Microfilming

no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID
1	6/22/15	TJD	KTW	ADDENDUM NO. 1



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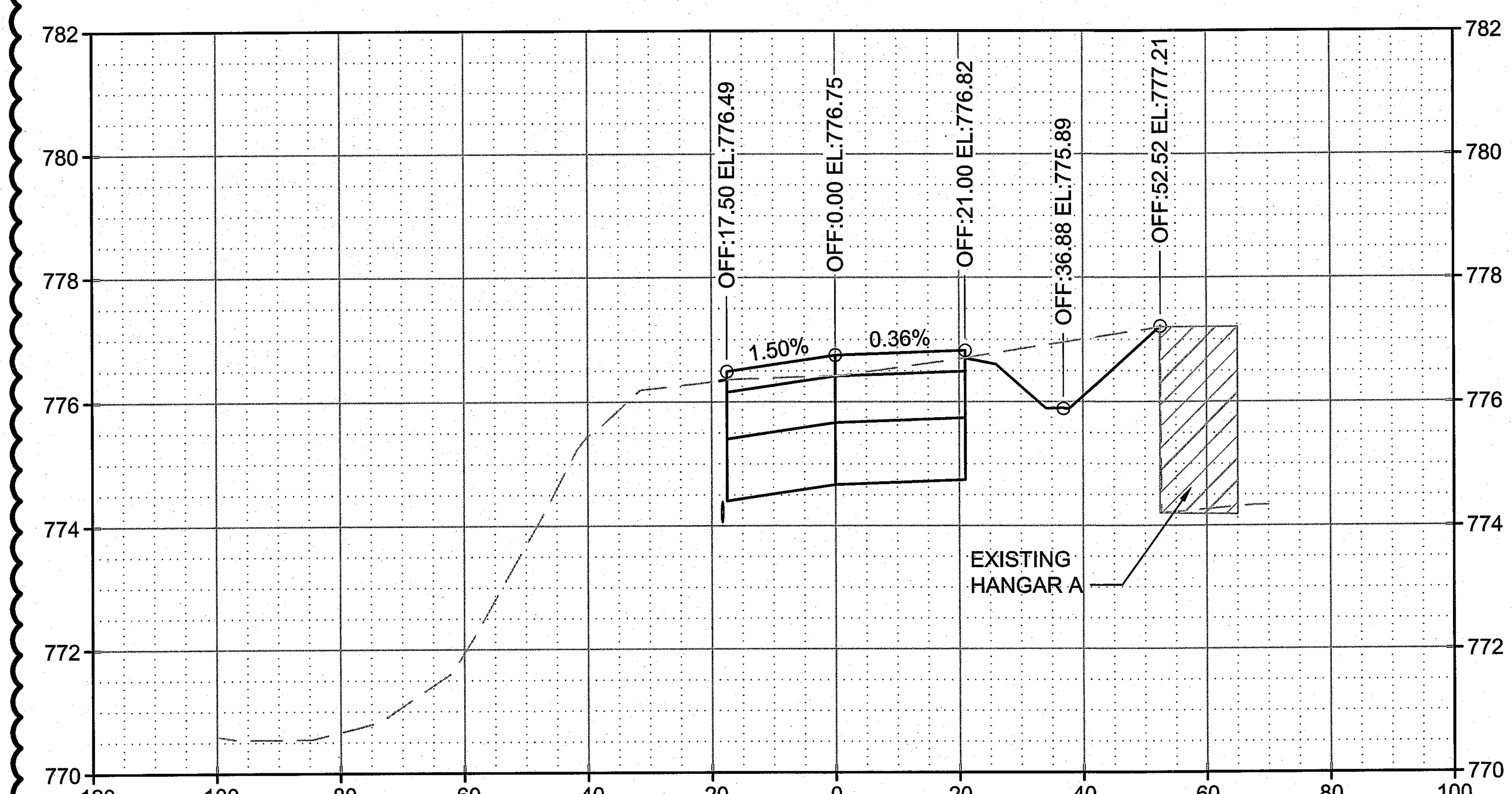

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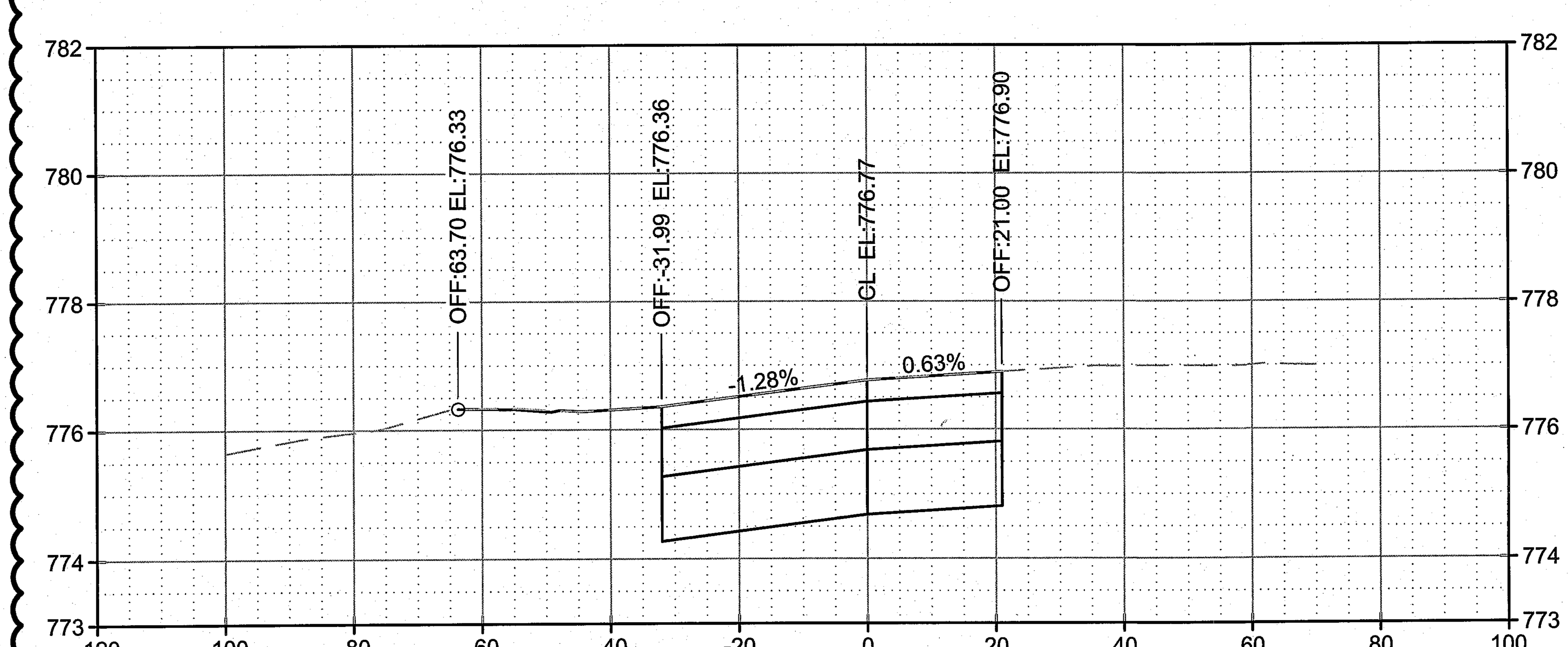

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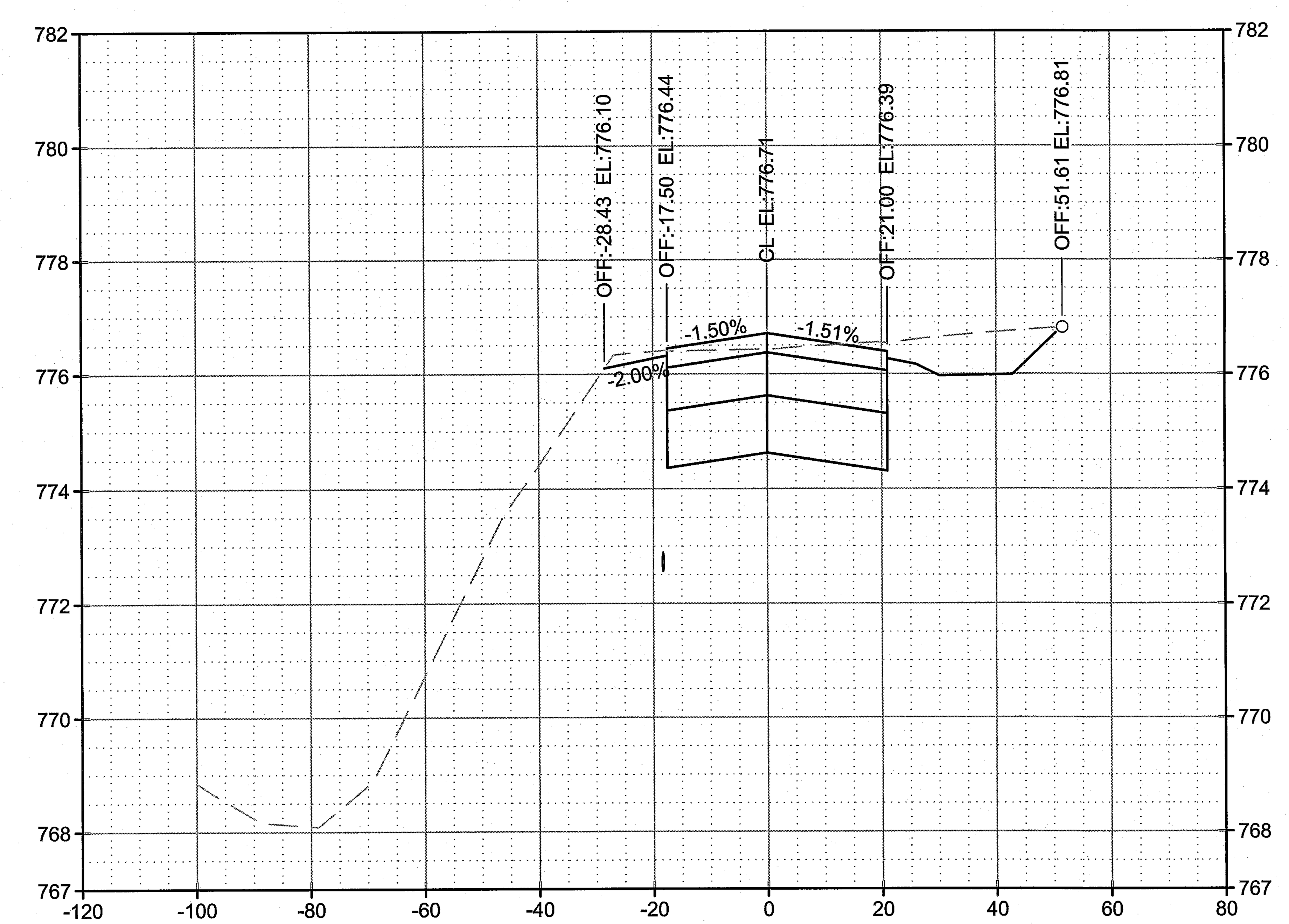

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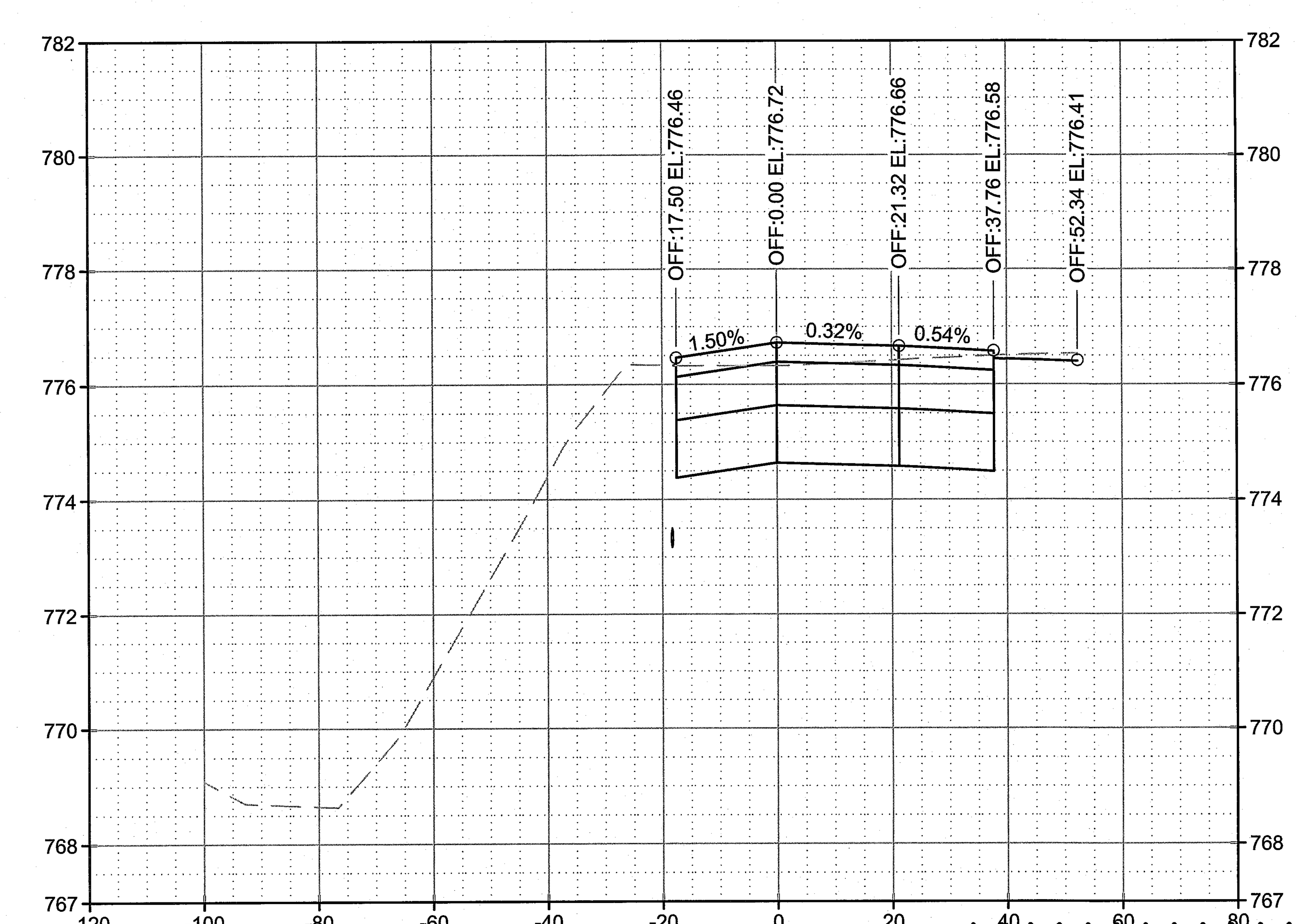


101+39.27

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

STATE OF MISSOURI — JOSEPH M. MOSES, JR. — NUMBER E-27476 — REGISTERED PROFESSIONAL ENGINEER — 6-22-15

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. 000165

date	detailed
6/22/2015	A. EWIGMAN
designed	checked
T. DOWSE	K. WACHIRA

MIDWEST NATIONAL AIR CENTER
13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

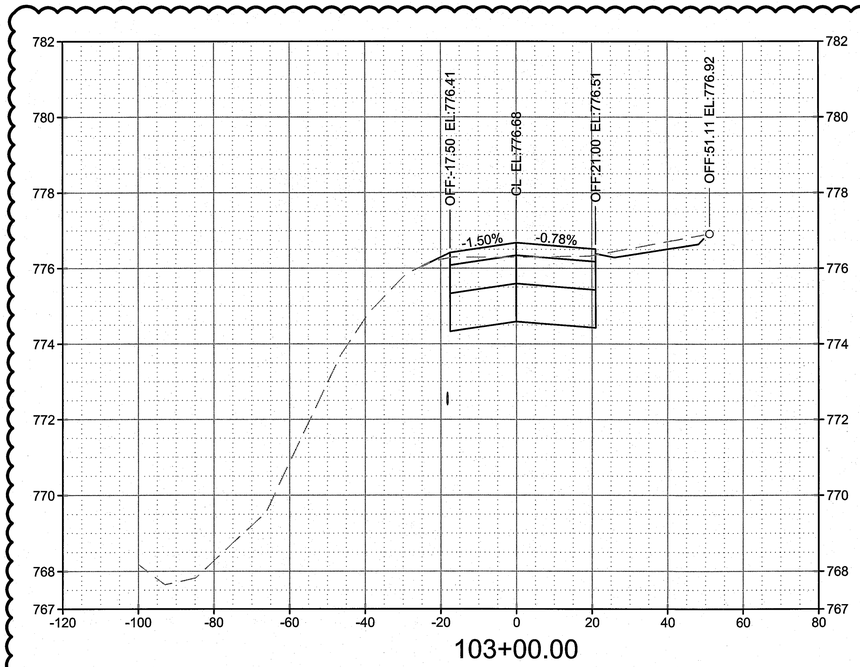
TAXILANE E CROSS SECTIONS
SHEET 1 OF 3

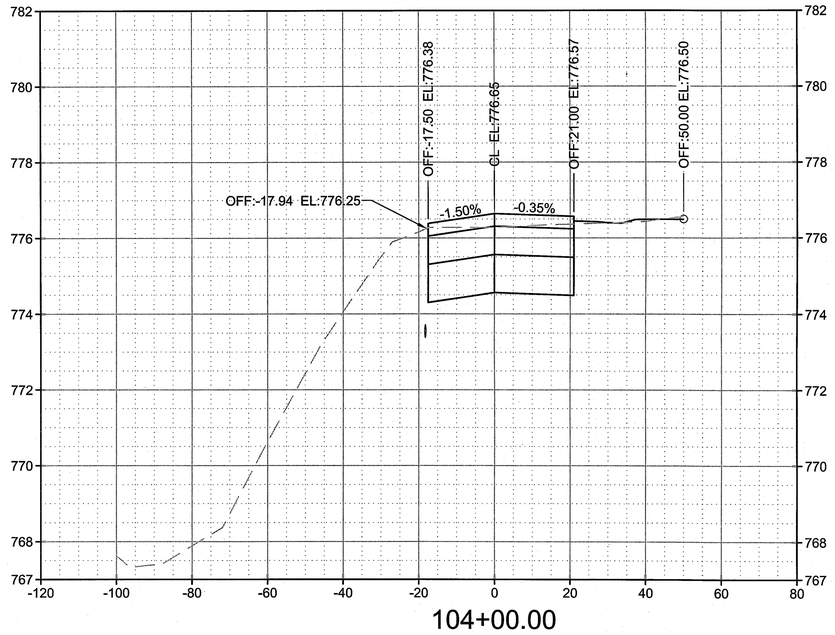
project	MoDOT #
81332	14-107B-2

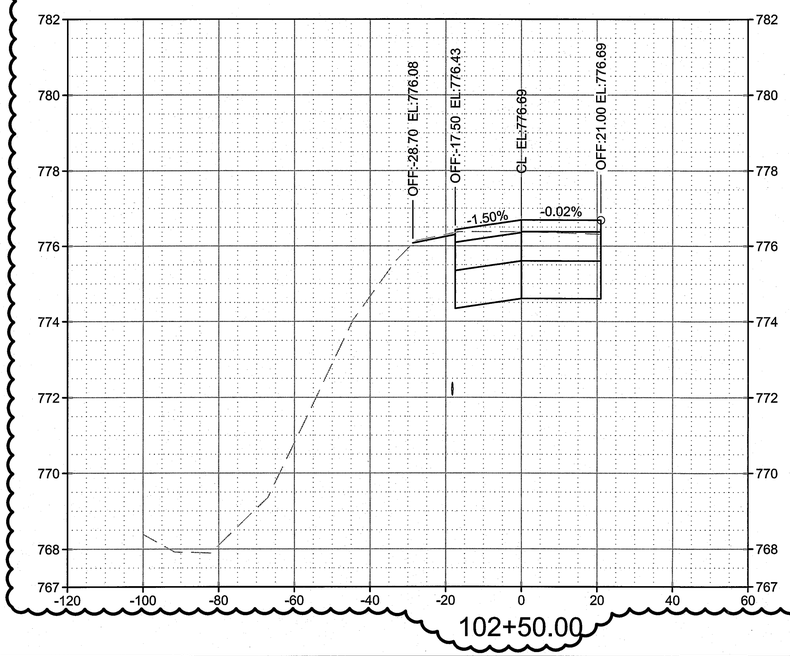
drawing: **C601** – rev. **0**

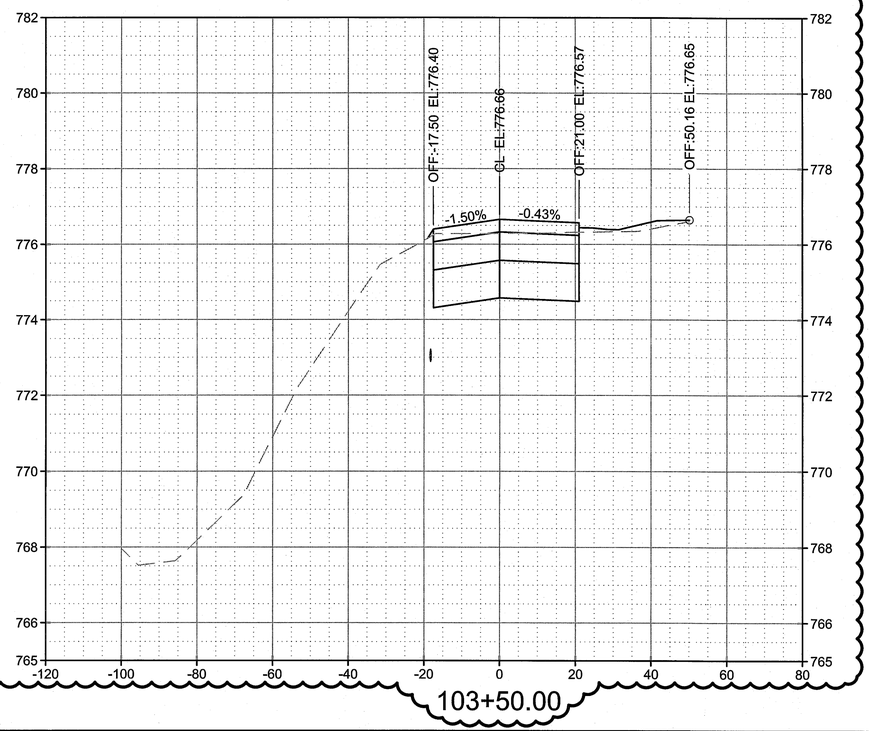
sheet of sheets

file 81332C601.DWG









no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID
1	6/22/15	TJD	KTW	ADDENDUM NO. 1

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13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

TAXILANE E CROSS SECTIONS
SHEET 2 OF 3

project	MoDOT #
81332	14-107B-2

drawing **C602** – rev. **0**

sheet of sheets

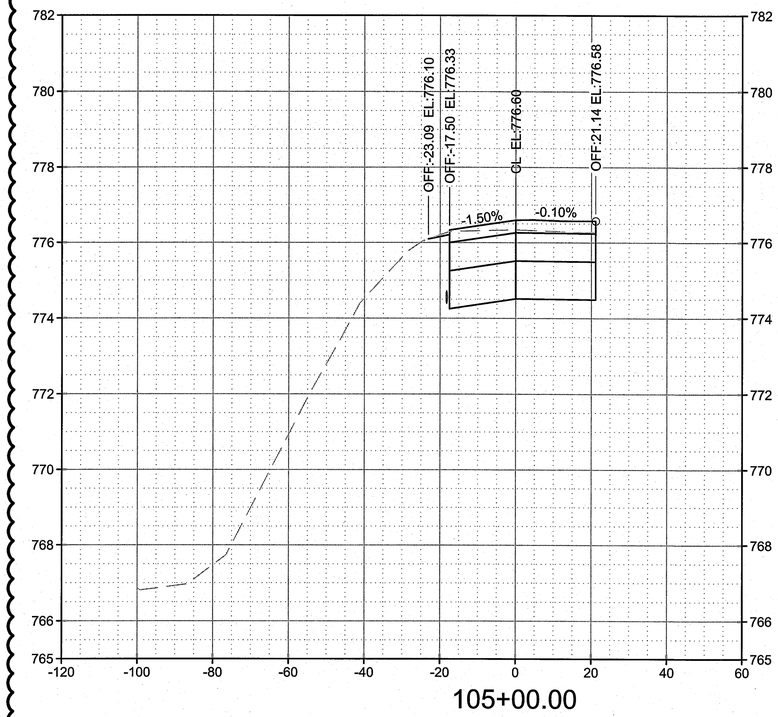
file 81332C601.DWG

STATE OF MISSOURI — JOSEPH M. MOSES, JR. — NOTARIAL SEAL — E-027476 — REGISTERED PROFESSIONAL ENGINEER — 6-22-15

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

Millimeters
Inches
Scale For Microfilming

ENTS\ANF\CLAYCOMO\GPH\81332_ARPTTAXILANES\DESIGN\CIVIL\SHEETS\81332C601.DWG 6/22/2015 12:34 PM SMLUEHRS



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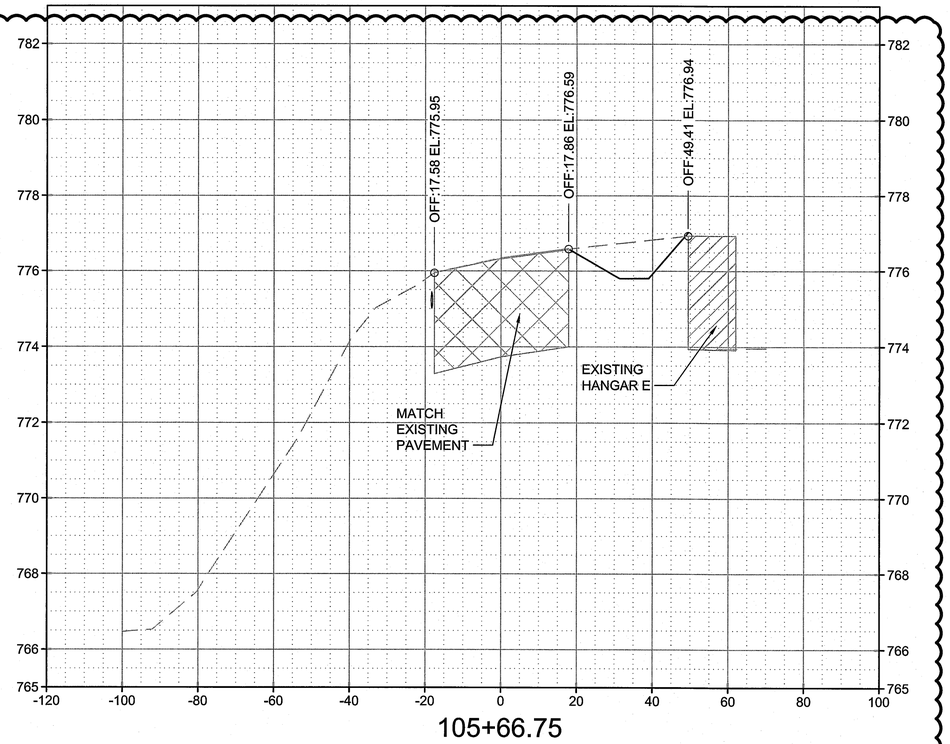

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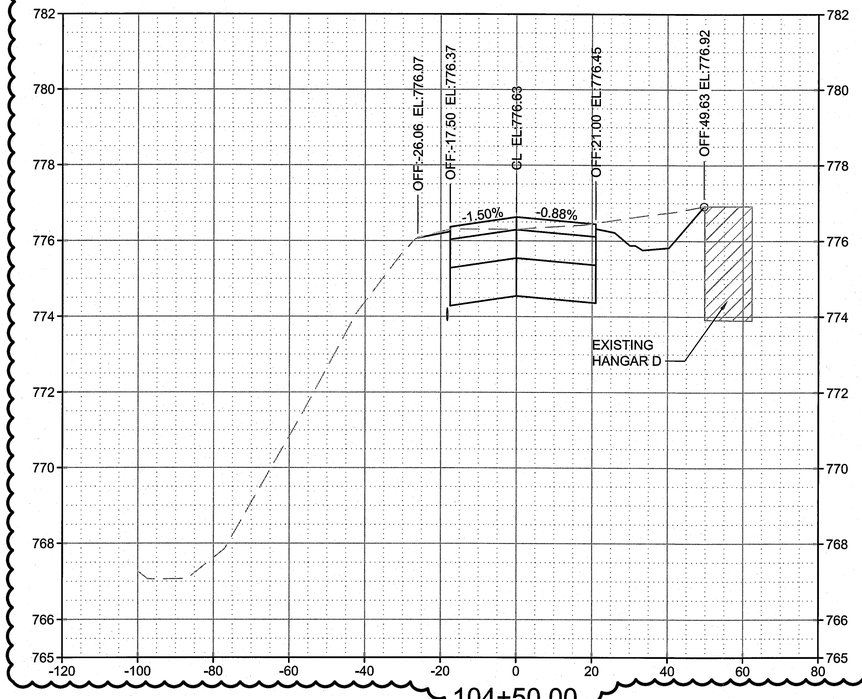

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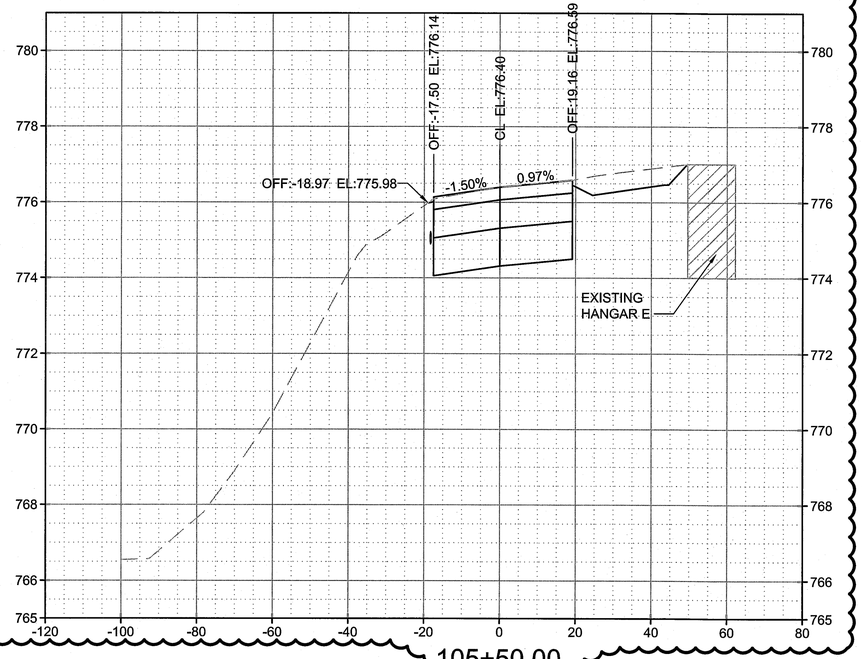

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no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID
1	6/22/15	TJD	KTW	ADDENDUM NO. 1

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. 000165

date	detailed
6/22/2015	A. EWIGMAN
designed	checked
T. DOWSE	K. WACHIRA

MIDWEST NATIONAL AIR CENTER
13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

TAXILANE E CROSS SECTIONS
SHEET 3 OF 3

project	MoDOT #
81332	14-107B-2

drawing **C603** — rev. **0**

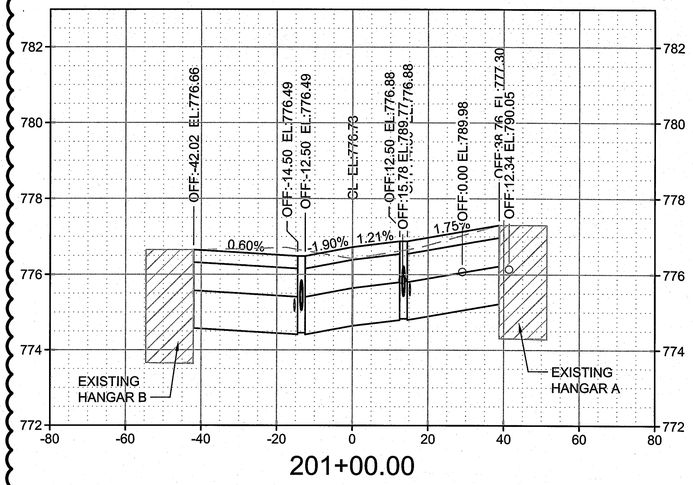
sheet of sheets

file 81332C601.DWG

STATE OF MISSOURI
JOSEPH M. MOSES, JR.
NOTARY PUBLIC
E-27476
REGISTERED PROFESSIONAL ENGINEER
6-22-15

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

Millimeters
Inches
Scale For Microfilming



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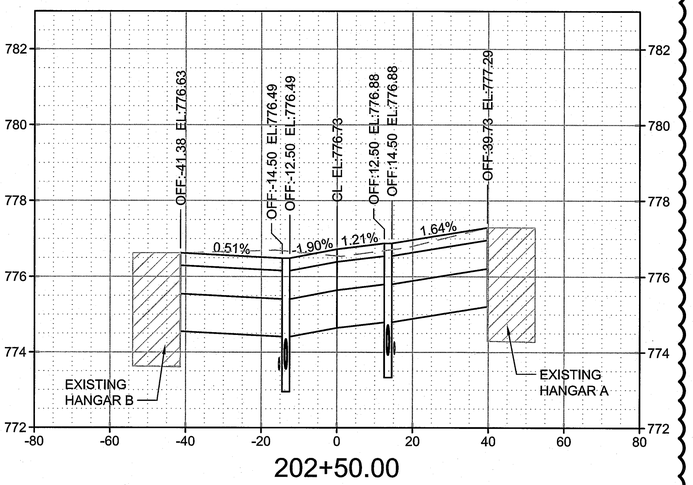

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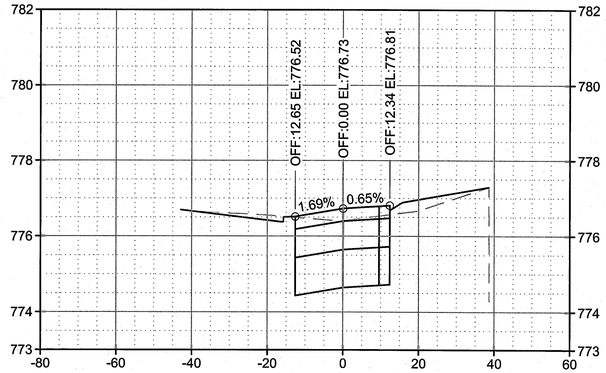

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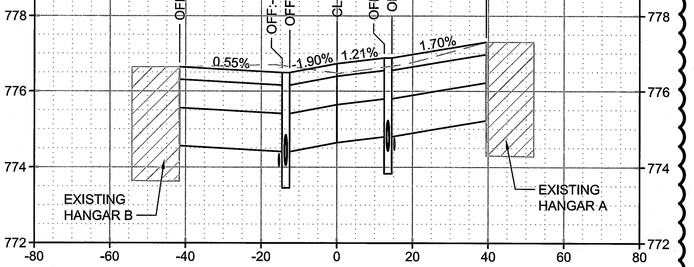

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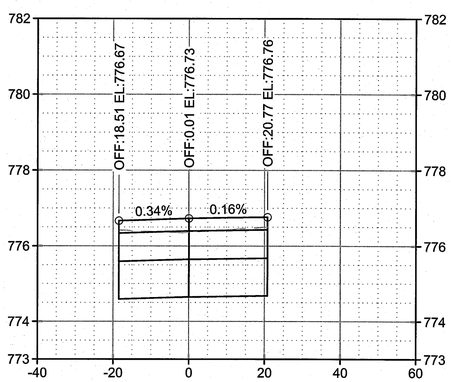

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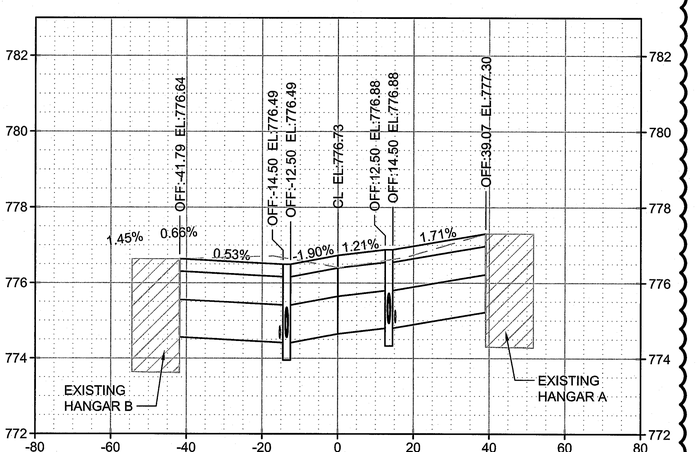

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no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID
1	6/22/15	TJD	KTW	ADDENDUM NO. 1

BURNS McDONNELL
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date	detailed
6/22/2015	A. EWIGMAN
designed	checked
T. DOWSE	K. WACHIRA

MIDWEST NATIONAL AIR CENTER
13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

TAXILANE A CROSS SECTIONS
SHEET 1 OF 2

project	MoDOT #
81332	14-107B-2

drawing **C604** rev. **1**

sheet of sheets

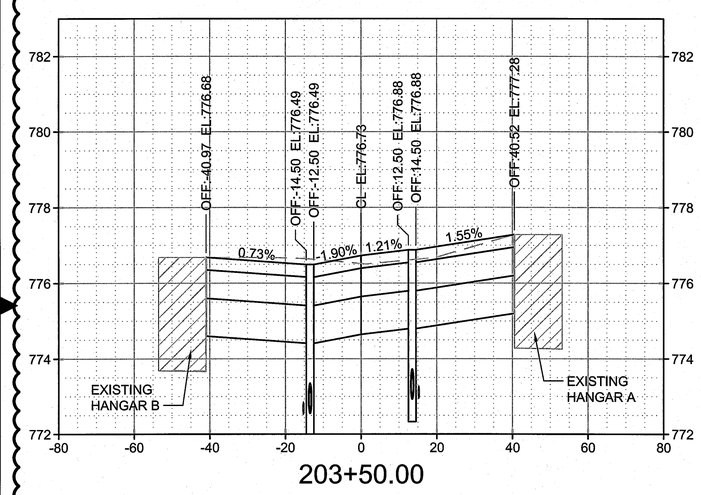
file 81332C601.DWG

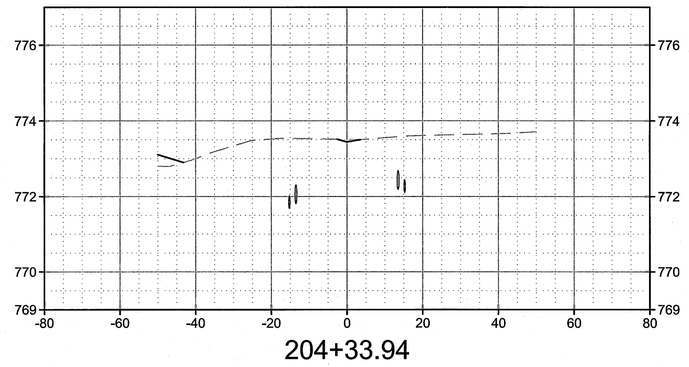
STATE OF MISSOURI
JOSEPH M. MOSES, JR.
NUMBER E-27476
REGISTERED PROFESSIONAL ENGINEER
6-22-15

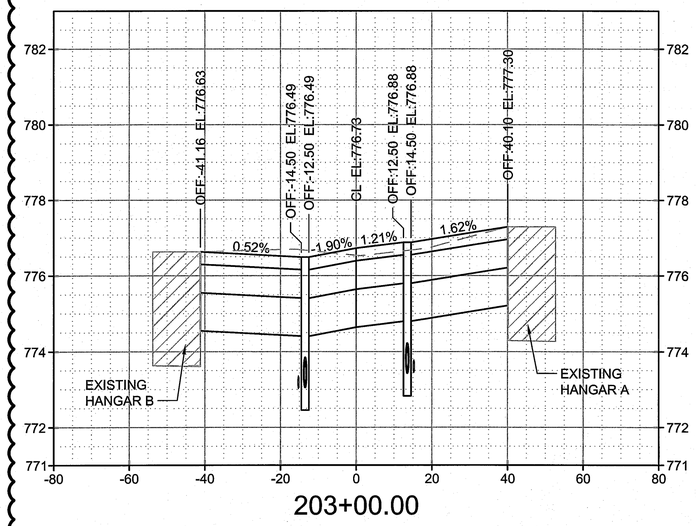
JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

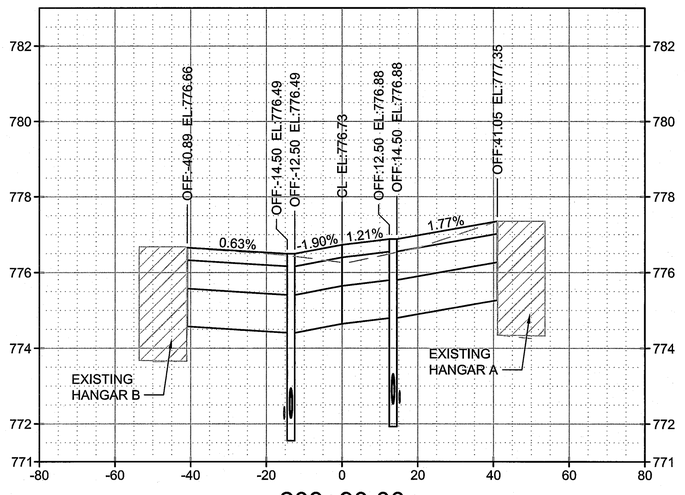
Scale For Microfilming
Inches
Millimeters

no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID
1	6/22/15	TJD	KTW	ADDENDUM NO. 1









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LICENSEE NO. 000165

date	detailed
6/22/2015	A. EWIGMAN
designed	checked
T. DOWSE	K. WACHIRA

MIDWEST NATIONAL AIR CENTER
13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

TAXILANE A CROSS SECTIONS
SHEET 2 OF 2

project	MoDOT #
81332	14-107B-2

drawing **C605** — rev. **0**

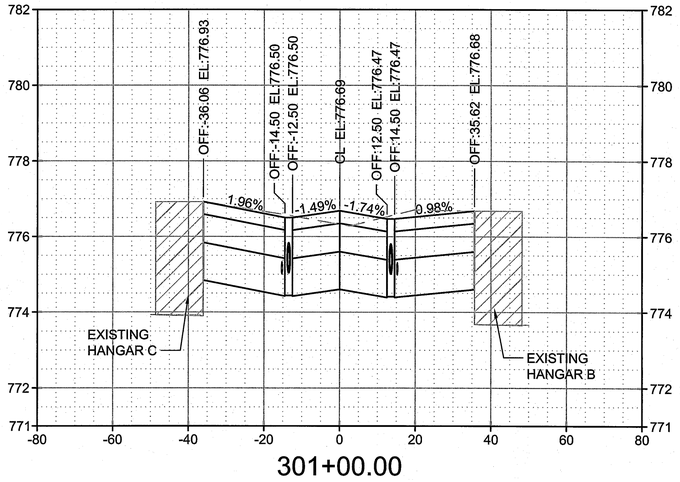
sheet of sheets

file 81332C601.DWG

STATE OF MISSOURI — JOSEPH H. MOSES JR. — NUMBER E-27476 — REGISTERED PROFESSIONAL ENGINEER

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

Scale For Microfilming: Millimeters / Inches



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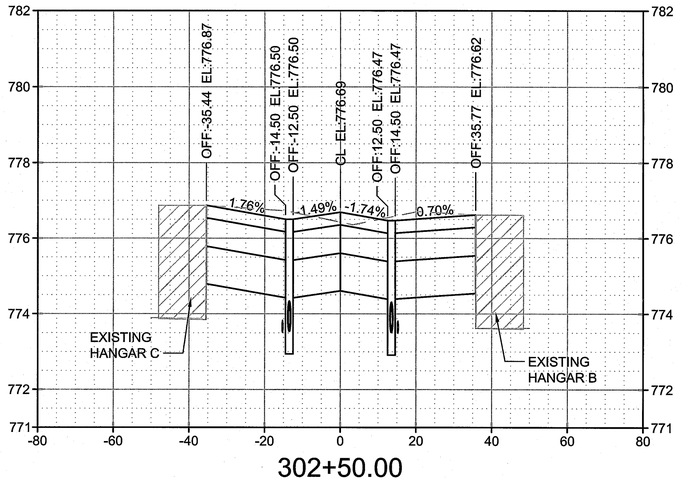

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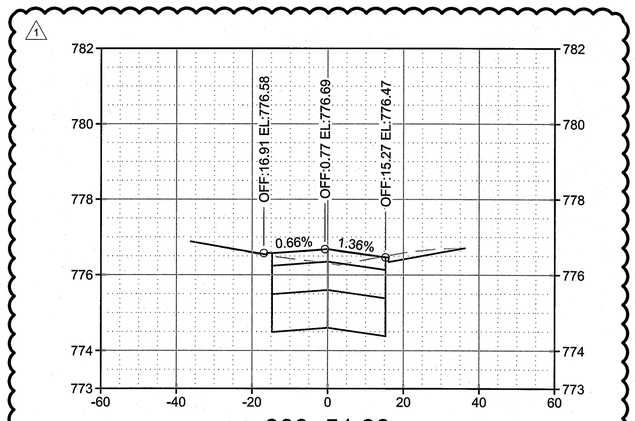

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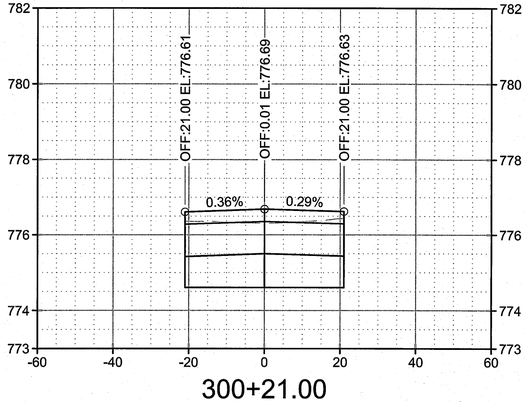

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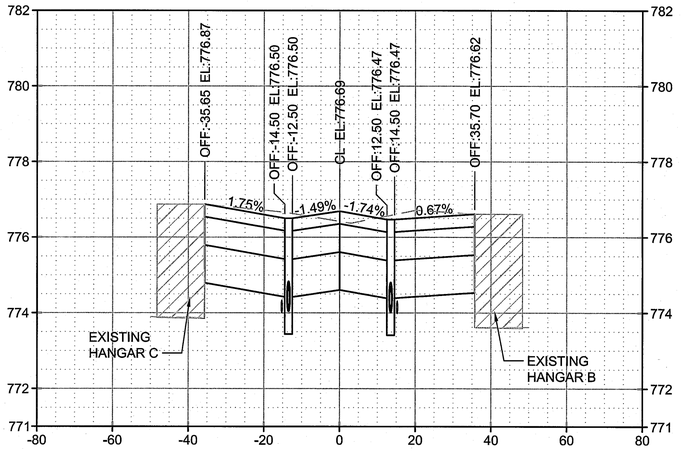

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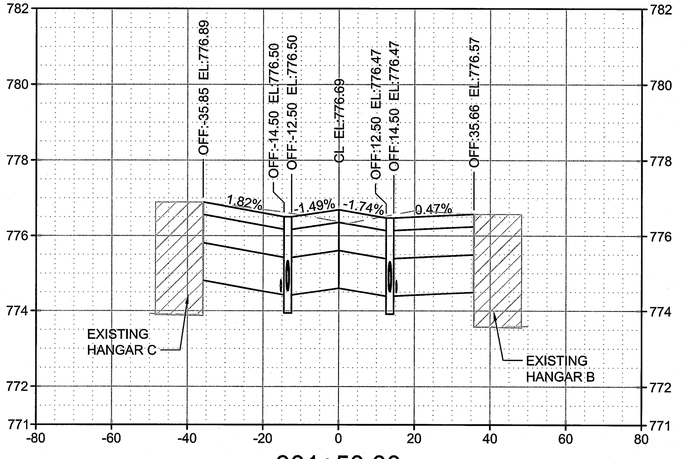

301+50.00

no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID
1	6/22/15	TJD	KTW	ADDENDUM NO. 1

BURNS McDONNELL
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816-333-9400
LICENSEE NO. 000165

date	detailed
6/22/2015	A. EWIGMAN
designed	checked
T. DOWSE	K. WACHIRA

MIDWEST NATIONAL AIR CENTER
13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

TAXILANE B CROSS SECTIONS
SHEET 1 OF 2

project	MoDOT #
81332	14-107B-2

drawing **C606** rev. **0**

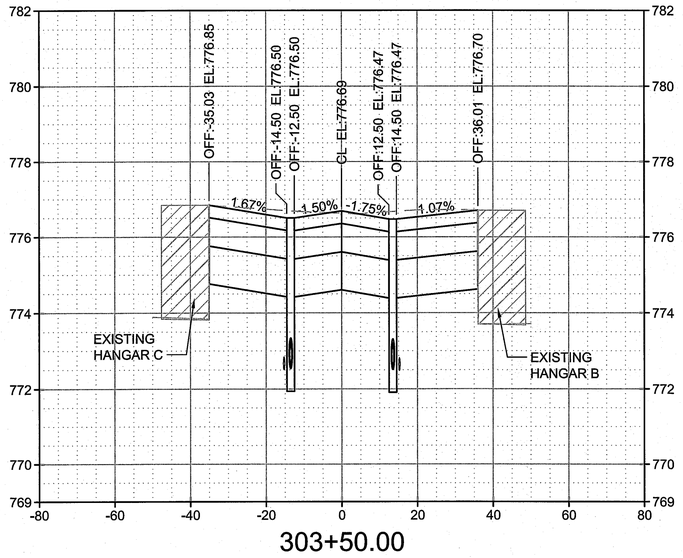
sheet of sheets

file 81332C601.DWG

STATE OF MISSOURI — JOSEPH M. MOSES, JR. — NUMBER E-27476 — REGISTERED PROFESSIONAL ENGINEER — 6-22-15

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

Millimeters / Inches — Scale For Microfilming



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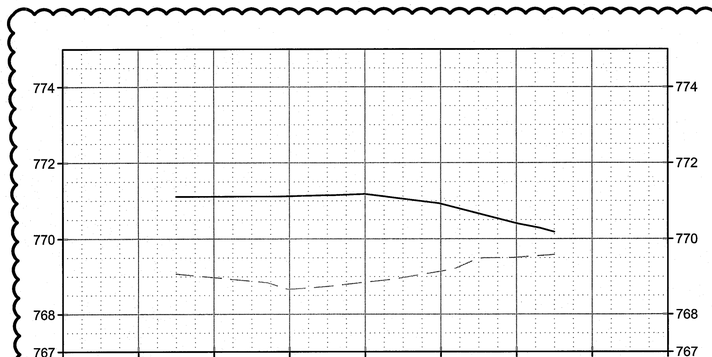

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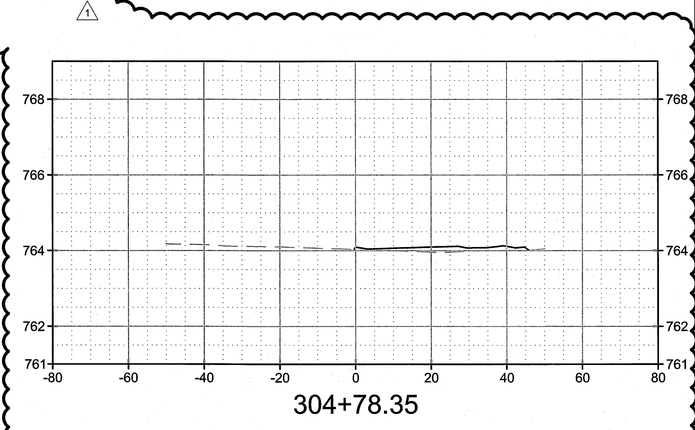

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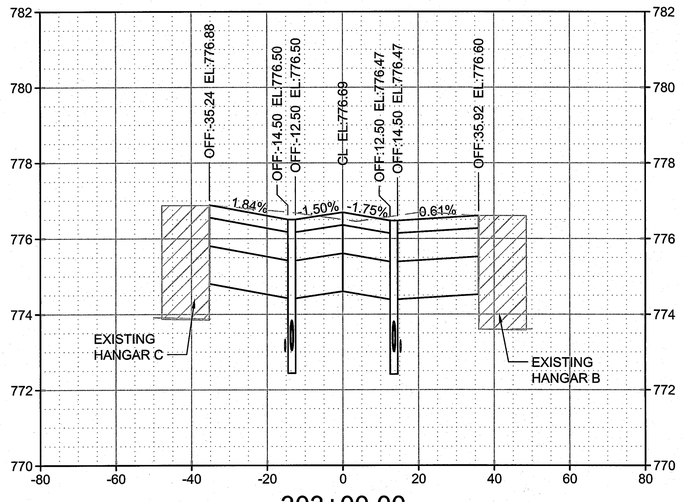

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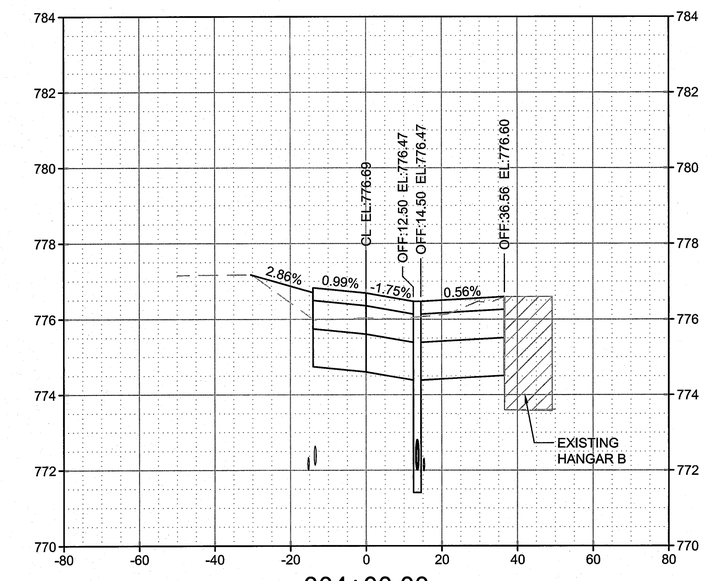


304+00.00

no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID
1	6/22/15	TJD	KTW	ADDENDUM NO. 1

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. 000165

date	detailed
6/22/2015	A. EWIGMAN
designed	checked
T. DOWSE	K. WACHIRA

MIDWEST NATIONAL AIR CENTER
13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

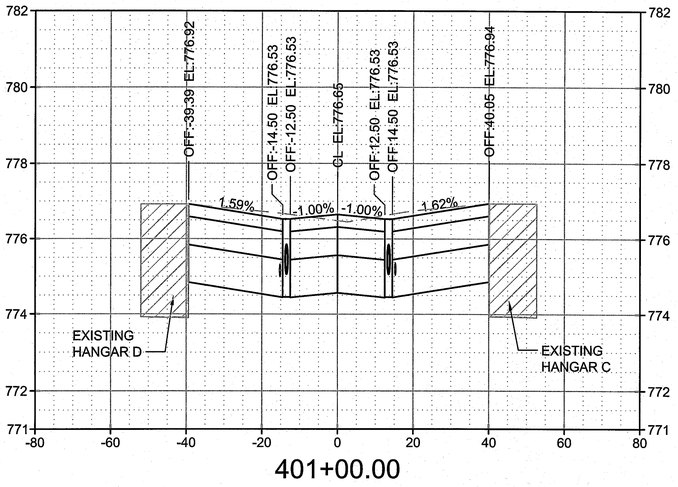
TAXILANE B CROSS SECTIONS
SHEET 2 OF 2

project	MoDOT #
81332	14-107B-2

drawing C607 – rev. 0

sheet of sheets

file 81332C601.DWG



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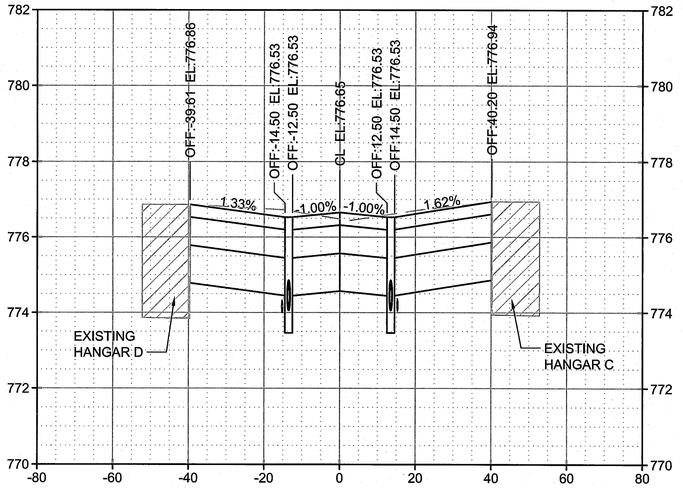

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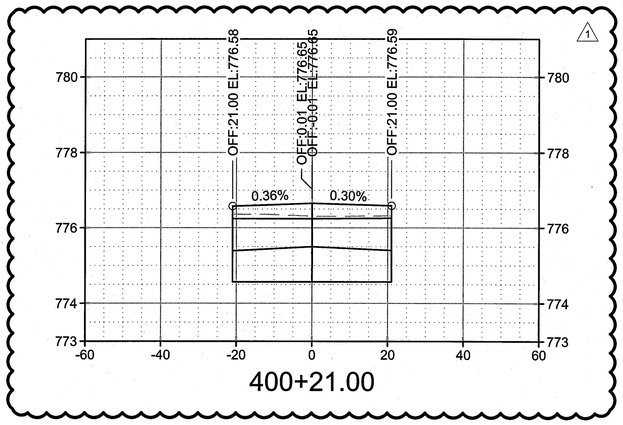

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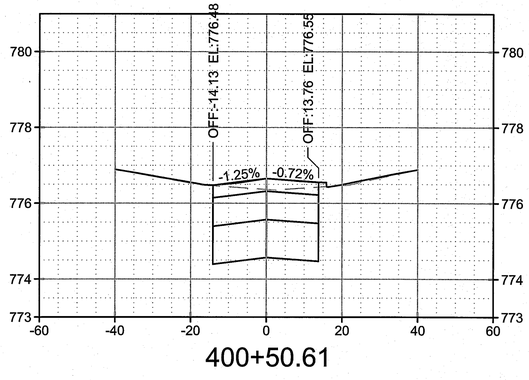

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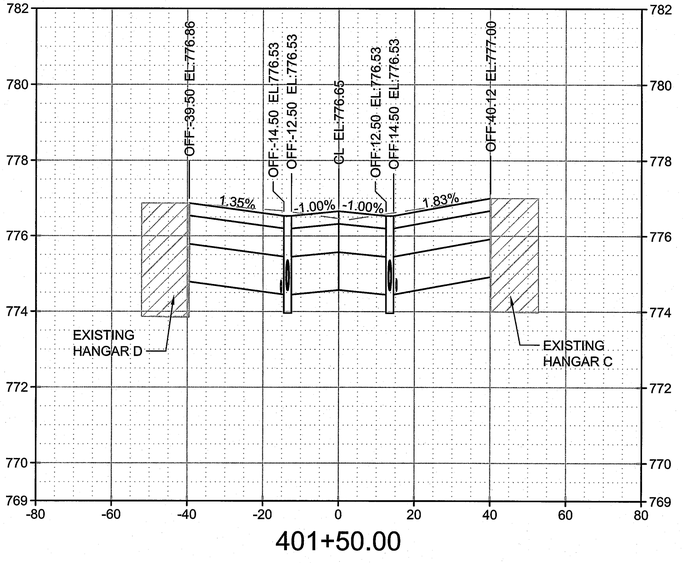


401+50.00

no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID
1	6/22/15	TJD	KTW	ADDENDUM NO. 1

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. 000165

date	detailed
6/22/2015	A. EWIGMAN
designed	checked
T. DOWSE	K. WACHIRA

MIDWEST NATIONAL AIR CENTER
13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

TAXILANE C CROSS SECTIONS
SHEET 1 OF 2

project	MoDOT #
81332	14-107B-2

drawing C608 – rev. 0

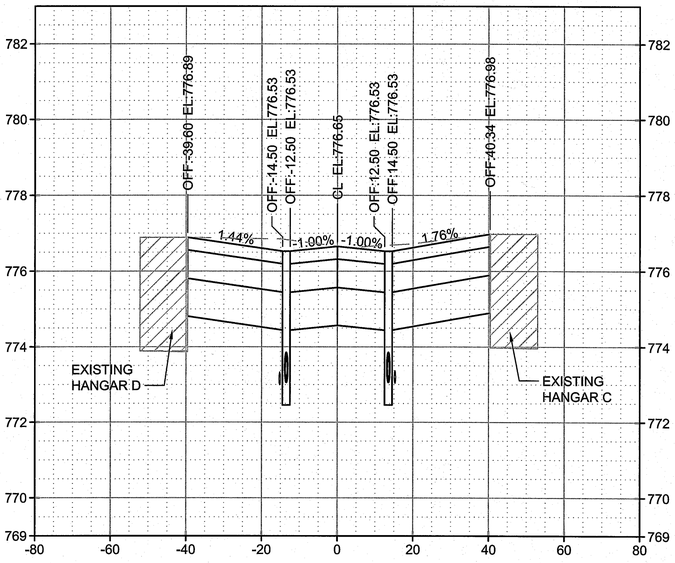
sheet of sheets

file 81332C601.DWG

STATE OF MISSOURI
JOSEPH M. MOSES, JR.
NUMBER E-27476
REGISTERED PROFESSIONAL ENGINEER
6-22-15

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

Scale For Microfilming
Millimeters
Inches



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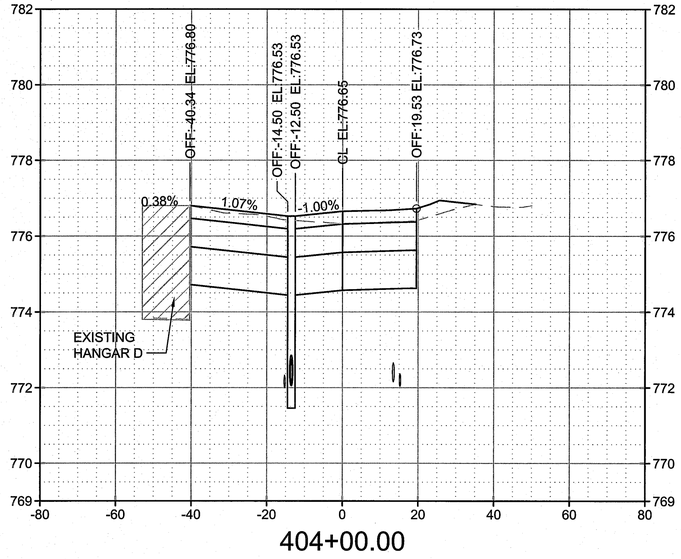

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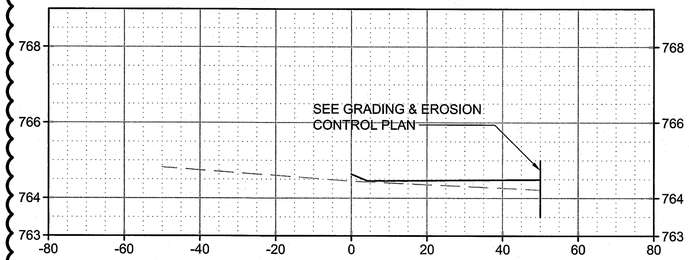

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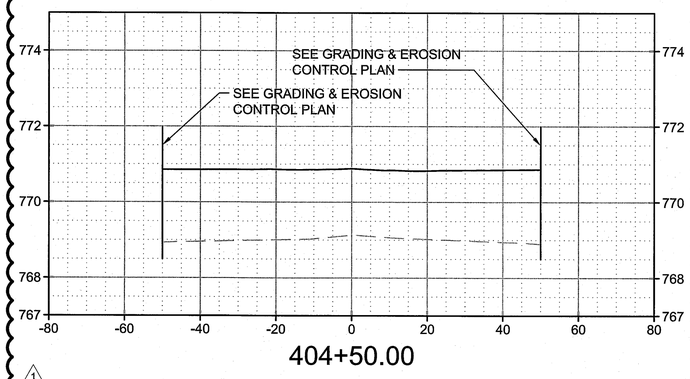

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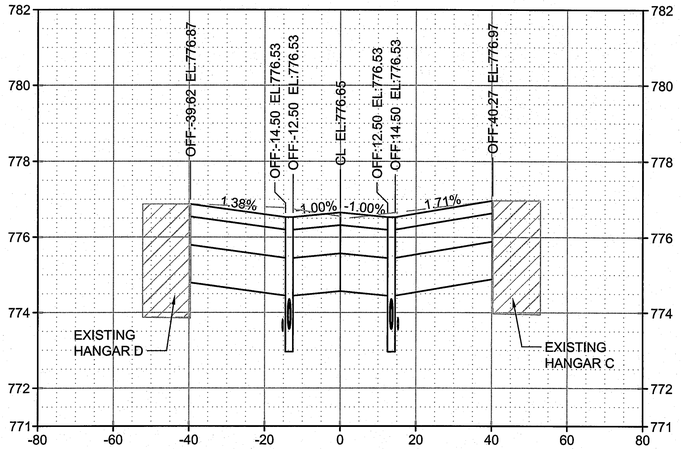

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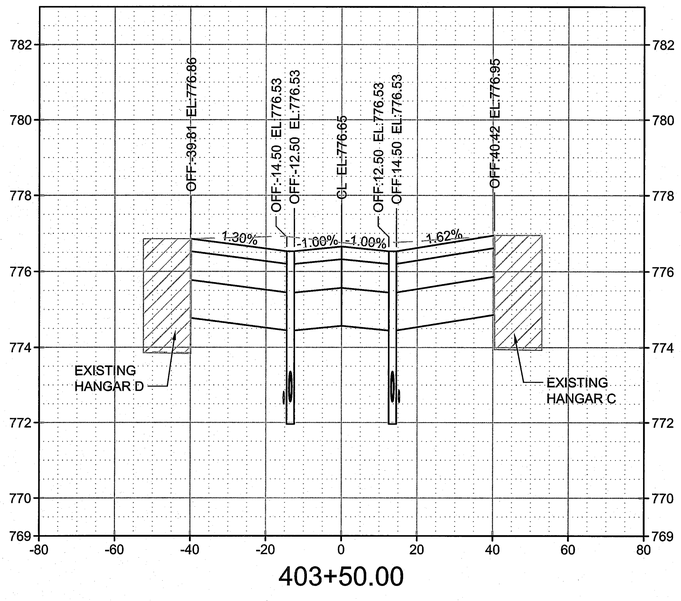

403+50.00

no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID
1	6/22/15	TJD	KTW	ADDENDUM NO. 1

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
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LICENSEE NO. 000165

date	detailed
6/22/2015	A. EWIGMAN
designed	checked
T. DOWSE	K. WACHIRA

MIDWEST NATIONAL AIR CENTER
13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

TAXILANE C CROSS SECTIONS
SHEET 2 OF 2

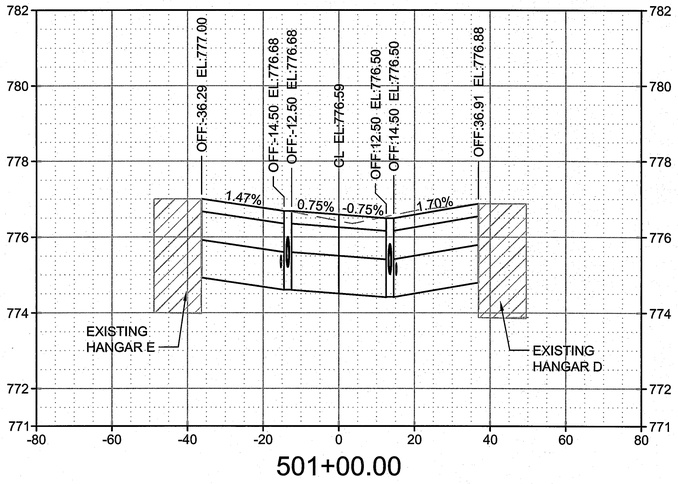
project	MoDOT #
81332	14-107B-2

drawing C609 – rev. 0

sheet of sheets

file 81332C601.DWG

Millimeters
Inches
Scale For Microfilming



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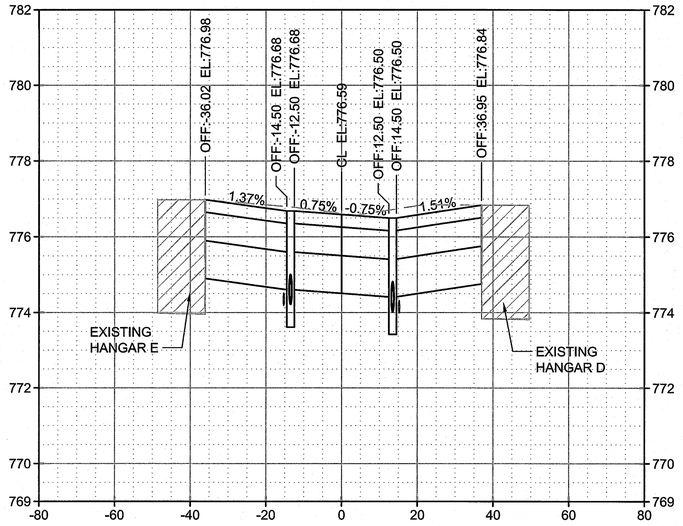

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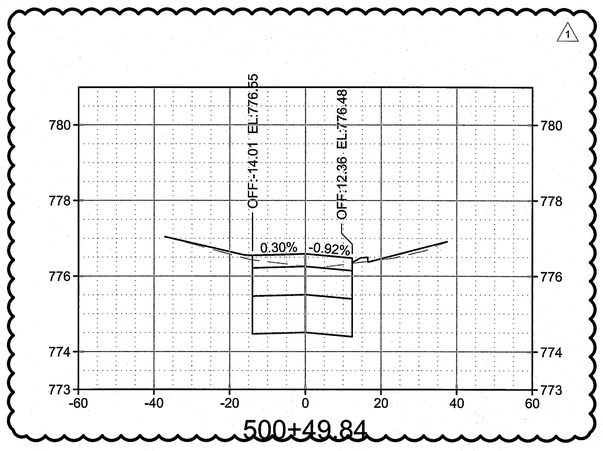

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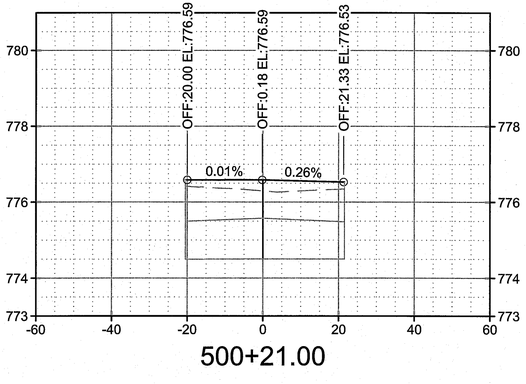

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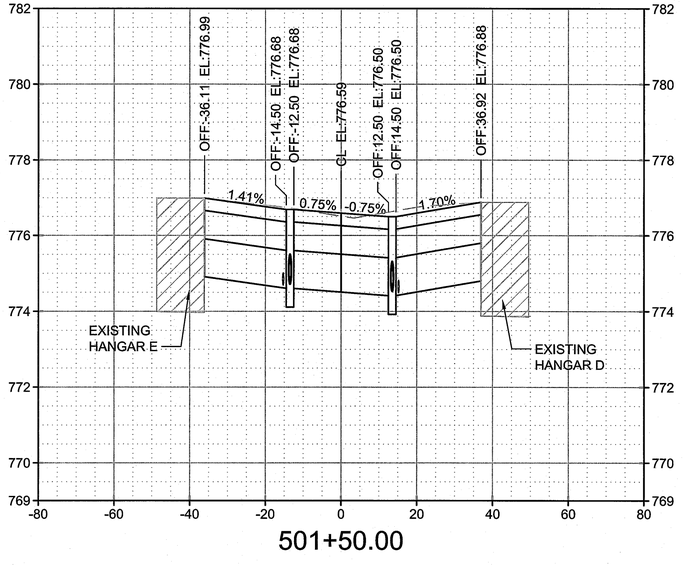

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1	6/22/15	TJD	KTW	ADDENDUM NO. 1

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MIDWEST NATIONAL AIR CENTER
13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

TAXILANE D CROSS SECTIONS
SHEET 1 OF 2

project	MoDOT #
81332	14-107B-2

drawing **C610** rev. **0**

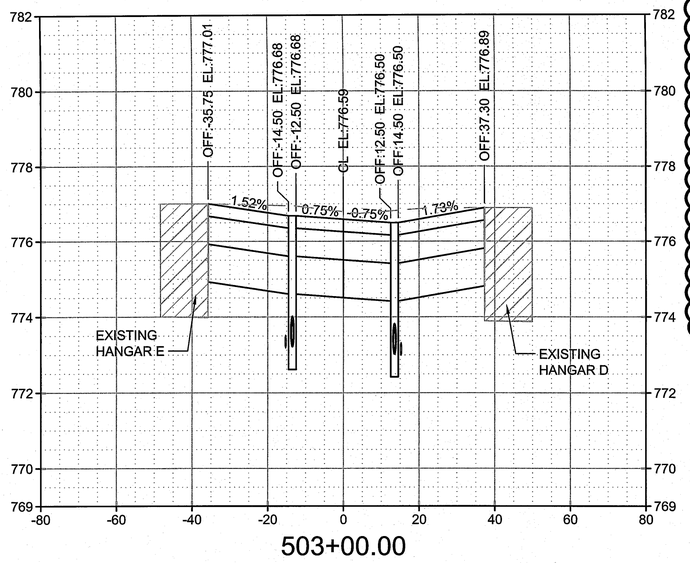
sheet of sheets

file 81332C601.DWG

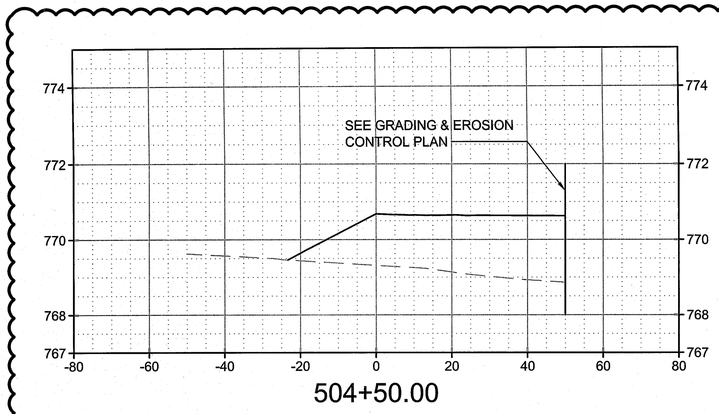
STATE OF MISSOURI
JOSEPH M. MOSES JR.
NUMBER E-27476
REGISTERED PROFESSIONAL ENGINEER
6-22-15

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

Millimeters
Scale For Microfilming
Inches



503+00.00



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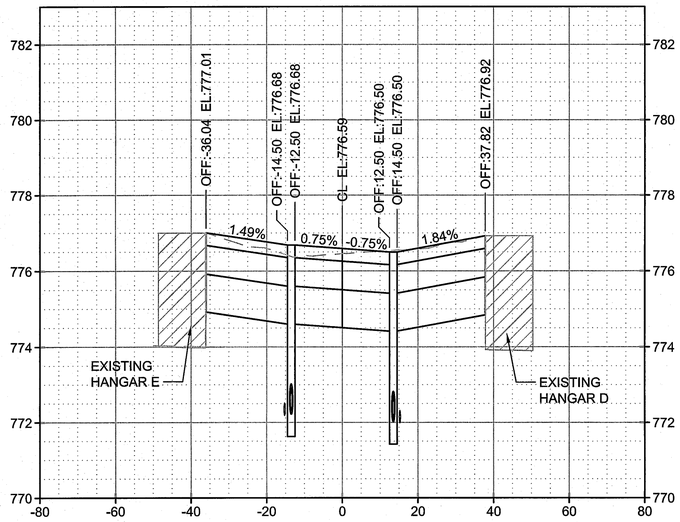

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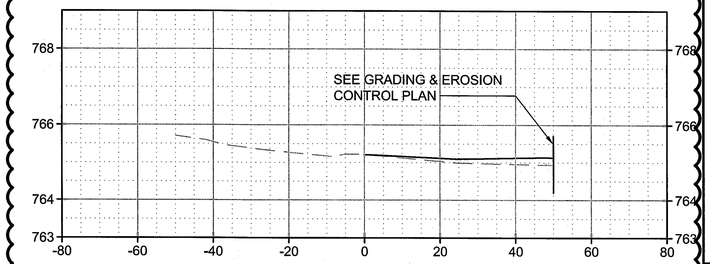

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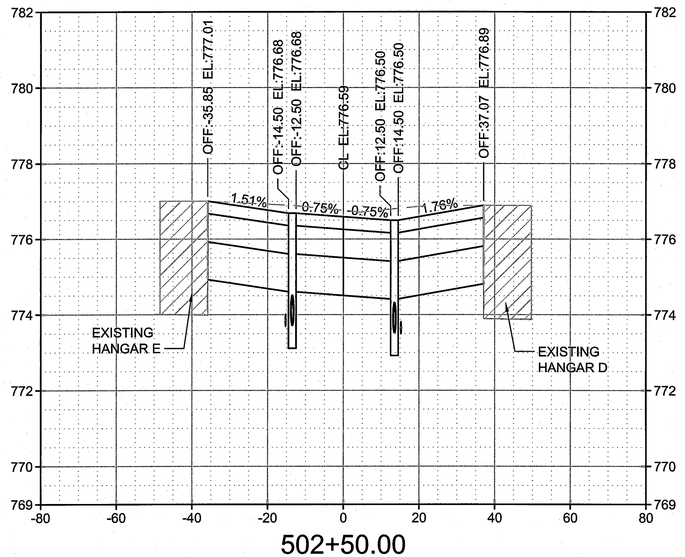

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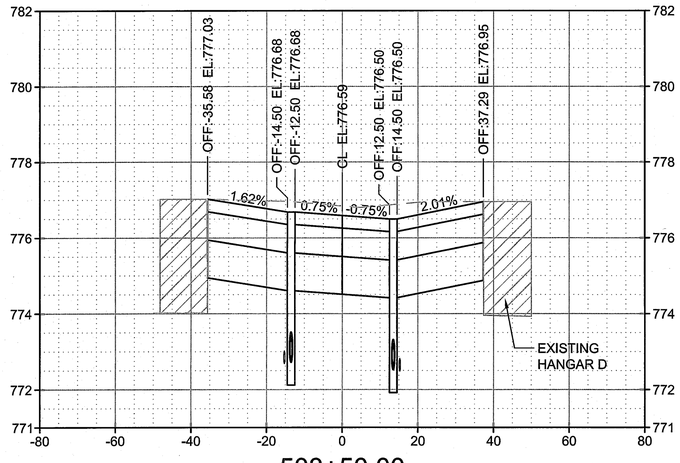

503+50.00

no.	date	by	ckd	description
0	6/12/15	TJD	KTW	ISSUED FOR BID
1	6/22/15	TJD	KTW	ADDENDUM NO. 1

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. 000165

date	detailed
6/22/2015	A. EWIGMAN
designed	checked
T. DOWSE	K. WACHIRA

MIDWEST NATIONAL AIR CENTER
13106 RHODUS RD
EXCELSIOR SPRINGS, MO 64024

RECONSTRUCT T-HANGAR TAXILANES

TAXILANE D CROSS SECTIONS
SHEET 2 OF 2

project	MoDOT #
81332	14-107B-2

drawing C611 — rev. 0

sheet of sheets

file 81332C601.DWG

STATE OF MISSOURI — JOSEPH M. MOSES — NUMBER E-27476 — REGISTERED PROFESSIONAL ENGINEER — 6-22-15

JOSEPH MOSES
PROFESSIONAL ENGINEER
PE# E-027476

Millimeters
Inches
Scale For Microfilming