Springfield-Branson
NATIONAL AIRPORT

CITY OF SPRINGFIELD, MISSOURI

ADDENDUM NO. 1

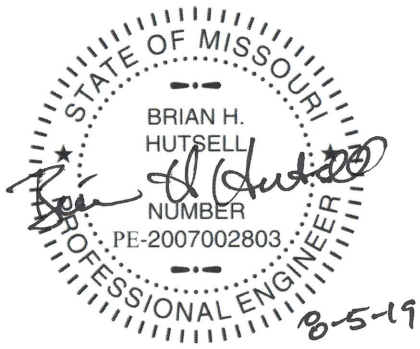
for

State Project No. AIR 196-092A-1

GENERAL AVIATION RAMP EXTENSION

AUGUST 5, 2019

Prepared By:



CMT

Crawford, Murphy & Tilly
Consulting Engineers
St. Louis, Missouri

19032002.00

ADDENDUM NO. 1
GENERAL AVIATION RAMP EXTENSION

This addendum is herewith a part of the Contract Documents of the above issued project, and is issued to amend and supplement the July 18, 2019 construction plan drawings, proposal, contract documents and specifications.

The **CONTRACT DOCUMENTS** are revised as follows:

SECTION 1 – NOTICE TO BIDDERS:
INSERT: Contract Work Items

"11A TEMPORARY 10' CHAIN-LINK FENCE CONSTRUCTION ENTRY GATE, WITH 3 STRANDS OF BARBED WIRE (INCLUDES REMOVAL) 1 Each"

"17A 15" CLASS IV REINFORCED CONCRETE PIPE 178 linear feet"

PROPOSAL FORMS – PROPOSAL FORM:
REPLACE: The existing proposal form with the new proposal form attached to this addendum.
CLARIFICATION: New items for pipe stubs and construction gate added to the proposal form.

ITEM MO-152 EXCAVATION AND EMBANKMENT
REVISE: Section 152-1.1
ADD: A second paragraph reading:

"All excess earthwork and unsuitable soils, less topsoil stockpiled and used on site as required per MO-905, or topsoil desired by the Airport, shall be disposed of off-site at the Contractor's expense."

ITEM MO-162 CHAIN LINK FENCING
REVISE: Section 162-5.1, first sentence – remove strike-through from "and barbed wire extensions"

REVISE: Section 162-5.1, fourth paragraph – add "Item MO-162-5.5 Temporary 10' Chain-Link Fence Construction Entry Gate, with 3 Strands of Barbed Wire (Includes Removal) – per each"

ITEM MO-701 PIPE FOR STORM DRAINS AND CULVERTS
ADD: New specification, as attached.

The **CONSTRUCTION PLANS** are revised as follows:

Sheet 14 of 34, CONSTRUCTION ACTIVITY PLAN – PHASES 1A, 1C
ADD: Note 7, reading:

"The existing, large aggregate construction entrance shall remain for the Contractor's use. The entrance at the vertical curb face at General Aviation drive shall be improved to provide a sloped transition for traffic entering the site. The Contractor shall remove the entrance aggregate and curb transition at the completion of the project and re-establish turf in this and other disturbed areas."

ADD: Note 8, reading:

"Utilize the existing perimeter construction entrance gate if it exists when the project commences. If the gate is removed prior to, or during the project, the gate shall be replaced by the Contractor at the as-bid unit price. Gate shall be removed and the perimeter fence re-established at the completion of construction."

Sheet 19 of 34, GRADING AND DRAINAGE PLAN
DELETE: This sheet.
ADD: Attached sheet.

CLARIFICATION: Pipe stubs added for ease of connection for future hangar construction to north and south.

Sheet 29 of 34, GENERAL DETAILS SHEET 3
DELETE: This sheet.
ADD: Attached sheet.
CLARIFICATION: Details for pipe stubs added on sheet 19

NEW SPECIFICATION

ITEM MO-701 PIPE FOR STORM DRAINS AND CULVERTS

DESCRIPTION

701-1.1 This item shall consist of the construction of concrete-plugged pipe culverts and storm drains in accordance with these specifications and in reasonably close conformity with the lines and grades shown on the plans. The pipe materials shall conform to the requirements of the 2004 Missouri Standard Specification for Highway Construction (MSSHC), Section 725 - Metal Pipe and Pipe-Arch Culverts, Section 726 - Rigid Pipe Culverts, Storm Drains and Sewers, and Section 732 - Flared End Sections.

All construction methods, testing, and acceptance criteria shall be in accordance with the standards included within this Item MO-701.

MATERIALS

701-2.1 PIPE MATERIALS. Pipe materials shall conform to the requirements of the 2004 MSSHC, as follows:

Corrugated Metallic-Coated Steel Pipe	Section 725
Reinforced Concrete Pipe - Class **IV**	Section 726
Flared End Sections	Section 732

STATE OF MISSOURI
BRIAN H. HUTSELL
NUMBER PE-2007002803
PROFESSIONAL ENGINEER
8-5-19

Prior to the use of materials, the contractor shall furnish manufacturer's certified test reports to the Engineer for those materials proposed for use during construction. The certified test reports shall include a statement that the materials meet the specification requirements.

701-2.2 CONCRETE. Concrete for pipe cradles shall have a minimum compressive strength of 2000 psi at 28 days and conform to the requirements of ASTM C 94.

CONSTRUCTION METHODS

701-3.1 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 it shall not be less than the external diameter of the pipe plus 6 inches on each side. The trench walls shall be approximately vertical.

Where rock, hardpan, or other unyielding material is encountered, the Contractor shall remove it from below the foundation grade for a depth of at least 12 inches or one-half inch for each foot of fill over the top of the pipe (whichever is greater) but for no more than three-quarters of the nominal diameter of the pipe. The width of the excavation shall be at least 1 foot greater than the horizontal outside diameter of the pipe. 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.

The excavation for pipes that are placed in embankment fill shall not be made until the embankment has been completed to a height above the top of the pipe as shown on the plans.

701-3.2 BEDDING. Bedding for reinforced concrete pipe will be classified as Class A, Class B, or Class C. When no bedding class is specified or detailed on the plans, the requirements for Class C bedding shall apply.

A. Reinforced Concrete Pipe.

Class A bedding shall be used if, in the judgment of the engineer, soil conditions are such that a firm bed cannot be otherwise secured. The pipe shall be laid in the center of a concrete cradle having a minimum width of 6 inches greater than the outside diameter of the pipe. The minimum thickness of the cradle under the bottom of the pipe shall be 1/4 of the internal diameter of the pipe, and the cradle shall extend up the sides of the pipe for a height equal to 1/4 its outside diameter. The concrete shall meet the requirements of item MO-610.

Class B bedding shall consist of a bed of granular material having a thickness of at least 6 inches below the bottom of the pipe and extending up around the pipe for a depth of not less than 30 percent of the pipe's vertical outside diameter. The layer of bedding material shall be shaped to fit the pipe for at least 10 percent of the pipe's vertical diameter and shall have recesses shaped to receive the bell of bell and spigot pipe. The bedding material shall be sand or selected sandy soil, all of which passes a 3/8 inch (9mm) sieve and not more than 10 percent of which passes a No. 200 (0.075 mm) sieve.

Class C bedding shall consist of a soil foundation shaped to fit the lower part of the pipe exterior for at least 10 percent of its overall height, and shall afford a uniformly firm bed throughout its entire length. In lieu of Class C bedding, Class B bedding may be used at no additional cost to the Sponsor.

B. Corrugated Metal Pipe.

For corrugated metal pipe, the bed shall be roughly shaped to fit the pipe, and a bedding blanket of sand or fine granular material shall be provided as follows:

Pipe Corrugation Depth (in.)	Minimum Bedding Depth (in.)
1/2	1
1	2
2	3
2 1/2	3 ½

701-3.3 LAYING PIPE. The pipe laying shall begin at the lowest point of the trench and proceed upgrade. The lower segment of the pipe shall be in contact with the bedding throughout its full length. Bell or groove ends of rigid pipes and outside circumferential laps of flexible pipes shall be placed facing upgrade.

Paved or partially lined pipe shall be placed so that the longitudinal center line of the paved segment coincides with the flow line.

Elliptical and elliptically reinforced pipes shall be placed with the manufacturer's top of pipe mark within five degrees of a vertical plane through the longitudinal axis of the pipe.

701-3.4 JOINING PIPE. All joints shall be sealed with an approved plastic compound, cement mortar or tubular joint seal. Rubber gasketed joints may be used at no additional cost to the sponsor. Where

permissible lift holes have been used, the holes shall be carefully filled with expansive mortar to provide a watertight section. The mortar shall be finished flush on the inside of the pipe and shall be properly cured on the outside. Lifting devices shall have sufficient bearing on the inside of the pipe to avoid damage resulting from a concentration of stresses around the lift holes.

If rubber gasket type pipe is specified or used, the joints shall be installed in accordance with the manufacturer's recommendations to ensure that joint devices are properly installed and that rubber gaskets are not displaced.

In sealing rigid pipe with mortar, the mortar contact areas of all pipe ends shall be damp when mortar is applied. After applying mortar to the entire interior surface of the bell or groove, the spigot or tongue end shall be forced into position. Any remaining void in the bell or groove shall be filled with a hub of mortar built up adjacent to the bell, or a bead of mortar built up around a groove-type joint. The interior joints of either type of pipe shall be finished flush with the surface of the pipe. Outside surface of mortar joints shall be cured with membrane curing compound.

In sealing rigid pipe with plastic joint compound, trowel grade compound shall be applied to the mating surfaces of both the tongue and groove, or to the entire interior surface of the bell and the upper portion of the spigot. Rope or tape type plastic compound shall be applied in accordance with the manufacturer's recommendations. The joints shall be forced together with excess compound extruding both inside and outside the joint. Excess compound shall be removed from the interior surface where accessible. Tubular joint seals shall be installed in a manner as recommended by the manufacturer. The joint between the bell and spigot shall be uniform for the full circumference and care shall be taken to prevent the bell from supporting the spigot.

In joining corrugated metal pipe, the ends shall be butted as closely as the corrugations will permit and shall be joined with a firmly bolted coupling band of the same material as the pipe.

701-3.5 BACKFILLING. Pipes shall be inspected and plugged before any backfill is placed; any pipes found to be out of alignment, unduly settled, or damaged shall be removed and relaid or replaced at the Contractor's expense.

Material for backfill shall be fine, readily compatible soil, or granular material selected from the excavation or a source of the Contractor's choosing. It shall not contain frozen lumps, stones that would be retained on a 2-inch sieve, chunks of highly plastic clay, or other objectionable material. No less than 95 percent of a granular backfill material shall pass through a 1/2 inch sieve, and no less than 95 percent of it shall be retained on a No. 4 sieve.

When the top of the pipe is even with or below the top of the trench, the backfill shall be compacted in layers not exceeding 6 inches on both sides of the pipe and shall be brought up one foot above the top of the pipe or to natural ground level, whichever is greater. Care shall be exercised to thoroughly compact the backfill material under the haunches of the pipe. Material shall be brought up evenly on both sides of the pipe.

When the top of the pipe is above the top of the trench, the backfill shall be compacted in layers not exceeding 6 inches and shall be brought up evenly on both sides of the pipe to 1 foot above the top of the pipe. The width of backfill on each side of the pipe for the portion above the top of the trench shall be equal to twice the pipe's diameter of 12 feet, whichever is less.

All backfill shall be compacted to the density required under Item MO-152.

701-3.6 PLUGS. Plugs for sealing pipes prior to backfilling shall be concrete, manufactured and sized for the specific purpose of plugging the belled ends of reinforced concrete pipes.

METHOD OF MEASUREMENT

701-4.1 The length of pipe shall be measured in linear feet of pipe in place, completed, properly plugged, and approved. It shall be 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 size shall be measured separately.

701-4.2 The number of concrete and/or corrugated metal pipe flared end sections of each class, type, and size shall be measured by the number per each installed and approved by the Engineer.

BASIS OF PAYMENT

701-5.1 Payment will be made at the contract unit price per linear foot for each kind of pipe of the type and size designated, and per each for each kind of flared end section of the type and size designated.

These prices shall fully compensate the Contractor for furnishing all materials, excavation, bedding, installation of these materials, backfilling, and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item MO-701-5.1 15” Class IV Reinforced Concrete Pipe, with Plug--per linear foot

REVISED BID FORM

PROPOSAL FORM
CITY OF SPRINGFIELD, MO
Project No. **AIR 192-096A-1**

TO: The City of Springfield, Missouri

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

PHASE II GENERAL AVIATION DEVELOPMENT PROGRAM:
GENERAL AVIATION RAMP EXTENSION

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 (SEE NEXT PAGE):

BASE BID						
BID ITEM	SPEC. NO.	ITEM DESCRIPTION	APPROX. QTY AND UNITS		UNIT PRICE	EXTENSION
X	XXXXX	EXAMPLE	109 Each	Words	Twenty one and 55/100	Two thousand three hundred forty eight and 95/100
				Numerals	$21.55	$2,348.95
1	MO-100-5.1	Mobilization	1 LS	Words		
				Numerals		
2	MO-152-5.1	Class A Excavation	1,800 CY	Words		
				Numerals		
3	MO-155-5.1	Fly Ash Treated Subgrade (12”)	3,460 SY	Words		
				Numerals		
4	MO-155-5.3	Fly Ash (Type C)	265 TONS	Words		
				Numerals		
5	MO-156-8.1	Installation and Removal of Silt Fence	700 LF	Words		
				Numerals		

6	MO-156-5.2	Heavy Duty Erosion Control Blanket	505 SY	Words		
				Numerals		
7	MO-156-5.3	Inlet Protection	2 EA	Words		
				Numerals		
8	MO-162-5.1	Temporary 10’ Chain Link Fence with 3 Strands of Barbed Wire (Includes Removal)	205 LF	Words		
				Numerals		
9	MO-162-5.2	Permanent 10’ Chain Link Fence with 3 Strands of Barbed Wire	250 LF	Words		
				Numerals		
10	MO-162-5.3	Existing Temporary Perimeter Fence Removal	545 LF	Words		
				Numerals		
11	MO-162-5.4	Existing Permanent Perimeter Fence Removal	235 LF	Words		
				Numerals		
11A	MO-162-5.4	Temporary 10’ Chain Link Construction Entrance Gate, with 3 Strands of Barbed Wire (Includes Removal)	1 EA	Words		
				Numerals		

12	P-307-5.1	6” Cement Treated Permeable Base Course (CTPB)	3460 SY	Words		
				Numerals		
13	P-501-5.1	11” Portland Cement Concrete Pavement	3333 SY	Words		
				Numerals		
14	P-501-5.2	Partial Depth PCC Repair	5 SF	Words		
				Numerals		
15	MO-620-5.1	Waterborne Paint, Yellow with Reflective Media	98 SF	Words		
				Numerals		
16	P-620-5.2	Waterborne Paint, Black, without Reflective Media	195 SF	Words		
				Numerals		
17	P-620-5.3	Pavement Marking Removal	15 SF	Words		
				Numerals		
17A	MO-701-5.1	15” Class IV Reinforced Concrete Pipe, with Plugs	178 LF	Words		
				Numerals		

18	MO-706-5.1	6” Perforated Underdrain Pipe	200 LF	Words		
				Numerals		
19	MO-706-5.2	Direct Connection to Existing Pipe or Structure	2 EA	Words		
				Numerals		
20	D-751-5.1	Cleanouts (In-Pavement)	1 EA	Words		
				Numerals		
21	D-751-5.2	Cleanout Removal / Cap Existing Underdrain	1 EA	Words		
				Numerals		
22	D-751-5.3	Inlet Adjustment	1 EA	Words		
				Numerals		
23	D-751-5.4	Sanitary Sewer Manhole Adjustment	1 EA	Words		
				Numerals		
24	MO-901-5.1	Seeding	0.2 AC	Words		
				Numerals		

25	MO-908-5.1	Mulching	0.2 AC	Words		
				Numerals		
26	SP-1-6.1	Small Block Retaining Wall	545 SF	Words		
				Numerals		
TOTAL BASE BID				Words		
				Numerals		

REVISED CONSTRUCTION PLAN SHEETS

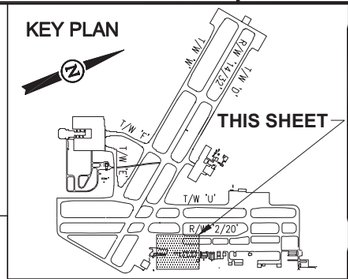
LEGEND

ST	EXISTING STORM SEWER TO REMAIN	SD-10	NEW STORM DRAIN RUN NUMBER
UGE	EXISTING UNDERGROUND ELECTRIC	UD-10	NEW UNDERDRAIN RUN NUMBER
SAN	EXISTING SANITARY LINE	CO	UNDERDRAIN CLEANOUT
W	EXISTING WATER MAIN	CS	UNDERDRAIN COLLECTION STRUCT
	EXISTING STORM LINE	DC	DIRECT CONNECTION
CE(X)	EXISTING CONCRETE-ENCASED ELECTRICAL DUCT BANK	GI	GRATED INLET
	EXISITNG UNDERDRAIN SYSTEM TO REMAIN	GMH	GRATED MANHOLE
	NEW UNDERDRAIN SYSTEM	MH	MANHOLE
ST	NEW STORM SEWER PIPE	TBR	TO BE REMOVED
540	NEW CONTOUR	TBR&R	TO BE REMOVED AND REPLACED
538	EXISTING CONTOUR	ATG	ADJUST TO PROPOSED GRADE
	NEW STORM SEWER INLET	UIP	USE IN PLACE
	NEW STORM SEWER MANHOLE		

UNDERDRAIN NOTES:

1. CONNECT PROPOSED UNDERDRAIN TO PROPOSED CLEANOUT.
2. MATCH PROPOSED UNDERDRAIN TO EXISTING INLET ELEVATION, MINIMUM DEPTH 3.5'. TRANSITION SLOPE TO MATCH PROPOSED INLET AT MINIMUM 0.4%.
3. CONNECT PROPOSED RCP TO EXISTING INLET

KEY PLAN



GA APRON BASELINE

0+00

1+00

2+00

3+00

4+00

LEASED HANGAR BUILDING - UNDER DEVELOPMENT

EXISTING GA APRON

EXISTING HANGAR BUILDING

EXISTING GA APRON

EXISTING UNDERDRAIN CLEANOUT TO BE REMOVED, UNDERDRAIN TO BE CAPPED

EXISTING INLET TO BE ADJUSTED TO GRADE. PROP. TOP ELEV. = 1268.05'

SD-01

SD-02

DC-01

88 LF OF CLASS IV, 15" RCP, PLUGGED AND BURIED

90 LF OF CLASS IV, 15" RCP, PLUGGED AND BURIED

NOTE: PROPOSED UNDERDRAINS ARE SHOWN OFFSET IN PLAN VIEW FOR CLARITY. UNDERDRAINS TO BE INSTALLED AT 0' OFFSET FROM GA APRON BASELINE - INLET TO INLET

UD-01

CO-01

EXISTING SANITARY LINES TO REMAIN IN PLACE (TYP.)

EXISTING SANITARY MANHOLE TO BE ADJUSTED TO GRADE. PROP. TOP ELEV. = 1268.55'

UD-02

DC-02

EXISTING STORM SEWER TO REMAIN IN PLACE

N. GENERAL AVIATION AVENUE

UNDERGROUND UTILITY NOTES:

1 THE LOCATION OF ALL UTILITIES SHOWN ON THESE PLANS ARE TAKEN FROM THE BEST AVAILABLE RECORDS. THE ENGINEER AND AIRPORT SHALL NOT BE RESPONSIBLE FOR ANY OMISSION OR VARIATION FROM THE LOCATIONS SHOWN. THE CONTRACTOR SHALL CONTACT THE AIRPORT MAINTENANCE DEPARTMENT, FAA AIRWAY FACILITIES AND OTHER UTILITY LOCATIONS REQUIRED TO IDENTIFY AND LOCATE EXISTING UTILITIES AT THEIR OWN EXPENSE. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS AND, THEREFORE, THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY, THERE MAY BE OTHER UTILITIES, THE EXISTENCE OF WHICH IS AT PRESENT NOT KNOWN, VERIFICATION OF THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN OR NOT SHOWN SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

2 ALL WORK SHALL BE COORDINATED WITH SPRINGFIELD - BRANSON NATIONAL AIRPORT OPERATIONS AND LOCAL AIRWAYS FACILITIES(AF) PERSONNEL, INCLUDING DATES OF CONSTRUCTION AND PROPOSED CONSTRUCTION METHODS FOR DETERMINING EXISTING CABLE AND UTILITY LOCATIONS.

3 IN ADVANCE OF THEIR OPERATION, THE CONTRACTOR SHALL EXPOSE, BY WHATEVER MEANS NECESSARY, INCLUDING HAND DIGGING, ANY EXISTING UTILITY THAT MAY BE IN CONFLICT PRIOR TO ADVANCING THEIR OPERATION TO THAT POINT AT NO ADDITIONAL COST TO THE OWNER.

Springfield-Branson NATIONAL AIRPORT

REVISION	DESCRIPTION	DATE	APPROVED
1	ADDENDUM 1	8/5/19	BHH

Designed by: TCS
Drawn by: DFH
Approved by: TCS
Chk by: BHH
Project Date: JULY 18, 2019
Plot Scale:
Plot Date: 5-Aug-19 14:55
Plot By: Brian Hutsell
Page Size: A1 Full Size Sheet 22"x34"
File Name: C-1300_DRAINAGE PLANS.DWG
Airfield Project No.: 3-29-0018-105
CMT Project No.: 180200.00

AIRPORT BOARD
CITY OF SPRINGFIELD

SPRINGFIELD-BRANSON NAT'L AP
SPRINGFIELD, MISSOURI

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(314) 436-5000 | www.cmtengr.com
MO Prof. Engineering #000531

AIR NO. 196-092A-1
GA RAMP EXTENSION

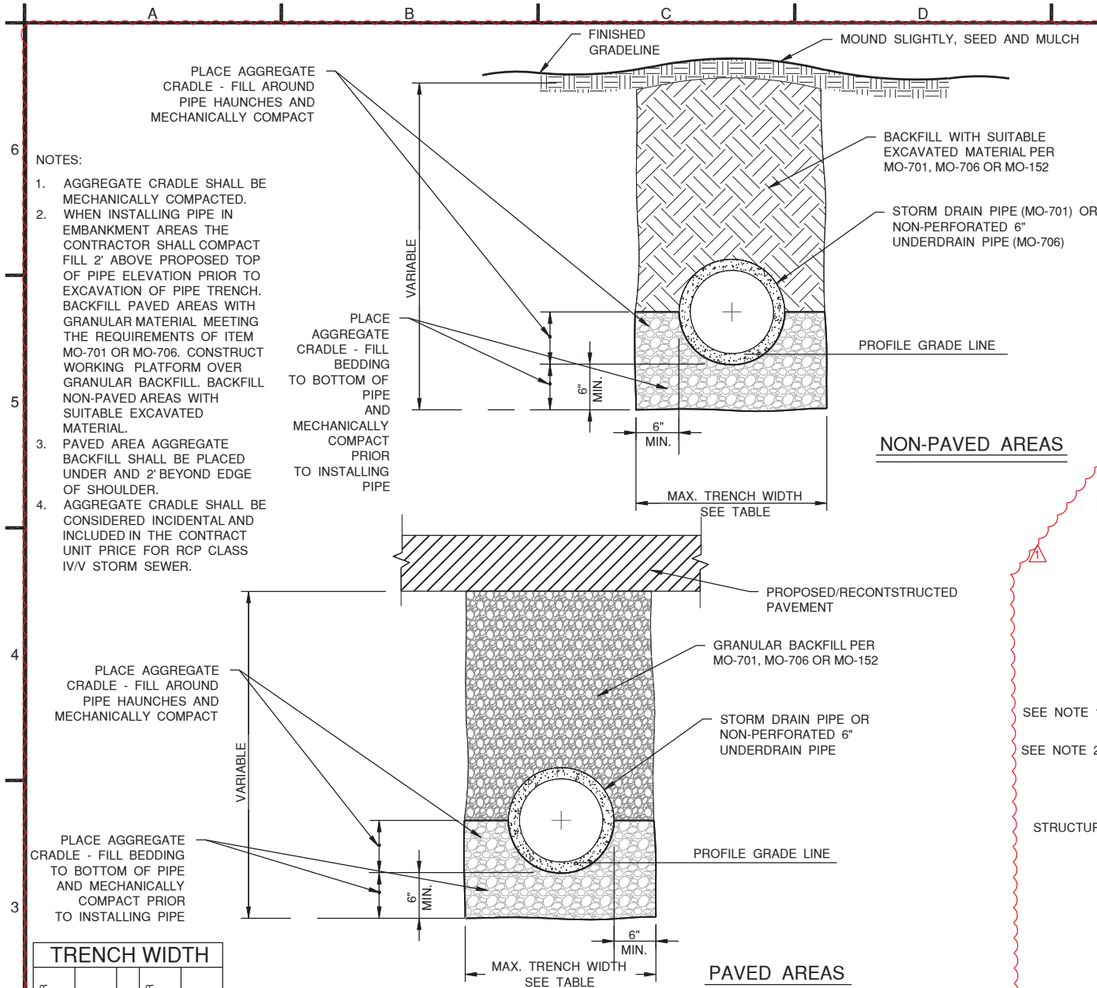
GRADING AND DRAINAGE PLAN

GRADING AND DRAINAGE PLAN

STATE OF MISSOURI
BRIAN H. HUTSELL
NUMBER PE-2007002803
PROFESSIONAL ENGINEER
Sealed Digitally August 5, 2019

AIR 196-092A-1
Sheet 19 of 34
Drawing: C-1301
VOL. 1 of 1

ISSUED FOR BID



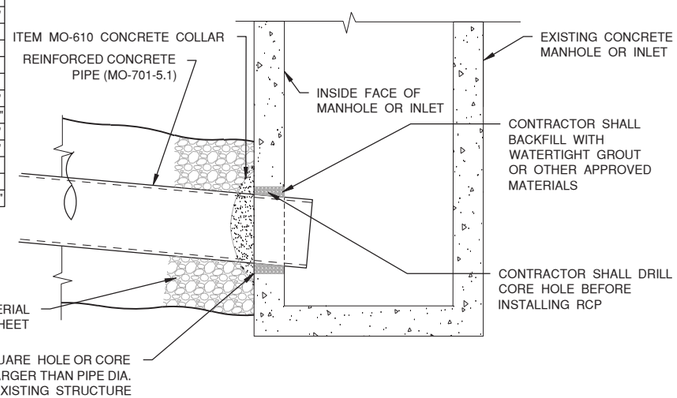
NOTES:

1. AGGREGATE CRADLE SHALL BE MECHANICALLY COMPACTED.
2. WHEN INSTALLING PIPE IN EMBANKMENT AREAS THE CONTRACTOR SHALL COMPACT FILL 2' ABOVE PROPOSED TOP OF PIPE ELEVATION PRIOR TO EXCAVATION OF PIPE TRENCH. BACKFILL PAVED AREAS WITH GRANULAR MATERIAL MEETING THE REQUIREMENTS OF ITEM MO-701 OR MO-706. CONSTRUCT WORKING PLATFORM OVER GRANULAR BACKFILL. BACKFILL NON-PAVED AREAS WITH SUITABLE EXCAVATED MATERIAL.
3. PAVED AREA AGGREGATE BACKFILL SHALL BE PLACED UNDER AND 2' BEYOND EDGE OF SHOULDER.
4. AGGREGATE CRADLE SHALL BE CONSIDERED INCIDENTAL AND INCLUDED IN THE CONTRACT UNIT PRICE FOR RCP CLASS IV/V STORM SEWER.

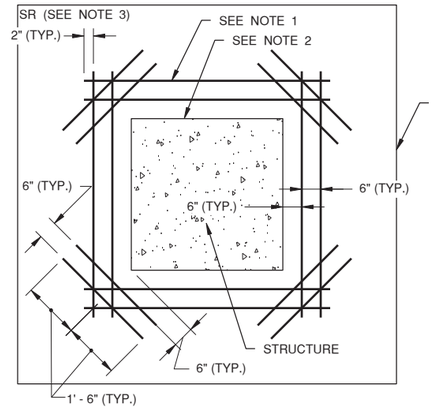
TRENCH WIDTH

INSIDE DIAMETER OF PIPE (INCHES)	MAXIMUM TRENCH WIDTH	INSIDE DIAMETER OF PIPE (INCHES)	MAXIMUM TRENCH WIDTH
6	3'-2"	42	6'-11"
8	3'-2"	48	7'-6"
10	3'-2"	54	8'-7"
12	3'-4"	60	9'-2"
15	3'-6"	66	9'-9"
18	3'-10"	72	10'-4"
21	4'-4"	78	10'-11"
24	4'-8"	84	11'-6"
27	4'-11"	90	12'-1"
30	5'-3"	96	12'-8"
33	6'-0"	102	13'-3"
36	6'-4"	108	13'-10"

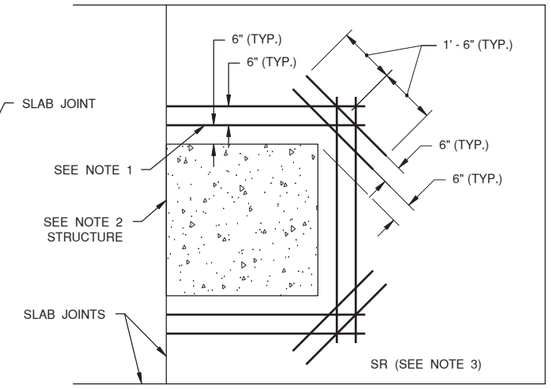
1 STORM DRAIN TRENCH DETAILS
N.T.S.



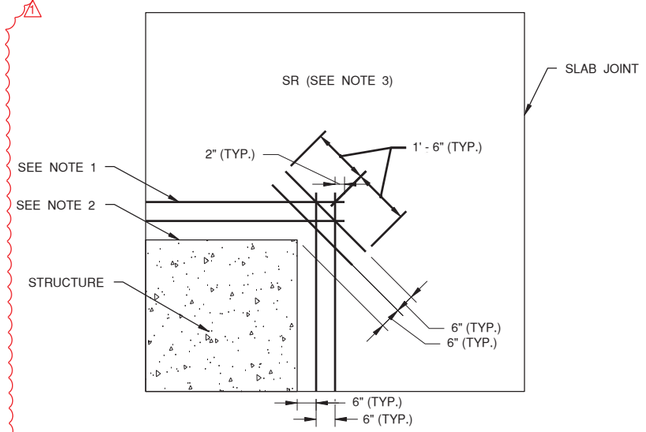
2 DIRECT CONNECTION DETAIL - RCP TO CONCRETE STRUCTURE
N.T.S.



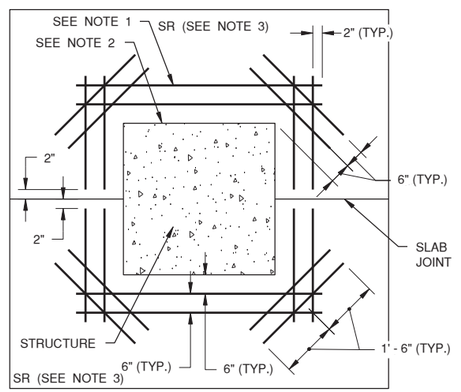
3 STRUCTURE IN MIDDLE OF SLAB
N.T.S.



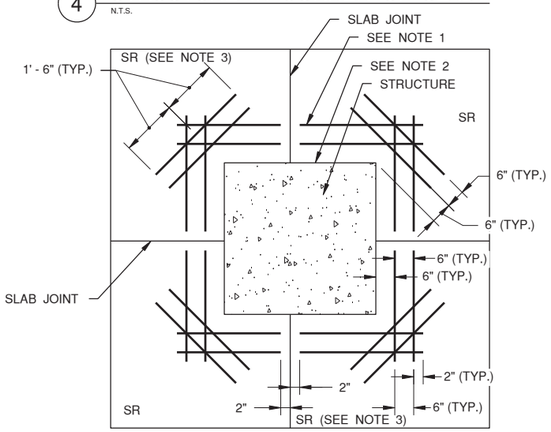
6 STRUCTURE ON EDGE OF SLAB
N.T.S.



4 STRUCTURE IN CORNER OF SLAB
N.T.S.



7 STRUCTURE IN TWO SLABS
N.T.S.



5 STRUCTURE IN THREE OR MORE SLABS
N.T.S.

NOTES:
1. BARS ARE #8 REINFORCING BARS. INSTALL AT TOP AND BOTTOM OF SLAB.

2. 1 1/2" EXPANSION JOINT MATERIAL WITH P-605 SILICONE SEALANT TO BE INSTALLED ON ALL SIDES OF STRUCTURE SEE DETAIL 1 ON SHEET C-5001.

3. SR = REINFORCED PANEL. SEE JOINTING DETAILS.

4. CONSULT ENGINEER FOR BAR LAYOUT CONFLICTING WITH PANEL JOINT.

GENERAL DETAILS SHEET 3

BRIAN H. HUTSELL
NUMBER PE-2007002803
PROFESSIONAL ENGINEER
STATE OF MISSOURI
Sealed Digitally August 5, 2019

ISSUED FOR BID

Springfield-Branson NATIONAL AIRPORT

REVISION	DESCRIPTION	DATE	APPROVED
1	ADDENDUM 1	9/5/19	BHH

Designed by: DFH | Approved by: TCS | Project Date: JULY 18, 2019
Dwn by: DFH | Chk by: BHH | Plot Scale:
Plot Date: 5-Aug-19 15:21
Plot By: Brain Hutsell
Plot Size: ANSI full bleed 22"x34"
File Name: C-5000_GENERAL DETAILS.DWG
Airfield Project No.: 2018-132-06
CMT Project No.: 190320002-00

CITY OF SPRINGFIELD
AIRPORT BOARD
SPRINGFIELD-BRANSON NAT'L AP
SPRINGFIELD, MISSOURI

CMT
CRAWFORD, MURPHY & TILLY, INC.
ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MISSOURI 63102
(314) 436-8500 www.crawfordmurphy.com
MO Prof. Engineering #000531

AIR NO. 196-092A-1
GA RAMP EXTENSION

GENERAL DETAILS
SHEET 3

AIR 196-092A-1
Sheet 29 of 34
Drawing: C-5003
VOL. 1 of 1

ACKNOWLEDGEMENT

Each bidder shall acknowledge receipt of this **Addendum No. 1** of ***GENERAL AVIATION RAMP EXTENSION*** by his/her signature affixed hereto, and shall attach this Addendum to the original bid.

CERTIFICATION BY BIDDER

SIGNATURE _____

TITLE _____

COMPANY _____

DATE _____

FAX/EMAIL TRANSMITTAL

To: Crawford, Murphy & Tilly, Inc
Attention: Brian Hutsell
Re: Addendum #1
Fax 314.436.0723
From:
(name) _____

(company) _____

Date:

To verify that all contractors are in receipt of this addendum, Contractors are asked to sign and date this acknowledgement sheet. The Contractor should fax or mail to Crawford, Murphy, & Tilly, Inc. at the number listed below by **August 7, 2019, or via email at bhutsell@cmtengr.com AND vursin@cmtengr.com.**

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

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

BY: CRAWFORD, MURPHY, & TILLY, INC.