

ADDENDUM NO. 1

TO: PLANS AND SPECIFICATIONS FOR STATE OF MISSOURI

New Outdoor Firing Range
Missouri State Highway Patrol
Jefferson City, Missouri
PROJECT NO. R1806-01

Bid Opening Date: 1:30 PM, Thursday, October 24, 2019 (Not Changed)

Bidders are hereby informed that the Construction Plans and/or Specifications are modified as follows:

Revised Bid Form and Unit Prices Form are attached. Bidders must use the forms marked **REVISED PER ADDENDUM NO. 1** to bid this project.

SPECIFICATION CHANGES:

1. **SECTION 004113 – BID FORM**

- a. Paragraphs G and H were revised.

Bidders must use the attached revised Bid Form to bid this project.

2. **SECTION 004322 – UNIT PRICES FORM**

- a. Unit Price No. 1 was revised.

Bidders must use the attached revised Unit Prices Form to bid this project.

3. **SECTION 011000 – SUMMARY OF WORK**

- a. REVISE Paragraph 1.2-A.1 as follows:

1. Project Location: **Between the existing Department of Corrections firing range and the State of Missouri's Surplus Property Facility, located approximately 4-miles outside of Jefferson City on MO Hwy 179.**

- b. REVISE Paragraph 1.4-B.1 as follows:

1. Owner Occupancy: Allow for Owner occupancy.

4. **REMOVE and REPLACE SECTION 012100 – ALLOWANCES in its entirety.**

- a. See attached for revised specification section.

5. **SECTION 012200 – UNIT PRICES**

- a. REVISE Paragraph 3.1-A as follows:

A. Unit Price No. 1:

1. Description: Potable water well system according to Division 33 Section Potable Water Supply Wells. This unit price item excludes the permanent casing of Unit Price No. 2 and the 4-inch well liner of Unit Price No. 3.
2. Unit of Measurement: Linear Feet.
3. Base Bid Quantity: 450 linear feet deep 10-inch diameter borehole, pump depth, and all other amenities necessary to construct a potable water well other than as included in Unit Prices 2 and 3.

6. **SECTION 012300 – ALTERNATES**

- a. REVISE Paragraphs 3.1-A and 3.1-B as follows:

- A. Alternate No. 1: Construct a Portland Cement Concrete parking area, with parking

stall striping, in place of the gravel parking area required in the Base Bid. Refer to Section 321313 - Concrete Paving and to concrete pavement details in the Plans. If Alternate #1 is accepted, the parking area is to be constructed as un-reinforced concrete in accordance with the detail on Sheet C-503. The parking area PCC pavements are to be constructed with a maximum contraction/control joint spacing of 12 feet. Ten additional work days will be added should the Owner accept this Alternate.

- B. Alternate No. 2: For Access Road 3, including the Explosives Detonation Area loop and Shoot House pull-off area, construct a Portland Cement Concrete access road in place of the gravel access road required in the Base Bid. Refer to Section 321313 - Concrete Paving and to concrete pavement details in the Plans. Access Road 3 is to be constructed with transverse and longitudinal joints in accordance with the details on Sheet C-501. Five additional work days will be added should the Owner accept this Alternate.

7. SECTION 013300 – SUBMITTALS

- a. ADD required submittals for Section 321313 – Concrete Paving (Joint Layout Plans) and Section 321723 – Pavement Markings to Paragraph 3.1 Required Submittals.

8. SECTION 083459 – VAULT DOOR AND FRAME

- a. REMOVE and REPLACE Paragraphs 2.1 and 2.2 as follows:

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements of specifications and drawings, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Brown Safe
 - 2. Hamilton Safes
 - 3. Overly Door Company

2.2 VAULT DOOR AND FRAME

- A. GSA Class 5-B Maximum Security Vault Door produced to the current requirements of Federal Specification AA-D-600D, having a single swing door clear opening sizes of 40" wide x 78" high.
- B. The door shall be equipped with a Sargent & Greenleaf mechanical combination lock conforming to Federal Specification FF-L-2937, or a Kaba-Mas X-10 electro-mechanical combination lock conforming to Federal Specification FF-L-2740, and an exterior lever handle, all as selected by the Owner.
- C. Active leaf shall have an inside emergency escape device.
- D. Doors shall be pre-hung in the frame and designed for tight clamp-on installation to the concrete vault walls.

- b. DELETE Paragraph 2.3 in its entirety.

8. SECTION 133419 – METAL BUILDING SYSTEMS

- a. ADD the following manufacturers to Paragraph 2.1-A:
 - 5. A&S Building Systems, Inc., a division of NCI.
 - 6. Alliance Steel, Inc.
 - 7. American Buildings Co., a Nucor Company.
 - 8. American Standard Steel Building Systems
 - 9. CanAm Steel Building Corporation
 - 10. CECO Building Systems
 - 11. Chief Buildings
 - 12. Kirby Buildings, a Nucor Company.
 - 13. Mesco Building Solutions, a division of NCI.

14. Metallic Building Company.
15. Nucor Building Systems.
16. Pinnacle Structures
17. Star Building Systems, a division of NCI.
18. Whirlwind Steel Buildings.

7. SECTION 321313 – CONCRETE PAVING

- a. ADD the following submittal to Paragraph 1.3:
 - I. Joint layout plans

8. ADD SECTION 321723 – PAVEMENT MARKINGS in its entirety.

- a. See attached for new specification section.

DRAWING CHANGES:

1. SHEET C-103

- a. REVISE KEYED NOTES 18, 19 and 21 as follows:

18. BASE BID SHALL INCLUDE 2" AGGREGATE SURFACE COURSE OVER 8" AGGREGATE BASE COURSE AT THE GRAVEL PARKING AREA AND ACCESS ROAD 3. ALTERNATE #1 SHALL INCLUDE PCC PAVING THE PARKING AREA AND STRIPING ALL PARKING STALLS, REPLACING BASE BID GRAVEL SURFACE. ALTERNATE #1 PCC PAVING SHALL BE UNREINFORCED CONCRETE WITH CONTROL JOINTS AT A MAXIMUM SPACING OF 12 FEET. ALTERNATE #2 INCLUDES PCC PAVING ACCESS ROAD 3, EXPLOSIVES DETONATION AREA LOOP, AND SHOOT HOUSE PULL-OFF AREA, REPLACING BASE BID GRAVEL SURFACES. REFER TO SHEET C-503. ALTERNATE #2 PCC PAVING SHALL BE CONSTRUCTED WITH DOWELED TRANSVERSE JOINTS AND TIE BARS AT LONGITUDINAL JOINTS. REFER TO SHEET C-501.
19. CONCRETE ACCESS ROAD 1 AND ACCESS ROAD 2 WITH 8" PCC OVER 6" BASE AND 7" PCC OVER 5" BASE, RESPECTIVELY, WITH 2' WIDE GRAVEL SHOULDER. REFER TO SHEETS C-501 AND C-503. ACCESS ROAD 1 AND ACCESS ROAD 2 SHALL BE CONSTRUCTED WITH DOWELED TRANSVERSE JOINTS AND TIE BARS AT LONGITUDINAL JOINTS. REFER TO SHEET C-501.
21. CONCRETE PAVEMENT WITH 5" PCC OVER 7" BASE FOR 2 HANDICAP PARKING STALLS AND ACCESS AISLE. REFER TO SHEETS C-503 AND C-504. PCC PAVEMENT AT HANDICAP PARKING STALLS SHALL BE UNREINFORCED CONCRETE WITH CONTROL JOINTS AT A MAXIMUM SPACING OF 12 FEET.

2. Sheet S-001

- a. REVISE Note 7.B.2) as follows:

Slump

- a. All concrete unless noted otherwise shall have a slump of 4" to 6". When water reducing admixture is added to increase concrete slump, the concrete shall have a slump of 7" to 9" after the admixture is added.

- b. REVISE Note 7.B.3) as follows:

Air Content

- a. All concrete exposed to weather shall be air entrained per ACI requirements (4% to 7% for $\frac{3}{4}$ " max aggregate).

3. Sheet E-102

- a. ADD electrical receptacles as identified on the attached supplemental drawing AD #1/E-102.

GENERAL COMMENTS:

1. Digital CAD files, in AutoCAD Civil 3D 2018 format, will be provided upon request.
2. The Pre-Bid Meeting was held October 8, 2019. The Pre-Bid Meeting sign-in sheet is attached.
3. Please contact Marlene Blackburn, Contract Specialist, at 573-522-6035 or marlene.blackburn@oa.mo.gov for questions regarding bidding procedures and MBE/WBE/SDVE submittal requirements.
4. The deadline for technical questions is October 16, 2019 at 5:00 PM. Submit technical questions to Bruce Dawson at bruced@ger-inc.biz and copy Bryan Chinn at bryan.chinn@oa.mo.gov.
5. All correspondence with respect to this project must include the State of Missouri project number as indicated above.
6. Changes to, or clarification of, the Bid Documents are only made as issued in the Addenda.
7. Current Planholders list is available at: <https://www.adsplanroom.net/jobs/182/planholders/r1806-01-new-outdoor-firing-range-missouri-state-highway-patrol>
8. Prospective bidders contact American Document Solutions, 1400 Forum Blvd Suite 1C, Columbia MO 65201, 573-446-7768 to order official plans and specifications.

ATTACHMENTS:

1. Section 004113 – Bid Form
2. Section 004322 – Unit Prices Form
3. Section 012100 – Allowances
4. Section 321723 – Pavement Markings
5. Supplemental Drawing AD #1/E-102
6. Pre-Bid Meeting Sign-In Sheet

October 15, 2019

END ADDENDUM NO. 1

STATE OF MISSOURI

Bid Time: 1:30 PM

Bid Date: _____

SECTION 004113 - BID FORM

REVISED PER ADDENDUM NO. 1

1.0 BID:

A. From:

(Bidder's Name)

herein after called the "**Bidder**".

B. To:

Director, Division of Facilities Management, Design and Construction
Room 730, Harry S Truman State Office Building
301 West High Street
Jefferson City, Missouri 65102

herein after called the "**Owner**."

C. For:

New Outdoor Firing Range
Missouri State Highway Patrol
Jefferson City, Missouri

D. Project Number:

R1806-01

hereinafter called the "**Work**."

E. Documents:

The undersigned, having examined and being familiar with the local conditions affecting the work and with the complete set of contract documents, including the Drawings, the Invitation For Bid, Instructions To Bidders, Statement of Bidders Qualifications, General Conditions, Supplement to General Conditions, and the technical specifications, including: addenda number _____ through _____ hereby proposes to perform the Work for the following:

F. Bid Amount:

Dollars (\$ _____)

G. Allowances:

The Base Bid above must include an allowance of \$5,000. See Section 012100 for details.

H. Alternates: Alternate No. 1: Construct a Portland Cement Concrete parking area, with parking stall striping, in place of the gravel parking area required in the Base Bid. Refer to Section 321313 - Concrete Paving and to concrete pavement details in the Plans. If Alternate #1 is accepted, the parking area is to be constructed as un-reinforced concrete in accordance with the detail on Sheet C-503. The parking area PCC pavements are to be constructed with a maximum contraction/control joint spacing of 12 feet. Ten additional work days will be added should the Owner accept this Alternate. **Ten additional work days will be added should Owner accept this Alternate.**

\$ _____ Dollars (\$ _____).

Alternate No. 2: : For Access Road 3, including the Explosives Detonation Area loop and Shoot House pull-off area, construct a Portland Cement Concrete access road in place of the gravel access road required in the Base Bid. Refer to Section 321313 - Concrete Paving and to concrete pavement details in the Plans. Access Road 3 is to be constructed with transverse and longitudinal joints in accordance with the details on Sheet C-501. **Five additional work days will be added should Owner accept this Alternate.**

\$ _____ Dollars (\$ _____).

2.0 MBE/WBE/SDVE PERCENTAGE OF PARTICIPATION PROJECT GOALS:

This project's specific goals are: **MBE 10.00%** **WBE 10.00%**, and **SDVE 3.00%**. NOTE: Only MBE/WBE firms certified by a State of Missouri public entity, and SDVE(s) meeting the requirements of Section 34.074, RSMo,

NOTE: ALL PAGES OF THIS BID FORM (004113) MUST BE COMPLETED AND SUBMITTED OR THE BID MAY BE REJECTED FOR BEING NON-RESPONSIVE.

and 1 CSR 30-5.010, as of the date of bid opening, can be used to satisfy the MBE/WBE/SDVE participation goals for this project.

3.0 BID BOND

- A. Accompanying the bid is: ___ 5% Bid Bond or ___ Cashier's Check/Bank Draft for 5% of base bid that is payable without condition to the Division of Facilities Management, Design and Construction, State of Missouri, as per Article 5 of "Instructions To Bidders".

4.0 CONTRACT COMPLETION TIME AND LIQUIDATED DAMAGES

- A. The Bidder agrees to complete the work within 130 working days from the date the Notice of Intent to Award is issued as modified by additional days added by the Owner's acceptance of alternates, if applicable. This includes ten (10) working days for document mailing and processing. The Bidder further agrees to pay to, or allow the State as liquidated damages the sum of \$1,000 for each working day thereafter that the entire work is not substantially complete.

5.0 ATTACHMENTS TO BID:

- A. 004322 Unit Prices Form
- 004336 Proposed Subcontractors
- 004337 MBE/WBE/SDVE Compliance Form
- 004338 MBE/WBE/SDVE Joint Venture Form
- 004339 MBE/WBE/SDVE Waiver Form
- 004340 SDVE Business Form
- 004541 Affidavit of Work Authorization

6.0 BIDDER'S CERTIFICATIONS:

- A. The Bidder agrees to pay not less than the hourly rate of wages as determined by the Department of Labor and Industrial Relations, State of Missouri, in accordance with Sections 290.210 to 290.340, RSMo.
- B. The Bidder hereby certifies that this bid is genuine and is not made in the interest of or on behalf of any undisclosed person, firm, or corporation, and is not submitted in conformity with any agreement or rules of any group, association or corporation;
That he/she has not directly or indirectly induced or solicited any other bidder to put in a false or sham proposal;
That he/she has not solicited or induced any person, firm or corporation to refrain from submitting a bid;
That he/she has not sought by collusion or otherwise to obtain for him/herself any advantage over any other bidder or over the Owner.
That he/she will not discriminate against any employee or applicant for employment because of race, creed, color or national origin in the performance of the work.
That he/she certifies that he/she has based this proposal upon an official /complete set of contract documents, either obtained from the Owner after Bidder placed himself/herself on the bidders' list or from a secondary source known to the Bidder to have provided a complete and accurate set of contract documents, provided that if Bidder received the contract documents from such a secondary source, any errors or omissions in the contract documents shall be interpreted and construed in favor of the Owner and against the Bidder. This proposal is also based upon the conditions within Article 1.2 of the General Conditions.
That he/she certifies that he/she will comply with the provisions of Sections 285.230-234, RSMo, regarding transient employers.
That he/she has enrolled and is and will continue to participate in a federal work authorization program in accordance with Sections 285.525 and 285.530, RSMo for the duration of this contract.

7.0 CONTACT INFORMATION (mandatory for all bidders):

Sole Proprietorship/General Partnership LLC Limited Partnership Corporation Joint Venture

Business Name: _____

Address: _____

Telephone: _____ Fax Number: _____

Federal ID Number: _____ or Social Security Number: _____

Missouri Business Charter Number: _____ (or provide the proper certificate from the Secretary of State)

Contact Name: _____ Contact email: _____

8.0 SIGNATURES:

FOR SOLE PROPRIETORSHIPS/GENERAL PARTNERSHIPS ONLY:

Sole Proprietor's Name (printed) Name each general partner: _____

Today's Date: _____

I, _____, being the sole proprietor/general partner of (name of business) _____ (and if the name of said business is other than my legal name, having filed a Registration of Fictitious Name with the Missouri Secretary of State in order to allow me to use such name in connection with my business, as provided by Section 417.200, RSMo, et seq.), do hereby submit this bid and agree to be bound unto the State of Missouri as herein provided (if a general partnership, all partners must sign below).

Signature: _____ Signature: _____

Signature: _____ Signature: _____

FOR LIMITED LIABILITY COMPANIES ONLY:

_____ today's date _____ State(s) of organization: _____
Manager's (or Managing Member's) Name (printed)

I, _____, being the Manager (or Managing Member) of (full legal name of limited liability company from Articles of Organization) _____, and being duly authorized to act as herein provided on behalf of said limited liability company, do hereby submit this bid on behalf of said limited liability company and agree that said limited liability company shall be bound unto the State of Missouri as herein provided.

Signature: _____

REVISED PER ADDENDUM NO. 1

1.0 Description

- A. For changing specified quantities of work from those indicated by the contract drawings and specifications, upon written instructions of Owner, the following unit prices shall prevail. The unit prices include all labor, overhead and profit, materials, equipment, appliances, bailing, shoring, shoring removal, etc., to cover the finished work of the several kinds of work called for. Only a single unit price shall be given and it shall apply for either MORE or LESS work than that shown on the drawings and called for in the specifications or included in the Base Bid. In the event of more or less units than so indicated or included during construction the total contract price shall be decreased as appropriate or increased by contract change in accordance with General Conditions Article 4.1.

2.0 Unit Prices:

Unit Price No. 1:

Description: Potable water well system according to Division 33 Section Potable Water Supply Wells. This unit price item excludes the permanent casing of Unit Price No. 2 and the 4-inch well liner of Unit Price No. 3.

Unit of Measurement: Linear Feet.

Base Bid Quantity: 450 linear feet deep 10-inch diameter borehole, pump depth, and all other amenities necessary to construct a potable water well other than as included in Unit Prices 2 and 3.

\$ _____ per Linear Foot

Unit Price No. 2:

Description: Potable water well system permanent casing according to Division 33 Section Potable Water Supply Wells.

Unit of Measurement: Linear Feet.

Base Bid Quantity: 250 linear feet of well casing and associated grouting material as indicated in the contract documents.

\$ _____ per Linear Foot

Unit Price No. 3:

Description: Potable water well system 4-inch well liner according to Division 33 Section Potable Water Supply Wells.

Unit of Measurement: Linear Feet.

Base Bid Quantity: 250 linear feet and all other amenities necessary to install and construct well liner.

\$ _____ per Linear Foot

END OF SECTION 004322 – Unit Prices Form

SECTION 012100 – ALLOWANCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract including General and Supplementary Conditions and other Division 1 Specification Sections apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements governing allowances.
 - 1. Certain items are specified in the Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when additional information is available for evaluation. If necessary, additional requirements will be issued by Contract Change.
- B. Types of allowances include the following:
 - 1. Lump-sum allowances.
 - 2. Weather allowances.
- C. Related Sections include the following:
 - 1. Division 1 Section "Contract Modification Procedures" for procedures for submitting and handling Contract Changes for allowances.
 - 2. Division 1 Section "Unit Prices" for procedures for using unit prices.

1.3 WEATHER ALLOWANCE

- A. Included within the completion period for this project are a specified number of “bad weather” days (see Schedule of Allowances).
- B. The Contractor’s progress schedule shall clearly indicate the bad weather day allowance as an “activity” or “activities”. In the event weather conditions preclude performance of critical work activities for 50% or more of the Contractor’s scheduled workday, that day shall be declared unavailable for work due to weather (a “bad weather” day) and charged against the above allowance. Critical work activities will be determined by review of the Contractor’s current progress schedule.
- C. The Contractor’s Representative and the Construction Representative shall agree monthly on the number of “bad weather” days to be charged against the allowance. This determination will be documented in writing and be signed by the Contractor and the Construction Representatives. If there is a failure to agree on all or part of the “bad weather” days for a particular month, that disagreement shall be noted on this written document and signed by each party’s representative. Failure of the Contractor’s representative to sign the “bad weather” day documentation after it is presented, with or without the notes of disagreement, shall constitute agreement with the “bad weather” day determination contained in that document.
- D. There will be no modification to the time of contract performance due solely to the failure to deplete the “bad weather” day allowance.

- E. Once this allowance is depleted, a no cost Contract Change time extension will be executed for “bad weather” days, as defined above, encountered during the remainder of the Project.

1.4 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract, Designer of the date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the Work.
- B. At Designer's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.
- C. Purchase products and systems selected by Designer from the designated supplier.

1.5 SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Contract Changes.
- B. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.6 COORDINATION

- A. Coordinate allowance items with other portions of the Work. Furnish templates as required to coordinate installation.

1.7 LUMP-SUM ALLOWANCES

- A. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials [selected by Designer] under allowance shall be included as part of the Contract Sum and not part of the allowance.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

- A. Weather Allowance: Included within the completion period for this Project are 30 “bad weather” days.

- B. Surveying Allowance: Bidders shall include in their base bid proposal the amount of \$5,000 for surveying, easement preparation, construction staking, and clearing related to Ameren’s power line extension from Surplus Property. Contractor shall retain Central Missouri Professional Services, Inc., Jefferson City, MO to provide these services. Contact Patrick Kremer, P.E., (573)-634-3455. Extent of clearing to be coordinated with Ameren Missouri. Ameren contact is Derek Wekenborg, (573)-681-7526.

END OF SECTION 012100

SECTION 321723 – PAVEMENT MARKINGS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Bid Form and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Provide labor, material, and equipment necessary installation of pavement markings as shown on the Drawings.
- B. Pavement markings are not included as a base-bid item. Only with the selection of Alternate #1, Portland Cement Concrete paving for the parking area, will the requirements of this section apply.

1.3 SUBMITTALS

- A. Manufacturer's Certificates and Data certifying that the paint, thermoplastic, and/or glass beads conform to the requirements specified.
- B. Shop Drawings: Indicate pavement markings and defined parking spaces. Indicate, with international symbol of accessibility, spaces allocated for people with disabilities.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver pavement marking materials to project site in original packages with seals unbroken and bearing manufacturer's labels containing brand name and type of material, date of manufacture, and directions for storage.
- B. Store pavement marking materials in a clean, dry, protected location within temperature range required by manufacturer. Protect stored materials from direct sunlight.

PART 2 - PRODUCTS

2.1 PAINT MATERIALS

- A. Pavement Marking Paint: Alkyd-resin type, lead and chromate free, ready mixed complying with AASHTO M 248, Type N; colors complying with Federal Standard 595.
- B. Colors:
 - 1. Yellow Chip #33538

PART 3 - EXECUTION

3.1 PAINTED MARKINGS

- A. Allow new pavement surfaces to cure for a period of not less than 14 days before application of marking materials.

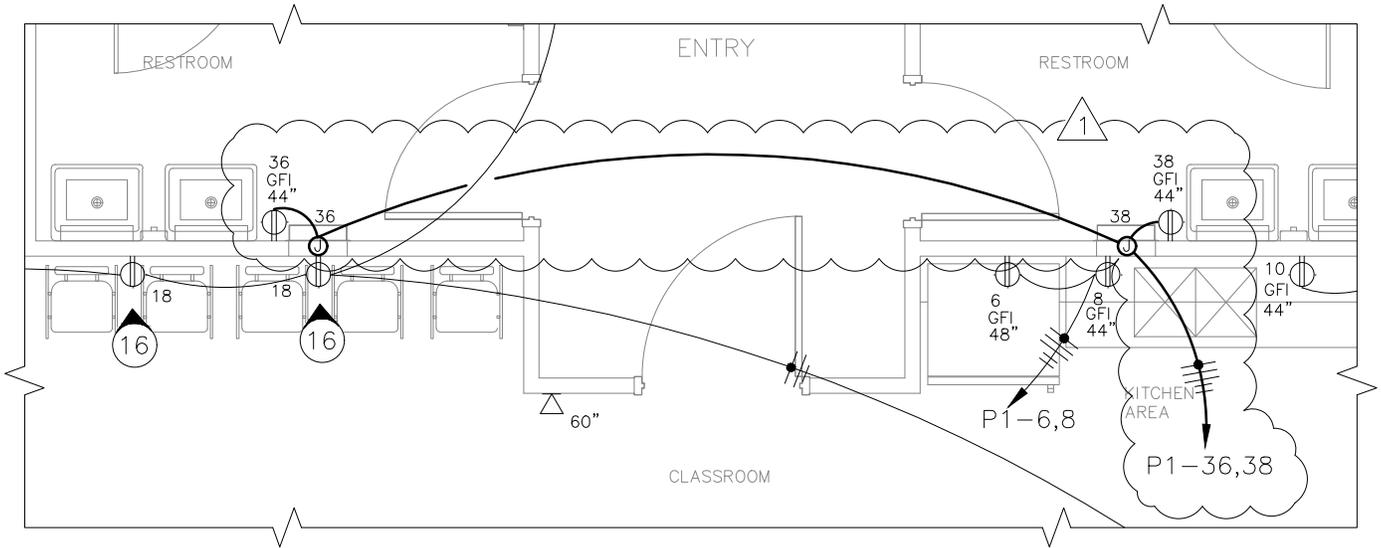
- B. Proceed with pavement marking only on clean, dry surfaces and at a minimum ambient or surface temperature of 40 degrees F (4.4 degrees C) for oil-based materials; 55 degrees F (12.8 degrees C) for water based materials; and not exceeding 95 degrees F (35 degrees C) for either.
- C. Do not apply pavement marking paint until layout, colors, and placement have been verified with the Engineer.
- D. Sweep and clean surface to eliminate loose material and dust.
- E. Apply paint with mechanical equipment to produce pavement markings, of dimensions indicated, with uniform, straight edges. Apply at manufacturer's recommended rates to provide a minimum wet film thickness of 15 mils (0.4 mm).

3.2 PROTECTION

- A. Conduct operations in such a manner that necessary traffic can move without hindrance.
- B. Protect newly painted markings so that, insofar as possible, the tires of passing vehicles will not pick up paint.

END OF SECTION 321723

PANEL DESIGNATION: P1		PANEL LOCATION: MECHANICAL ROOM		TOTAL VOLTAMPS THIS PANEL		52953			
VOLTAGE: 240 1PHASE 3WIRE		MOUNTING: SURFACE		PANEL SPACES: 42		TOTAL CONNECTED LOAD (AMPS)		221	
MAINS: 225A M.B.		CONNECTED LOAD		CKT. NO.		CONNECTED LOAD		CIRCUIT DESIGNATION	
CIRCUIT DESIGNATION		WIRE	TRIP	A	B	A	B	TRIP	WIRE
ALL INTERIOR LED LIGHTS	#12	20A/1P	966		1 2	180		20A/1P	#12
UNIT HEATER (UH-1)	#10	20A/2P		1500	3 4		558	20A/1P	#12
(GARAGE)	#10		1500		5 6	850		20A/1P	#12
NORTH 3 FLOOR OUTLETS	#12	20A/1P		540	7 8		1000	20A/1P	#12
SOUTH 3 FLOOR OUTLETS	#12	20A/1P	540		9 10	700		20A/1P	#12
PARKING LOT LIGHTS	#12	20A/1P		340	11 12		700	20A/1P	#12
POWER FOR WATER WELL PUMP	#10	50A/2P	2645		13 14	1500		20A/1P	#12
(VFD IN MECH ROOM)	#10			2645	15 16		1260	20A/1P	#12
AH-1 CIRCUIT #1	#4	60A/2P	4800		17 18	1080		20A/1P	#12
(HEATER 1)	#4			4800	19 20		550	20A/1P	#12
AH-1 CIRCUIT #2	#10	25A/2P	2400		21 22	540		20A/1P	#12
(HEATER 2)	#10			2400	23 24		540	20A/1P	#12
AH-1 CIRCUIT #3	#12	20A/2P	864		25 26	3312		60A/2P	#8
(UNIT)	#12			864	27 28		3312		#8
SHOOTHOUSE LIGHTS & POWER	#8	20A/1P	900		29 30	1500		20A/2P	#12
RIFLE RANGE LIGHTS & POWER	#8	20A/1P		844	31 32		1500		#12
PISTOL RANGE LIGHTS & POWER	#8	20A/1P	844		33 34	1275		20A/1P	#12
PISTOL/SHOTGUN RANGE LTS/PWR	#10	20A/1P		844	35 36		1000	20A/1P	#12
VAULT OUTLET	#12	20A/1P	180		37 38	1000		20A/1P	#12
VAULT OUTLET	#12	20A/1P		180	39 40			20A/1P	
BLANK					41 42				
				15639		11937		PHASE A	27576
								PHASE B	25377



1 PARTIAL CLASSROOM ELECTRICAL POWER PLAN
SCALE: 1/4"=1'-0"

ELECTRICAL POWER PLAN E102 ADDENDUM#1

MSHP NEW FIRING RANGE

DATE : 10-10-2019
DESIGNED BY : MDS
DRAWN BY : MDS
CHECKED BY : JLD



3100 Brown Station Rd. Suite C
COLUMBIA, MO. 65202
(573) 875-0045 FAX 875-0046
E-MAIL jdove@moengineering.com

AD#1
E102

**Pre-Bid Meeting Attendance Sheet
New Outdoor Firing Range
Missouri State Highway Patrol
Jefferson City, Missouri**

**Project No. R1806-01
10/8/19 @ 10:00 AM**

Name & Title	Company Name Type of Contracting	MBE/WBE/ SDVE Status	Phone	E-Mail Address
Bryan Chinn Project Manager	State of Missouri OA-FMDC Owner's Representative	N/A	573-751-2440	Bryan.Chinn@oa.mo.gov
GREGG CRANE ELECTRICAL ENGINEER	The Schematic Connection	N/A	573 9994302	SCHEMCONNECT@CENTURYTEL.NET
SGT AARON GRIFFIN MSHP ACADEMY			573 751-9941	AARON.GRIFFIN@MSHP. DPS.MO.GOV
DARREN WOODS ESTIMATOR	Emery SAPP + SONS, INC		573-228-7079	darren.woods@emerysapp.com
Kelly Hammack OPERATIONS MANAGER	OA-FMDC	—	573 526-0711	Kelly.hammack@oa.mo.gov
SLY DAVIDS	OA/FMDC		573-526-6286	CALL.DAVIDS@OA.MO.GOV

**Pre-Bid Meeting Attendance Sheet
 New Outdoor Firing Range
 Missouri State Highway Patrol
 Jefferson City, Missouri**

**Project No. R1806-01
 10/8/19 @ 10:00 AM**

Name & Title	Company Name Type of Contracting	MBE/WBE/ SDVE Status	Phone	E-Mail Address
Charles Saunders AM	DK Power Elec, HVAC	WBE	573-721-3564	Charles.DKPower@gmail.com
KEVIN Smith OWNER	FLOWMASTER Construction GENERAL		573-721-6021	KSbugout@sbcglobal.net
Craig Linhardt	Meyer Electric		573-893-2335	Craig@meyerelectric.net
Mike Bungart	G.B.H Builders		573-257-1062	Mike@gbhbuiders.com
Bruce Dawson	GREDELL Engineering Resources, Inc.		573-659-9078	bruced@ger-inc.biz

**Pre-Bid Meeting Attendance Sheet
New Outdoor Firing Range
Missouri State Highway Patrol
Jefferson City, Missouri**

**Project No. R1806-01
10/8/19 @ 10:00 AM**

Name & Title	Company Name Type of Contracting	MBE/WBE/ SDVE Status	Phone	E-Mail Address
Larry Brandhorst	The Architects Alliance		573-636-5000	lbrandhorst@thearchitectsalliance.com
Scott Brooks	Donaldson Excavating		573-473-6618	donexc@ktis.net
DAVE Richardson	CL Richardson Const		573-657-9557	cd-richardson@hotmail.com
Dave Weber	Allstate Consultants LLC		573.875. 8799	dweber@ allstateconsultants.net
Kate Peiffer	u		u	kpeiffer@ allstateconsultants.net
Jim Dove	Midwest Eng & Design		875-0045	Dove@moengineering.com

**Pre-Bid Meeting Attendance Sheet
New Outdoor Firing Range
Missouri State Highway Patrol
Jefferson City, Missouri**

**Project No. R1806-01
10/8/19 @ 10:00 AM**

Name & Title	Company Name Type of Contracting	MBE/WBE/ SDVE Status	Phone	E-Mail Address
TRAVIS DOW	GREDELL Engineering Resources, Inc.	NA	(573) 659-9070	travisd@ger-inc.biz
BRENT ROOP	" "	" "	" "	brentr@ger-inc.biz
Chris Hart Range Consultant	Action Target		(801) 319-1314	chrish@actiontarget.com
TROY PINKERTON	SIRCAL	NO	573-694-9990	troy@sircalcontracting.com
VAUGHN PROST	PROST BUILDERS INC. G.C.	No cell	573-694-1095 off 573-635-0211	estimating@prostbuilders.com or vkpe@prostbuilders.com
CURTIS GOBEN	The Architects Alliance		573 636 5000	cgoben@thearchitects alliance.com

**Pre-Bid Meeting Attendance Sheet
New Outdoor Firing Range
Missouri State Highway Patrol
Jefferson City, Missouri**

**Project No. R1806-01
10/8/19 @ 10:00 AM**

Name & Title	Company Name Type of Contracting	MBE/WBE/ SDVE Status	Phone	E-Mail Address
Jason Morris owner	MORRIS ELECTRIC		573-690-3930	MORRIS ELECTRICAL SERVICES@gmail.com
Mike Robinett	Schneider Electric & JC		573-636-4101	mrobinett@secojc.com
Stacey Josey owner	J+J Enterprises caulking sub	WBE	573-592-0073	stacey@joseycaulk.com
Tracie Siebeneck Mech. eng.	Midwest Engineering & Design		573 8750045	tsiebeneck@moengineering.com
Guy Stroud Mech. eng	Midwest Engineering & Design		573 875 0045	guyestroud@gmail.com
Nate Moenkhauff . PM	Little Dixie Construction		573-449-7200	nmoenkhauff@ldconst.com

**Pre-Bid Meeting Attendance Sheet
 New Outdoor Firing Range
 Missouri State Highway Patrol
 Jefferson City, Missouri**

**Project No. R1806-01
 10/8/19 @ 10:00 AM**

Name & Title	Company Name Type of Contracting	MBE/WBE/ SDVE Status	Phone	E-Mail Address
James Case Case exc.	Case exc		573-619-6554	Caseexcavating & embargmail.com
Chris Schnieders	JEFF Schnieders Const.	WBE	573-636-7335	Chris@jsci.com
CATHY BROWN, DIRECTOR	MSHP, Fleet's Facilities Div.		573-751-2161	Catherine.brown@ mshp.dps.mo.gov
Joe Sanning	OAFMDc		573-644- 4371	Joe.Sanning@oa.mo.gov
Mike Toole	Reinhold Electric		314-604-2871	miketool.ce@gmail.com