

JOB SPECIAL PROVISIONS TABLE OF CONTENTS (ROADWAY)

(Job Special Provisions shall prevail over General Special Provisions whenever in conflict therewith.)

A.	General - Federal JSP-09-02L	1
B.	Contract Liquidated Damages JSP- 13-01D	1
C.	Work Zone Traffic Management JSP-02-06N	2
D.	Emergency Provisions and Incident Management	5
E.	Project Contact for Contractor/Bidder Questions JSP-96-05	5
F.	Supplemental Revisions JSP-18-01HH	6
G.	Liquidated Damages Specified	14
H.	Liquidated Damages for Winter Months JSP-04-17A	15
I.	Utilities JSP-93-26F	15
J.	Adjusting Existing Pull Boxes	19
K.	Quality Management NJSP-15-22	19
L.	DBE Prompt Payment Reporting JSP-24-05B	24
M.	ADA Compliance and Final Acceptance of Constructed Facilities JSP-10-01C	26
N.	ADA Material Testing Frequency Modifications JSP-23-01	27
O.	Truck Mounted Attenuator (TMA) for Stationary Activities JSP-23-04	28
P.	ADA Compliant Moveable Barricade	29
Q.	Linear Grading for ADA Facilities - SW	29
R.	Curb Ramps and Sidewalk – SW	31
S.	Signal Controller	31
T.	Uninterruptible Power Supply	32
U.	Signal Detection Disconnection	33
V.	Accessible Pedestrian Pushbutton Connectivity	33
W.	Contractor Furnished, Contractor Installed Radar Detection System	34
X.	Flashing Yellow Arrow Implementation Details	36
Y.	Retroreflective Back Plates	37
Z.	Disposition of Existing Signal, Lighting and Network Equipment	37
AA.	Remote Pushbutton Post	38
BB.	Removal and Delivery of Existing Signs JSP-12-01C	39
CC.	No Value Engineering Proposals for 2.5 Inch Perforated Square Steel Tube (PSST) Posts and Concrete Post Anchors for 2.5 Inch Perforated Square Steel Tube (PSST) Posts	39
DD.	Option of Accelerated PCCP Concrete on Paved Approaches	40
EE.	Protection Measures for Recharge Areas of Protected Species	40
FF.	Use of Right-of-Way, Permanent Easements, and Temporary Construction Easements	50
GG.	Access to Commercial Properties	50
HH.	Damage to Existing Pavement, Shoulders, Side Roads and Entrances	50
II.	Pavement Edge Treatment for Drop Off Conditions	51
JJ.	Contractor Furnished Surveying and Staking – SW	51
KK.	Modified Type A Gutter	52
LL.	Type A or Type B Curb and Gutter Construction	52
MM.	Modified Type S Curb	52
NN.	Steel Plate	53
OO.	Modified Paved Approach	53

Job No.: J8P3144

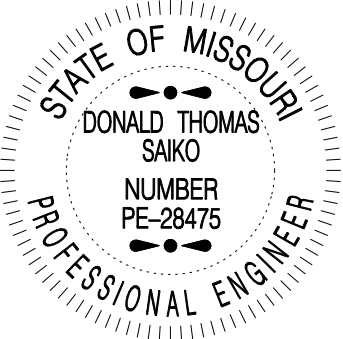
Route: LP44

County: Greene

PP.	Positive Drainage	54
QQ.	Sodding and Fertilizing	54
RR.	Seeding and Mulching Requirements JSP-25-03	55
SS.	Cooperation Between Contractors – SW	55
TT.	Lump Sum Temporary Traffic Control JSP-22-01B	56
UU.	Right-of-Way Clearance	58



REVISED

 THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.	MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 W. CAPITOL AVE. JEFFERSON CITY, MO 65102 Phone 1-888-275-6636
	GARVER 7509 NW Tiffany Springs Parkway STE 200 Kansas City, MO 64153 Certificate of Authority: 2008013090 Consultant Phone: 816-298-6465
	If a seal is present on this sheet, JSP's have been electronically sealed and dated.
	JOB NUMBER: J8P3144 GREENE COUNTY, MO DATE PREPARED: 06/11/2025
	ADDENDUM DATE: R001 August 7, 2025
Only the following items of the Job Special Provisions (Roadway) are authenticated by this seal: All	

JOB
SPECIAL PROVISION

A. General - Federal JSP-09-02L

1.0 Description. The Federal Government is participating in the cost of construction of this project. All applicable Federal laws, and the regulations made pursuant to such laws, shall be observed by the contractor, and the work will be subject to the inspection of the appropriate Federal Agency in the same manner as provided in Sec 105.10 of the Missouri Standard Specifications for Highway Construction with all revisions applicable to this bid and contract.

1.1 This contract requires payment of the prevailing hourly rate of wages for each craft or type of work required to execute the contract as determined by the Missouri Department of Labor and Industrial Relations and requires adherence to a schedule of minimum wages as determined by the United States Department of Labor. For work performed anywhere on this project, the contractor and the contractor's subcontractors shall pay the higher of these two applicable wage rates. State Wage Rates, Information on the Required Federal Aid Provisions, and the current Federal Wage Rates are available on the Missouri Department of Transportation web page at www.modot.org under "Doing Business with MoDOT", "Contractor Resources". Effective Wage Rates will be posted 10 days prior to the applicable bid opening. These supplemental bidding documents have important legal consequences. It shall be conclusively presumed that they are in the bidder's possession, and they have been reviewed and used by the bidder in the preparation of any bid submitted on this project.

1.2 The following documents are available on the Missouri Department of Transportation web page at www.modot.org under "Doing Business with MoDOT"; "Standards and Specifications". The effective version shall be determined by the letting date of the project.

General Provisions & Supplemental Specifications

Supplemental Plans to July 2025 Missouri Standard Plans
For Highway Construction

These supplemental bidding documents contain all current revisions to the published versions and have important legal consequences. It shall be conclusively presumed that they are in the bidder's possession, and they have been reviewed and used by the bidder in the preparation of any bid submitted on this project.

B. Contract Liquidated Damages JSP- 13-01D

1.0 Description. Liquidated Damages for failure or delay in completing the work on time for this contract shall be in accordance with Sec 108.8. The liquidated damages include separate amounts for road user costs and contract administrative costs incurred by the Commission.

2.0 Period of Performance. Prosecution of work is expected to begin on the date specified below in accordance with Sec 108.2. Regardless of when the work is begun on this contract, all work on all projects shall be completed on or before the date specified below. Completion by this date shall be in accordance with the requirements of Sec 108.7.1.

Notice to Proceed: October 6, 2025
Contract Completion Date: November 30, 2026

2.1 Calendar Days and Completion Dates. Completion of the project is required as specified herein. The count of calendar days will begin on the date the contractor starts any construction operations on the project.

Project	Calendar Days	Daily Road User Cost
J8P3144	263	\$5,400

3.0 Liquidated Damages for Contract Administrative Costs. Should the contractor fail to complete the work on or before the contract completion date specified in Section 2.0, or within the number of calendar days specified in Section 2.1, whichever occurs first, the contractor will be charged contract administrative liquidated damages in accordance with Sec 108.8 in the amount of **\$750** per calendar day for each calendar day, or partial day thereof, that the work is not fully completed. For projects in combination, these damages will be charged in full for failure to complete one or more projects within the specified contract completion date or calendar days.

4.0 Liquidated Damages for Road User Costs. Should the contractor fail to complete the work on or before the contract completion date specified in Section 2.0, or within the number of calendar days specified in Section 2.1, whichever occurs first, the contractor will be charged road user costs in accordance with Sec 108.8 in the amount specified in Section 2.1 for each calendar day, or partial day thereof, that the work is not fully completed. These damages are in addition to the contract administrative damages and any other damages as specified elsewhere in this contract.

C. Work Zone Traffic Management JSP-02-06N

1.0 Description. Work zone traffic management shall be in accordance with applicable portions of Division 100 and Division 600 of the Standard Specifications, and specifically as follows.

1.1 Maintaining Work Zones and Work Zone Reviews. The Work Zone Specialist (WZS) shall maintain work zones in accordance with Sec 616.3.3 and as further stated herein. The WZS shall coordinate and implement any changes approved by the engineer. The WZS shall ensure all traffic control devices are maintained in accordance with Sec 616, the work zone is operated within the hours specified by the engineer, and will not deviate from the specified hours without prior approval of the engineer. The WZS is responsible to manage work zone delay in accordance with these project provisions. When requested by the engineer, the WZS shall submit a weekly report that includes a review of work zone operations for the week. The report shall identify any problems encountered and corrective actions taken. Work zones are subject to unannounced inspections by the engineer and other departmental staff to corroborate the validity of the WZS's review and may require immediate corrective measures and/or additional work zone monitoring.

1.2 Work Zone Deficiencies. Failure to make corrections on time may result in the engineer suspending work. The suspension will be non-excusable and non-compensable regardless if road user costs are being charged for closures.

2.0 Traffic Management Schedule.

2.1 Traffic management schedules shall be submitted to the engineer for review prior to the start of work and prior to any revisions to the traffic management schedule. The traffic management schedule shall include the proposed traffic control measures, the hours traffic control will be in place, and work hours.

2.2 The traffic management schedule shall conform to the limitations specified in Sec 616 regarding lane closures, traffic shifts, road closures and other width, height and weight restrictions.

2.3 The engineer shall be notified as soon as practical of any postponement due to weather, material or other circumstances.

2.4 In order to ensure minimal traffic interference, the contractor shall schedule lane closures for the absolute minimum amount of time required to complete the work. Lanes shall not be closed until material is available for continuous construction and the contractor is prepared to diligently pursue the work until the closed lane is opened to traffic.

2.5 Traffic Congestion. The contractor shall, upon approval of the engineer, take proactive measures to reduce traffic congestion in the work zone. The contractor shall immediately implement appropriate mitigation strategies whenever traffic congestion reaches an excess of 10 minutes to prevent congestion from escalating to 15 minute or above threshold. If disruption of the traffic flow occurs and traffic is backed up in queues of 15 minute delays or longer, then the contractor shall immediately review the construction operations which contributed directly to disruption of the traffic flow and make adjustments to the operations to prevent the queues from reoccurring. Traffic delays may be monitored by physical presence on site or by utilizing real-time travel data through the work zone that generate text and/or email notifications where available. The engineer monitoring the work zone may also notify the contractor of delays that require prompt mitigation. The contractor may work with the engineer to determine what other alternative solutions or time periods would be acceptable.

2.5.1 Traffic Safety.

2.5.1.1 Recurring Congestion. Where traffic queues routinely extend to within 1000 feet of the ROAD WORK AHEAD, or similar, sign on a divided highway or to within 500 feet of the ROAD WORK AHEAD, or similar, sign on an undivided highway, the contractor shall extend the advance warning area, as approved by the engineer.

2.5.1.2 Non-Recurring Congestion. When traffic queues extend to within 1000 feet of the ROAD WORK AHEAD, or similar, sign on a divided highway or to within 500 feet of the ROAD WORK AHEAD, or similar, sign on an undivided highway infrequently, the contractor shall deploy a means of providing advance warning of the traffic congestion, as approved by the engineer. The warning location shall be no less than 1000 feet and no more than 0.5 mile in advance of the end of the traffic queue on divided highways and no less than 500 feet and no more than 0.5 mile in advance of the end of the traffic queue on undivided highways.

3.0 Work Hour Restrictions.

3.1 Except for emergency work, as determined by the engineer, and long term lane closures required by project phasing, all lanes shall be scheduled to be open to traffic during the five major holiday periods shown below, from 12:00 noon on the last working day preceding the holiday until

6:00 a.m. on the first working day subsequent to the holiday unless otherwise approved by the engineer.

Memorial Day
Labor Day
Thanksgiving
Christmas
New Year's Day

3.1.1 Independence Day. The lane restrictions specified in Section 3.1 shall also apply to Independence Day, except that the restricted periods shall be as follows:

When Independence Day falls on:	The Holiday is Observed on:	Halt Lane Closures beginning at:	Allow Lane Closures to resume at:
Sunday	Monday	Noon on Friday	6:00 a.m. on Tuesday
Monday	Monday	Noon on Friday	6:00 a.m. on Tuesday
Tuesday	Tuesday	Noon on Monday	6:00 a.m. on Wednesday
Wednesday	Wednesday	Noon on Tuesday	6:00 a.m. on Thursday
Thursday	Thursday	Noon on Wednesday	6:00 a.m. on Friday
Friday	Friday	Noon on Thursday	6:00 a.m. on Monday
Saturday	Friday	Noon on Thursday	6:00 a.m. on Monday

3.2 The contractor shall not perform any construction operation on the roadway, including the hauling of material within the project limits, during restricted periods, holiday periods or other special events specified in the contract documents.

3.3 Any work requiring a reduction in the number of through lanes of traffic shall be completed during nighttime hours. Nighttime hours shall be considered to be 7:00 p.m. to 7:00 a.m. for this project.

4.0 Detours and Lane Closures.

4.1 When a changeable message sign (CMS) is provided, the contractor shall use the CMS to notify motorists of future traffic disruption and possible traffic delays one week before traffic is shifted to a detour or prior to lane closures. The CMS shall be installed at a location as approved or directed by the engineer. If a CMS with Communication Interface is required, then the CMS shall be capable of communication prior to installation on right of way. All messages planned for use in the work zone shall be approved and authorized by the engineer or its designee prior to deployment. When permanent dynamic message signs (DMS) owned and operated by MoDOT are located near the project, they may also be used to provide warning and information for the work zone. Permanent DMS shall be operated by the TMC, and any messages planned for use on DMS shall be approved and authorized by the TMC at least 72 hours in advance of the work.

4.2 At least one lane of traffic in each direction shall be maintained at all times except for brief intervals of time required when the movement of the contractor's equipment will seriously hinder the safe movement of traffic. Periods during which the contractor will be allowed to interrupt traffic will be designated by the engineer.

5.0 Basis of Payment. No direct payment will be made to the contractor to recover the cost of equipment, labor, materials, or time required to fulfill the above provisions, unless specified

elsewhere in the contract document. All authorized changes in the traffic control plan shall be provided for as specified in Sec 616.

D. Emergency Provisions and Incident Management

1.0 The contractor shall have communication equipment on the construction site or immediate access to other communication systems to request assistance from the police or other emergency agencies for incident management. In case of traffic accidents or the need for police to direct or restore traffic flow through the job site, the contractor shall notify police or other emergency agencies immediately as needed. The Resident Engineer's office shall also be notified when the contractor requests emergency assistance.

Springfield Resident Engineer: Brad Griпка 417-895-6720 (Office) or 417-529-2469 (Cell)

2.0 In addition to the 911 emergency telephone number for ambulance, fire or police services, the following agencies may also be notified for accident or emergency situation within the project limits.

Missouri Highway Patrol: (417) 895-6868
Greene County Sheriff's Department: (417) 868-4040
City of Springfield Police Department: (417) 864-1810
City of Springfield Fire Department: (417) 874-2300
MoDOT Customer Service (417) 895-7600
Emergency Only Numbers
911
(*55 cell phone – Missouri Highway Patrol)
(417-864-1160 cell – MoDOT Incident Management Coordinator)

2.1 This list is not all inclusive. Notification of the need for wrecker or tow truck services will remain the responsibility of the appropriate police agency.

2.2 The contractor shall notify law enforcement and emergency agencies before the start of construction to request their cooperation and to provide coordination of services when emergencies arise during the construction at the project site. When the contractor completes this notification with law enforcement and emergency agencies, a report shall be furnished to the engineer on the status of incident management.

3.0 No direct pay will be made to the contractor to recover the cost of the communication equipment, labor, materials or time required to fulfill the above provisions.

E. Project Contact for Contractor/Bidder Questions JSP-96-05

All questions concerning this project during the bidding process shall be forwarded to the project contact listed below.

Kara Richart, Project Contact
MoDOT – Southwest District
3025 E Kearney St.

Springfield, MO 65803

Telephone Number: 417-895-7622

Email: kara.richart@modot.mo.gov

All questions concerning the bid document preparation can be directed to the Central Office – Design at (573) 751-2876.

F. Supplemental Revisions JSP-18-01HH

- Compliance with [2 CFR 200.216 – Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment](#).

The Missouri Highways and Transportation Commission shall not enter into a contract (or extend or renew a contract) using federal funds to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as substantial or as critical technology as part of any system where the video surveillance and telecommunications equipment was produced by Huawei Technologies Company, ZTE Corporation, Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

- Stormwater Compliance Requirements

1.0 Description. This provision requires the contractor to provide a Water Pollution Control Manager (WPCM) for any project that includes land disturbance on the project site and the total area of land disturbance, both on the project site, and all Off-site support areas, is one (1) acre or more. Regardless of the area of Off-site disturbance, if no land disturbance occurs on the project site, these provisions do not apply. When a WPCM is required, all sections within this provision shall be applicable, including assessment of specified Liquidated Damages for failure to correct Stormwater Deficiencies, as specified herein. This provision is in addition to any other stormwater, environmental, and land disturbance requirements specified elsewhere in the contract.

1.1 Definitions. The project site is defined as all areas designated on the plans, including temporary and permanent easements. The project site is equivalent to the “permitted site”, as defined in MoDOT’s State Operating Permit. An Off-site area is defined as any location off the project site the contractor utilizes for a dedicated project support function, such as, but not limited to, staging area, plant site, borrow area, or waste area.

1.2 Reporting of Off-Site Land Disturbance. If the project includes any planned land disturbance on the project site, prior to the start of work, the contractor shall submit a written report to the engineer that discloses all Off-site support areas where land disturbance is planned, the total acreage of anticipated land disturbance on those sites, and the land disturbance permit number(s). Upon request by the engineer, the contractor shall submit a copy of its land disturbance permit(s) for Off-site locations. Based on the total acreage of land disturbance, both on and Off-site, the engineer shall determine if these Stormwater Compliance Requirements shall apply. The Contractor shall immediately report any changes to the planned area of Off-site land disturbance. The Contractor is responsible for obtaining its own separate land disturbance permit for Off-site areas.

2.0 Water Pollution Control Manager (WPCM). The Contractor shall designate a competent person to serve as the Water Pollution Control Manager (WPCM) for projects meeting the description in Section 1.0. The Contractor shall ensure the WPCM completes all duties listed in Section 2.1.

2.1 Duties of the WPCM:

- (a) Be familiar with the stormwater requirements including the current MoDOT State Operating Permit for construction stormwater discharges/land disturbance activities; MoDOT's statewide Stormwater Pollution Prevention Plan (SWPPP); the Corps of Engineers Section 404 Permit, when applicable; the project specific SWPPP, the Project's Erosion & Sediment Control Plan; all applicable special provisions, specifications, and standard drawings; and this provision;
- (b) Successfully complete the MoDOT Stormwater Training Course within the last 4 years. The MoDOT Stormwater Training is a free online course available at MoDOT.org;
- (c) Attend the Pre-Activity Meeting for Grading and Land Disturbance and all subsequent Weekly Meetings in which grading activities are discussed;
- (d) Oversee and ensure all work is performed in accordance with the Project-specific SWPPP and all updates thereto, or as designated by the engineer;
- (e) Review the project site for compliance with the Project SWPPP, as needed, from the start of any grading operations until final stabilization is achieved, and take necessary actions to correct any known deficiencies to prevent pollution of the waters of the state or adjacent property owners prior to the engineer's weekly inspections;
- (f) Review and acknowledge receipt of each MoDOT Inspection Report (Land Disturbance Inspection Record) for the Project within forty eight (48) hours of receiving the report and ensure that all Stormwater Deficiencies noted on the report are corrected as soon as possible, but no later than stated in Section 5.0.

3.0 Pre-Activity Meeting for Grading/Land Disturbance and Required Hold Point. A Pre-Activity meeting for grading/land disturbance shall be held prior to the start of any land disturbance operations. No land disturbance operations shall commence prior to the Pre-Activity meeting except work necessary to install perimeter controls and entrances. Discussion items at the pre-activity meeting shall include a review of the Project SWPPP, the planned order of grading operations, proposed areas of initial disturbance, identification of all necessary BMPs that shall be installed prior to commencement of grading operations, and any issues relating to compliance with the Stormwater requirements that could arise in the course of construction activity at the project.

3.1 Hold Point. Following the pre-activity meeting for grading/land disturbance and subsequent installation of the initial BMPs identified at the pre-activity meeting, a Hold Point shall occur prior to the start of any land disturbance operations to allow the engineer and WPCM the time needed to perform an on-site review of the installation of the BMPs to ensure compliance with the SWPPP is met. Land disturbance operations shall not begin until authorization is given by the engineer.

4.0 Inspection Reports. Weekly and post run-off inspections will be performed by the engineer and each Inspection Report (Land Disturbance Inspection Record) will be entered into a web-based Stormwater Compliance database. The WPCM will be granted access to this database and shall promptly review all reports, including any noted deficiencies, and shall acknowledge receipt of the report as required in Section 2.1 (f.).

5.0 Stormwater Deficiency Corrections. All stormwater deficiencies identified in the Inspection Report shall be corrected by the contractor within 7 days of the inspection date or any extended period granted by the engineer when weather or field conditions prohibit the corrective work. If the contractor does not initiate corrective measures within 5 calendar days of the inspection date or any extended period granted by the engineer, all work shall cease on the project except for work to correct these deficiencies, unless otherwise allowed by the engineer. All impact costs related to this halting of work, including, but not limited to stand-by time for equipment, shall be borne by the Contractor. Work shall not resume until the engineer approves the corrective work.

5.1 Liquidated Damages. If the Contractor fails to complete the correction of all Stormwater Deficiencies listed on the MoDOT Inspection Report within the specified time limit, the Commission will be damaged in various ways, including but not limited to, potential liability, required mitigation, environmental clean-up, fines, and penalties. These damages are not reasonably capable of being computed or quantified. Therefore, the contractor will be charged with liquidated damages specified in the amount of \$2,000 per day for failure to correct one or more of the Stormwater Deficiencies listed on the Inspection Report within the specified time limit. In addition to the stipulated damages, the stoppage of work shall remain in effect until all corrections are complete.

6.0 Basis of Payment. No direct payment will be made for compliance with this provision.

- **Delete Sec 106.9 in its entirety and substitute the following:**

106.9 Buy America Requirements.

Buy America Requirements are waived if the total amount of Federal financial assistance applied to the project, through awards or subawards, is below \$500,000.

106.9.1 Buy America Requirements for Iron and Steel.

On all federal-aid projects, the contractor's attention is directed to Title 23 CFR 635.410 *Buy America Requirements*. Where steel or iron products are to be permanently incorporated into the contract work, steel and iron material shall be manufactured, from the initial melting stage through the application of coatings, in the USA except for "minimal use" as described herein. Furthermore, any coating process of the steel or iron shall be performed in the USA. Under a general waiver from FHWA the use of pig iron and processed, pelletized, and reduced iron ore manufactured outside of the USA will be permitted in the domestic manufacturing process for steel or iron material.

106.9.1.1 Buy America Requirements for Iron and Steel for Manufactured items.

A manufactured item will be considered iron and steel if it is "predominantly" iron or steel. Predominantly iron or steel means that the cost of iron or steel content of a product is more than 50 percent of the total cost of all its components.

106.9.2 Any sources other than the USA as defined will be considered foreign. The required domestic manufacturing process shall include formation of ingots and any subsequent process. Coatings shall include any surface finish that protects or adds value to the product.

106.9.3 “Minimal use” of foreign steel, iron or coating processes will be permitted, provided the cost of such products does not exceed 1/10 of one percent (0.1 percent) of the total contract cost or \$2,500.00, whichever is greater. If foreign steel, iron, or coating processes are used, invoices to document the cost of the foreign portion, as delivered to the project, shall be provided and the engineer’s written approval obtained prior to placing the material in any work.

106.9.4 Buy America requirements include a step certification for all fabrication processes of all steel or iron materials that are accepted per Sec 1000. The AASHTO Product Evaluation and Audit Solutions compliance program verifies that all steel and iron products fabrication processes conform to 23 CFR 635.410 Buy America Requirements and is an acceptable standard per 23 CFR 635.410(d). AASHTO Product Evaluation and Audit Solutions compliant suppliers will not be required to submit step certification documentation with the shipment for some selected steel and iron materials. The AASHTO Product Evaluation and Audit Solutions compliant supplier shall maintain the step certification documentation on file and shall provide this documentation to the engineer upon request.

106.9.4.1 Items designated as Category 1 will consist of steel girders, piling, and reinforcing steel installed on site. Category 1 items require supporting documentation prior to incorporation into the project showing all steps of manufacturing, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements. This includes the Mill Test Report from the original producing steel mill and certifications documenting the manufacturing process for all subsequent fabrication, including coatings. The certification shall include language that certifies the following. That all steel and iron materials permanently incorporated in this project was procured and processed domestically and all manufacturing processes, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410.

106.9.4.2 Items designated as Category 2 will include all other steel or iron products not in Category 1 and permanently incorporated in the project. Category 2 items shall consist of, but not be limited to items such as fencing, guardrail, signing, lighting and signal supports. The prime contractor is required to submit a material of origin form certification prior to incorporation into the project from the fabricator for each item that the product is domestic. The Certificate of Materials Origin form ([link to certificate form](#)) from the fabricator must show all steps of manufacturing, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements and be signed by a fabricator representative. The engineer reserves the right to request additional information and documentation to verify that all Buy America requirements have been satisfied. These documents shall be submitted upon request by the engineer and retained for a period of 3 years after the last reimbursement of the material.

106.9.4.3 Any minor miscellaneous steel or iron items that are not included in the materials specifications shall be certified by the prime contractor as being procured domestically. Examples of these items would be bolts for sign posts, anchorage inserts, etc. The certification shall read “I certify that all steel and iron materials permanently incorporated in this project during all manufacturing processes, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements procured and processed domestically in accordance with CFR Title 23 Section 635.410 Buy America

Requirements. Any foreign steel used was submitted and accepted under minor usage". The certification shall be signed by an authorized representative of the prime contractor.

106.9.5 When permitted in the contract, alternate bids may be submitted for foreign steel and iron products. The award of the contract when alternate bids are permitted will be based on the lowest total bid of the contract based on furnishing domestic steel or iron products or 125 percent of the lowest total bid based on furnishing foreign steel or iron products. If foreign steel or iron products are awarded in the contract, domestic steel or iron products may be used; however, payment will be at the contract unit price for foreign steel or iron products.

106.9.6 Buy America Requirements for Construction Materials other than iron and steel materials. Construction materials means articles, materials, or supplies that consist of only one of the items listed. Minor additions of articles, materials, supplies, or binding agents to a construction material do not change the categorization of the construction material. Upon request by the engineer, the contractor shall submit a domestic certification for all construction materials listed that are incorporated into the project.

- (a) Non-ferrous metals
- (b) Plastic and Polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables)
- (c) Glass (including optic glass)
- (d) Fiber optic cable (including drop cable)
- (e) Optical fiber
- (f) Lumber
- (g) Engineered wood
- (h) Drywall

106.9.6.1 Minimal Use allowance for Construction Materials other than iron or steel.

"The total value of the non-compliant products is no more than the lesser of \$1,000,000 or 5% of total applicable costs for the project." The contractor shall submit to the engineer any non-domestic materials and their total material cost to the engineer. The contractor and the engineer will both track these totals to assure that the minimal usage allowance is not exceeded.

106.9.7 Buy America Requirements for Manufactured Products.

Manufactured products means:

- (a) Articles, materials, or supplies that have been:
 - (i) Processed into a specific form and shape; or
 - (ii) Combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies.
- (b) If an item is classified as an iron or steel product, a construction material, or a section 70917(c) material under § 184.4(e) and the definitions set forth in this section, then it is not a manufactured product. However, an article, material, or supply classified as a manufactured product under § 184.4(e) and paragraph (1) of this definition may include components that are construction materials, iron or steel products, or section 70917(c) materials.

106.9.7.1 Manufactured products are exempt from Buy America requirements. To qualify as a manufactured product, items that consist of two or more of the listed construction materials that have been combined together through a manufacturing process, and items that include at least one of the listed materials combined with a material that is not listed through a manufacturing

process, should be treated as manufactured products, rather than as construction materials.

106.9.7.2 Manufactured items are covered under a general waiver to exclude them from Buy America Requirements. To qualify for the exemption the components must comprise of 55% of the value of materials in the item. The final assembly must also be performed domestically.

- Third-Party Test Waiver for Concrete Aggregate

1.0 Description. Third party tests may be allowed for determining the durability factor for concrete pavement and concrete masonry aggregate.

2.0 Material. All aggregate for concrete shall be in accordance with Sec 1005.

2.1 MoDOT personnel shall be present at the time of sampling at the quarry. The aggregate sample shall be placed in an approved tamper-evident container (provided by the quarry) for shipment to the third-party testing facility.

2.2 AASHTO T 161 Method B Resistance of Concrete to Rapid Freezing and Thawing, shall be used to determine the aggregate durability factor. All concrete beams for testing shall be 3-inch wide by 4-inch deep by 16-inch long or 3.5-inch wide by 4.5-inch deep by 16-inch long. All beams for testing shall receive a 35-day wet cure fully immersed in saturated lime water prior to initiating the testing process.

2.3 Concrete test beams shall be made using a MoDOT approved concrete pavement mix design.

3.0 Testing Facility Requirements. All third-party test facilities shall meet the requirements outlined in this provision.

3.1 The testing facility shall be AASHTO accredited.

3.1.1 For tests ran after January 1, 2025, accreditation documentation shall be on file with the Construction and Materials Division prior to any tests being performed.

3.1.2 Construction and Materials Division may consider tests completed prior to January 1, 2025, to be acceptable if all sections of this provision are met, with the exception of 3.1.1. Accreditation documentation shall be provided with the test results for tests completed prior to January 1, 2025. No tests completed prior to September 1, 2024, will be accepted.

3.2 The testing facility shall provide their testing process, list of equipment, equipment calibration documentation, and testing certifications or qualifications of technicians performing the AASHTO T 161 Procedure B tests. The testing facility shall provide details on their freezing and thawing apparatus including the time and temperature profile of their freeze-thaw chamber. The profile shall include the temperature set points throughout the entirety of the freeze-thaw cycle. The profile shall show the cycle time at which the apparatus drains/fills with water and the cycle time at which the apparatus begins cooling the specimens.

3.3 Results, no more than five years old, from the third-party test facility shall compare within ± 2.0 percent of an independent test from another AASHTO accredited test facility or with MoDOT test records, in order to be approved for use (e.g. test facility results in a durability factor of 79, MoDOT's recent durability test factor is 81; this compared within +2 percent). The independent

testing facility shall be in accordance with this provision. The comparison test can be from a different sample of the same ledge combination.

3.4 When there is a dispute between the third party durability test results and MoDOT durability test results, the MoDOT durability test result shall govern.

3.5 Test results shall be submitted to MoDOT's Construction and Materials division electronically for final approval. Test results shall include raw data for all measurements of relative dynamic modulus of elasticity and percent length change for each individual concrete specimen. Raw data shall include initial measurements made at zero cycles and every subsequent measurement of concrete specimens. Raw data shall include the cycle count and date each measurement was taken. Test results shall also include properties of the concrete mixture as required by AASHTO T 161. This shall include the gradation of the coarse aggregate sample. If AASHTO T 152 is used to measure fresh air content, then the aggregate correction factor for the mix determined in accordance with AASHTO T 152 shall also be included.

4.0 Method of Measurement. There is no method of measurement for this provision. The testing requirements and number of specimens shall be in accordance with AASHTO T 161 Procedure B.

5.0 Basis of Payment. No direct payment will be made to the contractor or quarry to recover the cost of aggregate samples, sample shipments, testing equipment, labor to prepare samples or test samples, or developing the durability report.

- ***Delete paragraph 15.0 of the General Provision Disadvantaged Business Enterprise (DBE) Program Requirements and substitute the following:***

15.0 Bidder's List Quote Summary. MoDOT is a recipient of federal funds and is required by 49 CFR 26.11 to provide data about its DBE program. All bidders who seek to work on federally assisted contracts must submit data about all DBE and non-DBEs in accordance with Sec 102.7.9. MoDOT will not compare the submitted Bidder's List Quote Summary to any other documents or submittals, pre or post award. All information will be used by MoDOT in accordance with 49 CFR 26.11 for reporting to USDOT and to aid in overall DBE goal setting.

- ***Add Sec 102.7.9 to include the following:***

102.7.9 Bidder's List Quote Summary. Each bidder shall submit with each bid a summary of all subcontractors, material suppliers, and service providers (e.g. hauling) considered on federally funded projects pursuant to 49 CFR 26.11. The bidder will provide the firm's name, the corresponding North American Industry Classification System (NAICS) code(s) the firm(s) were considered for, and whether or not they were used in the bid. The information submitted should be the most complete information available at the time of bid. The information shall be disclosed on the Bidder's List Quote Summary form provided in the bidding documents and submitted in accordance with Sec 102.10. Failure to disclose this information may result in a bid being declared irregular.

- ***Delete Sec 102.1 - 102.2.5 and substitute the following:***

102.1 Notice of Bid Opening. After the date is fixed for the receipt of bids, the notice of bid opening will be posted on MoDOT's website and published as required by law. The notice of bid opening will contain a description of the proposed work, instructions and information to the potential bidder regarding bid forms, plans, specifications, combination bids and the reservation of the right of the Commission to reject any and all bids.

102.2 Contractor Questionnaire. Each prospective bidder, including a joint venture, shall file a contractor questionnaire on the form furnished by the Commission, which is available on MoDOT's website. The contractor questionnaire shall be furnished to the Commission as a separate document apart from any other document submitted. A bid will not be opened and read unless a fully responsive contractor questionnaire is on file with the Commission at least seven days prior to the time set for the opening of the bids. A new contractor questionnaire shall be filed as described in **Title 7 CSR 10-15.010**, except the Commission reserves the right to request a contractor questionnaire from any contractor as of any date if the Commission has shown reason to believe that the contractor's experience data may have changed from that shown on the questionnaire on file. This document shall include a record of the bidder's experience data. The Commission will use this information as an aid to determine in each instance the lowest responsible bidder and nothing contained herein shall be construed as depriving the Commission of the Commission's discretion in the matter of determining the lowest responsible bidder.

102.2.1 At any time prior to award, as a condition of award and for a period of three years after the date of final acceptance, the Commission may request true copies of the bidder's financial data, including the bidder's balance sheet, profit and loss statement and similar financial data, as of the close of the bidder's most recent fiscal year prior to submission of the bid, and for each fiscal year between the contract award and final acceptance of the contract work. Unless specified otherwise by the Commission, financial data shall be prepared by an accountant and audited financial data shall be provided if it is available to the bidder for the fiscal period requested. A bidder who has not closed the first fiscal year prior to the date of the request shall supply the last periodic balance sheet, profit and loss statement and similar data.

102.2.2 Each prospective bidder shall sign the contractor questionnaire acknowledging that such bidder will fully comply with all written requests by the Missouri Department of Labor and Industrial Relations, Division of Labor Standards, to provide information for the purpose of establishing a prevailing wage.

102.2.3 The prospective bidder doing business in the State of Missouri shall submit the charter number with the contractor questionnaire. The entity must be in good standing on file with the Corporation Division of the Missouri Secretary of State's Office to be approved and successfully awarded a bid. Each corporation that is a party to a joint venture shall submit the same required report with the corporation's joint venture contractor questionnaire.

102.2.4 All prospective bidders who are corporations organized in states other than Missouri or countries other than the USA shall furnish, at the prospective bidder's cost, a certified copy of a current certificate of authority to do business in Missouri, with said certificate to remain on file with the Commission. Such a certified copy may be secured from the corporation supervisor in the Office of the Secretary of State, Jefferson City, Missouri. The prospective bidder agrees to cause the prospective bidder's authority to do business as a foreign corporation to be continued and extended throughout the life of any contract awarded and until all claims thereon and thereunder shall have been finally settled. All prospective bidders shall have a valid certificate of authority to transact business in Missouri at the time of bid opening as a condition of responsiveness.

- **Delete Sec 108.13.1 and substitute the following:**

108.13.1 The acts, omissions and liabilities of persons or firms affiliated with the contractor or of persons that are principals of the contractor, are those of the contractor, unless the circumstances clearly negate that conclusion. Persons or firms are "affiliates" of each other if, directly or indirectly, either one controls or has the power to control the other or a third person controls or has the power to control both. Examples of control include, but are not limited to: interlocking management or ownership, identity of interests among family members, shared facilities and equipment, common use of employees on projects or a new business entity organized following the determination of ineligibility or non-responsibility of a person or firm which has the same or similar management, ownership or principal employees as the ineligible person. A "principal" will be defined as an officer, director, owner, partner or other natural person within a firm with primary management, supervisory or contracting responsibilities, including participating in, or formulating, bids.

G. Liquidated Damages Specified

1.0 Description. If any lanes of Route LP44 (Chestnut Expressway) or US65 southbound on-ramp are not open to traffic by 7:00 a.m. each day following a nighttime lane closure, the Commission, the traveling public, and state and local police and governmental authorities will be damaged in various ways, including but not limited to, increased construction administration cost, potential liability, traffic and traffic flow regulation cost, traffic congestion and motorist delay, with its resulting cost to the traveling public. These damages are not reasonably capable of being computed or quantified. Therefore, the contractor will be charged with liquidated damages specified according to the following schedule.

- (a) If any lane or lanes of Route LP44 (Chestnut Expressway) or US65 southbound on-ramp are closed for any time between 7:00 a.m. to 8:00 a.m., the contractor shall be charged in the amount of \$800 for that hour or any fraction of that hour.
- (b) If any lane or lanes of Route LP44 (Chestnut Expressway) or US65 southbound on-ramp are closed for any time between 8:00 a.m. to 9:00 a.m., the contractor shall be charged in the amount of \$1,200 for that hour or any fraction of that hour.
- (c) If any lane or lanes of Route LP44 (Chestnut Expressway) or US65 southbound on-ramp are closed for any time between 9:00 a.m. to 10:00 a.m., the contractor shall be charged in the amount of \$1,000 for that hour or any fraction of that hour.
- (d) If any lane or lanes of Route LP44 (Chestnut Expressway) or US65 southbound on-ramp are closed for any time after 10:00 a.m., the contractor shall be charged in the amount of \$1,400 for the remaining day not to exceed \$4,400 for each full day or fraction of a day that all lanes are not open to traffic.

1.1 All liquidated damages specified are in excess of the limitation as specified elsewhere in this special provision. It shall be the responsibility of the engineer to determine the quantity of excess closure time.

1.2 The said liquidated damages specified will be assessed regardless of whether it would otherwise be charged as liquidated damages under the Missouri Standard Specification for Highway Construction, as amended elsewhere in this contract.

H. Liquidated Damages for Winter Months JSP-04-17A

Delete Sec 108.8.1.3 (a)

Liquidated damages for failure to complete the work on time shall not be waived from December 15 to March 15, both dates inclusive.

I. Utilities JSP-93-26F

1.0 For informational purposes only, the following is a list of names, addresses, and telephone numbers of the known utility companies in the area of the construction work for this improvement:

<u>Utility Name</u>	<u>Known Required Adjustment</u>	<u>Type</u>
AT&T – Distribution Scott Hall 600 St. Louis, Room 630 Springfield, MO 65806 Phone: 417-849-8265 Email: sh4949@att.com	No	Communications
Brightspeed Nick Bridges Phone: 479-238-5515 Email: nick.bridges@brightspeed.com	No	Communications
City Utilities of Springfield - Electric T&D Rick Herchenroeder 301 E. Central St. Springfield, MO 65801 Phone: 417-874-8291 Email: rick.herchenroeder@cityutilities.net	Yes (see 1.4 & 2.0)	Power
City Utilities of Springfield - Gas & Water Ryan Jeppson 301 E. Central St. Springfield, MO 65801 Phone: 417-831-8643 Email: ryan.jeppson@cityutilities.net	Yes (see 1.5, 1.6, & 3.0)	Gas & Water
City Utilities of Springfield - SpringNet Eric Cochran 301 E Central St. Springfield, MO 65801	No	Communications

Phone: 417-831-8612
Email: ecochran@springnet.net

MoDOT – Signals, Lighting, ITS
Joe Dotson
2455 N. Mayfair Ave.
Springfield, MO 65803
Phone: 417-733-0664
Email: joseph.dotson@modot.mo.gov

Yes
(see 4.0)

Signals, Lighting, ITS

City of Springfield – Traffic
Brian Doubrava
1107 W. Chestnut Expressway
Springfield, MO 65802
Phone: 417-864-1163
Email: bdoubrava@springfieldmo.gov

No

Signals/ITS

City of Springfield – Clean Water Services
Matt Taylor
840 Boonville Ave.
Springfield, MO 65802
Phone: 417-864-1934
Email: mtaylor@springfieldmo.gov

No

Sewer

Bluebird
David Frazier
800 NW Chipman Rd., Suite 5750
Lee's Summit, MO 64063
Phone: 816-807-0145
Email: david.frazier@bluebirdnetwork.com

No
(see 5.0)

Communications

Lumen
Kimberly Singleton, Engineering Manager
Phone: 419-631-4683
Email: kimberly.singleton@lumen.com
Olsson (Lumen's contract engineer)
Sandra Munoz-Cabuya
7301 W. 133rd Street, Suite 200
Overland Park, KS 66213
Phone: 913-748-2646
Email: smunozcabuya@olsson.com

No

Communications

Mediacom
Kyle Keller
1533 S. Enterprise Ave.
Springfield, MO 65804
Phone: 417-496-8577
Email: kkeller@mediacomcc.com

No

Communications

1.1 Disclaimer and Verification of Utility Information. The existence and approximate location of utility facilities known to exist, as shown on the plans, are based upon the best information available to the Commission at this time. This information is provided by the Commission "as-is" and the Commission expressly disclaims any representation or warranty as to the completeness, accuracy, or suitability of the information for any use. Reliance upon this information is done at the risk and peril of the user, and the Commission shall not be liable for any damages that may arise from any error in the information. It is, therefore, the responsibility of the contractor to verify the above listing information indicating existence, location and status of any facility. Such verification includes direct contact with the listed utilities.

1.2 Contractor Verification of Signal Bases. The proposed roadway improvements include the installation of five new signal bases. The Contractor shall field verify that the proposed traffic signal base locations will not need to be shifted to avoid utilities prior to ordering the traffic signal equipment. The Contractor shall be proactive in the discovery of potential utility conflicts. The Contractor shall directly contact the utility companies to verify the location of facilities, and coordinate with the utility company and the Engineer to determine if a conflict will be encountered due to the work proposed in the contract. If a conflict is anticipated, the Contractor shall perform test holes to field verify no conflicts exist with the proposed traffic signal base locations. If a conflict is determined, the Contractor shall shift the signal base location, as approved by the Engineer. The Contractor shall coordinate construction activities with the utilities and take measures to ensure the integrity of the existing facilities are not disturbed during construction. The contractor will be compensated for the additional mast arm length if required. The Contractor shall not order materials until measurements are field verified. No direct payment will be made to the contractor to recover the cost of equipment, labor, materials, incidentals, or time required to fulfill the above provisions, unless specified elsewhere in the contract document.

1.3 Overhead Primary Electric. Various utilities listed above have overhead lines within the project limits in the vicinity of the Contractor's work. The contractor shall comply with the Missouri Overhead Powerline Safety Act; this statute makes it illegal for an unauthorized person or entity to work or bring equipment within 10 feet of a high voltage line that has not been covered or de-energized. The purpose of the Missouri Overhead Powerline Safety Act is to ensure the safety of the public when working around overhead power lines. If the contractor needs line cover when working near a primary powerline, then the contractor shall notify that utility owner a minimum of 14 days in advance of needing line cover. Most power providers perform this service free of charge for municipally driven projects. The contractor shall be responsible for any damage to the overhead lines caused by their operations. There will be no direct payment for compliance to this specification.

1.4 Coordination with City Utilities Electric. As part of the roadway improvements, the contractor will be required to provide and install new whiteway lighting conduit and bases as per City Utilities drawing number 94295 included as part of the roadway plans. The roadway contractor will be required to pick up any CU provided items from their stockroom located at 742 N. Belcrest and transport these items to the site for installation. The contractor shall coordinate construction activities with CU's Contract Inspector, Corey Bryan (417-450-7347). All work performed for the future ownership/maintenance of City Utilities shall conform to their standard drawing located at: <https://www.cityutilities.net/business/construction/> All costs required for compliance with this special provision shall be included in the contractor's submitted unit prices for CU lighting items included in the roadway contract.

1.5 Coordination with City Utilities Gas. There are a few existing gas valves along the Chestnut Expressway corridor that may require an elevation adjustment on the cover to meet the

proposed grade. The contractor shall be responsible for coordinating the necessary elevation adjustments with Rudy Schroeder (417-225-2250) in CU Gas operations. City Utilities has requested a minimum of two weeks advance notice for scheduling purposes. The contractor shall be responsible for removing any concrete around the existing valve and establish the necessary height adjustment for CU crews. There will be no direct payment for compliance to this specification.

1.6 Coordination with City Utilities Water. There are a few existing water valves and water meters along the Chestnut Expressway corridor that may require an elevation adjustment on the cover to meet the proposed grade. The contractor shall be responsible for coordinating the necessary elevation adjustments with Jeff Bolin (417-619-3475) in CU Water operations. City Utilities has requested a minimum of two weeks advance notice for scheduling purposes. The contractor will be responsible for removing any concrete around the existing valve/meter and establish the necessary height adjustment for CU crews. There will be no direct payment for compliance to this specification.

2.0 City Utilities – Electric. City Utilities has impacts to existing whiteway lighting at the Grant Street intersection and at the Jefferson Street intersection. At Grant Street, the impacts are wood poles. CU crews will perform in-line shifts on the impacted poles during construction. The roadway contractor will be required to provide survey staking for CU crews at the two new pole locations. At Jefferson Street, CU has impacts to one pole in the southeast quadrant and one pole in the southwest quadrant. Both impacted poles have underground feeds. The roadway contractor will be responsible for providing and installing the new lighting foundations and buried conduit runs as shown on City Utilities drawing number 94295 included within the bidding documents. After these items have been installed by the contractor and accepted by City Utilities, CU crews will provide and install the wire, poles, and luminaires.

3.0 City Utilities – Gas & Water. City Utilities has an existing 4" steel gas main in conflict with proposed signal base 3 in the northwest quadrant of Grant Street. CU will be using PE material for this main relocation. Because the relocation work will impact existing sidewalk and roadway pavement, City Utilities intends to relocate the gas main during construction. CU anticipates the relocation work could take up to 4 weeks to complete. The roadway contractor shall be responsible for coordinating their proposed construction schedule at Grant Street with City Utilities to allow time for them to complete their gas relocations ahead of the roadway work. The roadway contractor will also be responsible for any necessary construction staking for CU's crews to relocate the main. There will be no direct payment for compliance to this specification.

4.0 MoDOT Signals, Lighting & ITS. The proposed roadway improvements involve signal modifications at eight locations within the project limits. The modifications range in scope from simple head replacement to full signal rebuild. In addition to the signal work, the contractor will be required to modify several MoDOT owned signal and lighting pullboxes. The pullbox modifications range from elevation adjustment to meet ADA compliance to full pullbox relocation. The contractor shall perform the work as shown in the plans and job special provisions. All costs associated with performing this work shall be completely covered in the contractor's submitted bid prices for the signal items included in the roadway contract.

5.0 Bluebird. Bluebird has an existing buried 432FO running parallel to Chestnut Expressway along parcels 2, 4, and 7. This fiber was installed as part of Bluebird's initial backbone buildout in Springfield which has been found to be shallow at multiple locations. The roadway contractor shall exercise caution when performing the driveway modifications as shown in the plans. The contractor is advised to limit the depth of any saw cutting operation to the depth of material being

removed. Any damage to Bluebird's facilities caused by the contractor's operations shall be repaired and/or replaced at the direction of Bluebird solely at the expense of the roadway contractor.

J. Adjusting Existing Pull Boxes

1.0 Description. This work shall consist of adjusting existing MoDOT pull boxes (signal, lighting, ITS, etc.) to meet Americans with Disabilities Act (ADA) requirements.

2.0 Construction Requirements. The contractor shall adjust existing MoDOT pull boxes at sidewalk and ramp locations as shown on the plans. All work shall be in accordance with Sec 902.

2.1 The contractor shall exercise reasonable care during the adjustment of the pull boxes. All pull boxes damaged due to contractor activities shall be replaced in kind as approved by the engineer at the contractor's expense.

3.0 Method of Measurement. Measurement for adjusting existing pull boxes will be made per each.

4.0 Basis of Payment. The accepted adjustments will be paid for at the contract unit price for Pay Item No. 902-99.02 Adjusting Pull Box, per each. Payment will be considered full compensation for all labor, equipment, material, or special construction methods to complete the described work.

K. Quality Management NJSP-15-22

1.0 Quality Management. The contractor shall provide Quality Management as specified herein to ensure the project work and materials meets or exceeds all contract requirements.

1.1 The contractor shall provide Quality Control (QC) of the work and material, as specified herein, to ensure all work and material is in compliance with contract requirements. QC staff shall perform and document all inspection and testing. The QC inspectors and testers may be employed by the contractor, sub-contractor, or a qualified professional service provided by the contractor.

1.2 The engineer will provide Quality Assurance (QA) inspection. The role of QA is to verify the performance of QC and provide confidence that the product will satisfy given requirements for quality.

1.3 The contractor shall designate a person to serve as the project Quality Manager (QM). The QM shall be knowledgeable of standard testing and inspection procedures for highway and bridge construction, including a thorough understanding of the Missouri Standard Specifications. The QM shall be responsible for the implementation and execution of the Quality Management Plan and shall oversee all QC responsibilities, including all sub-contract work. The QM shall be the primary point of contact for all quality related issues and responsibilities, and shall ensure qualified QC technicians and inspectors are assigned to all work activities. The QM should be separate from the manager of the work activities to effectively manage a QC program.

1.4 Any QC personnel determined in sole discretion of the engineer to be incompetent, derelict in their duties, or dishonest, shall at a minimum be removed from the project. Further investigation will follow with a stop work notification to be issued until the contractor submits a corrective action report that meets the approval of the engineer.

2.0 Quality Management Plan. The contractor shall develop, implement and maintain a Quality Management Plan (QMP) that will ensure the project quality meets or exceeds all contract requirements, and provides a record for acceptance of the work and material. A sample QMP, which shows minimum requirements, is provided on the MoDOT website at: www.modot.org/quality.

2.1 The QMP shall address all QC inspection and testing requirements of the work as described herein. A draft QMP shall be submitted to the Resident Engineer for review at least two weeks prior to the pre-construction conference. An approved QMP is required at least two weeks prior to the start of work, unless otherwise allowed by the engineer. Physical work on the project shall not begin prior to approval of the QMP by the engineer.

2.2 The approved QMP shall be considered a contract document and any revisions to the QMP will require approval from the engineer.

2.3 The following items shall be included in the Quality Management Plan:

- a) Organizational structure of the contractor's project management, production staff, and QC staff, specific to this project.
- b) Name, qualifications and job duties of the Quality Manager.
- c) A list of all certified QC testers who will perform QC duties on the project, including sub-contract work, and the tests in which they are certified.
- d) A list of all QC inspectors who will perform QC inspection duties on the project, including sub-contract work, and the areas of inspection that they will be assigned.
- e) A procedure for verifying documentation is accurate and complete as outlined in Section 3.
- f) A procedure describing QC Inspections as outlined in Section 4.
- g) A procedure describing QC Testing, as outlined in Section 5, including a job specific Inspection and Test Plan (ITP).
- h) A procedure describing Material Receiving as outlined in Section 6.
- i) A list of Hold Points that are not included in the checklist forms, as outlined in Section 8.
- j) A procedure for documenting and resolving Non-Conforming work as outlined in Section 9.
- k) A procedure for tracking and documenting revisions to the QMP.

- l) A list of any approved changes to the Standard Specifications or ITP, including a reference to the corresponding change order.
- m) Format for the Weekly Schedule and Work Plans as outlined in Section 10, including a list of activities that will require pre-activity meetings.

3.0 Project Documentation. The contractor shall establish a Document Control Procedure for producing and uploading the required Quality Management documents to a MoDOT-provided server. The document management software used by MoDOT is Microsoft SharePoint®. Contractors do not need to purchase Microsoft SharePoint®, however, it is recommended that new users acquire some basic training to better understand how to use this software. MoDOT does not provide the software training, but there are several online vendors who do. Contractors are required to use Microsoft Excel® and Microsoft Word® with some documents.

3.1 The contractor shall utilize the file structure and file naming convention provided by MoDOT. A sample file structure is available on the MoDOT website.

3.2 Documents (standard forms, reports, and checklists) referenced throughout this provision are considered the minimum documentation required. They shall be obtained from MoDOT at the following web address: www.modot.org/quality. The documents provided by MoDOT are required to be used in the original format, unless otherwise approved by the engineer. Any alteration to these forms shall be approved by the engineer.

3.3 Timely submittal of the required documents to the MoDOT document storage location is essential to ensure payment can be processed for the completed work. Submittal of the documents is required within 12 hours of the work shift that the work was performed, or on a document-specific schedule approved by the engineer and included in the QMP.

3.4 The contractor shall establish a verification procedure that ensures all required documents are submitted to the engineer within the specified time, and prior to the end of each pay period for the work that was completed during that period. Payment will not be made for work that does not include all required documents. Minimum documents that might be required prior to payment include: Test Reports, Inspection Checklists, Materials Receiving Reports, and Daily Inspection Reports.

3.5 The contractor shall perform an audit at project closeout to ensure the final collection of documents is accurate and complete.

4.0 Quality Control Inspections. The QMP shall identify a procedure for performing QC inspections. QC inspections shall be performed for all project activities to ensure the work is in compliance with the contract, plans and specifications.

4.1 The QM shall identify the QC inspectors assigned to each work activity. The QC inspectors shall inspect the work to ensure the work is completed in accordance with the plans and specifications, and shall document the inspection by completing the required inspection checklists, forms, and reports provided by MoDOT. Depending on the type of work, the checklists may be necessary daily, or they may follow a progressive work process. The frequency of each checklist shall be stated in the QMP. The contractor may propose alternate versions of checklists that are more specific to the work.

4.2 A Daily Inspection Report (DIR) is required to document pertinent activity on the project each day. This report shall include a detailed diary that describes the work performed as well as observations made by the inspection staff regarding quality control. The report shall include other items such as weather conditions, location of work, installed quantities, tests performed, and a list of all subcontractors that performed work on that date. The report shall include the full name of the responsible person who filled out the report and shall be digitally signed by an authorized contractor representative.

4.3 External fabrication of materials does not require further QC inspection if the product is currently under MoDOT inspection or an approved QC/QA program. QC inspection and testing required in the production of concrete for the project shall be the responsibility of the contractor.

4.4 The contractor shall measure, and document on the DIR, the quantity for all items of work that require measurement. Any calculations necessary to support the measurement shall be included with the documentation. The engineer will verify the measurements prior to final payment.

5.0 Quality Control Testing. The QMP shall identify a procedure for QC testing. The contractor shall perform testing of the work at the frequency specified in the Inspection and Test Plan (ITP).

5.1 MoDOT will provide a standard ITP and the contractor shall modify it to include only the items of work in the contract, including adding any Job Special Provision items. The standard ITP is available on the MoDOT website at www.modot.org/quality. The contractor shall not change the specifications, testing procedures, or the testing frequencies, from the standard ITP without approval by the engineer and issuance of a change order.

5.2 Test results shall be recorded on the standard test reports provided by the engineer, or in a format approved by the engineer. Any test data shall be immediately provided to the engineer upon request at any time, including prior to the submission of the test report.

5.3 The contractor shall ensure that all personnel who perform sampling and/or testing are certified by the MoDOT Technician Certification Program or a certification program that has been approved by MoDOT for the sampling and testing they perform.

5.4 If necessary, an independent third party will be used to resolve any significant discrepancies between QC and QA test results. All dispute resolution testing shall be performed by a laboratory that is accredited in the AASHTO Accreditation Program in the area of the test performed. The contractor shall be responsible for the cost to employ the third party laboratory if the third party test verifies that the QA test was accurate. The Commission shall be responsible for the cost if the third party test verifies that the QC test was accurate.

6.0 Material Receiving. The QMP shall identify a procedure for performing material receiving. Standard material receiving forms will be provided by the engineer.

6.1 The procedure shall address inspections for all material delivered to the site (excluding testable material such as concrete, asphalt, aggregate, etc.) for general condition of the material at the time it is delivered. The material receiving procedure shall record markings and accompanying documentation indicating the material is MoDOT accepted material (MoDOT-OK Stamp, PAL tags, material certifications, etc.).

6.2 All required material documentation must be present at the time of delivery. If the material is not MoDOT accepted, the contractor shall notify the engineer immediately and shall not incorporate the material into the work.

7.0 Quality Assurance. The engineer will perform Quality Assurance inspection and testing (QA) to verify the performance of QC inspection and testing. The frequency of the QA testing will be as shown in the ITP, but may be more frequent at the discretion of the engineer. The engineer will record the results of the QA testing and inspection and will inform the contractor of any known discrepancies.

7.1 QA is responsible for verifying the accuracy of the final quantity of all pay items in the contract. This includes taking measurements on items that require measurement and other items that are found to have appreciable errors.

7.2 QA inspection and test results shall not be used as a substitute for QC inspection and testing.

7.3 QA will be available for Hold Point inspections at the times planned in the Weekly Schedule. The inspections may be re-scheduled as needed, but a minimum 24-hour advance notification from the contractor is required unless otherwise approved by the engineer.

8.0 Hold Points. Hold Points are events that require approval by the engineer prior to continuation of work. Hold Points occur at definable stages of work when the succeeding work depends on a QA review of the preceding work before work can continue.

8.1 A list of minimum Hold Points will be provided by the engineer and shall be included in the QMP. The engineer may make changes to the Hold Point list at any time.

8.2 Prior to all Hold Point inspections, QC shall provide the engineer with the Daily Inspection Reports, Inspection Checklists, Test Reports, and Material Receiving Reports for the work performed leading up to the Hold Point. If the engineer identifies any corrective actions needed during a Hold Point inspection, the corrections shall be completed prior to continuing work. The engineer may require a new Hold Point to be scheduled if the corrections require a follow-up inspection.

9.0 Non-Conformance Reporting. Non-conformance reports shall be issued by the contractor for work that does not meet the contract requirements. Non-conforming work includes work, testing, materials and processes that do not meet contract requirements. The contractor shall establish a procedure for identifying and resolving non-conforming work as well as tracking the status of the reports.

9.1 Contractor QC staff or production staff should identify non-conforming work and document the details on the Non-Conformance Report form provided by MoDOT. QA staff may also initiate a non-conformance report.

9.2 In-progress work that does not meet the contract requirements may not require a non-conformance report if production staff is aware of the issue and corrects the problem during production. QC or QA may issue a non-conformance report for in-progress work when documentation of the deficiency is considered beneficial to the project record.

9.3 The contractor shall propose a resolution to the non-conforming work. Acceptance of a resolution by the engineer is required before closure of the non-conformance report.

9.4 For recurring non-conformance work of the same or similar nature, a written Corrective Action Request will be issued by QC or QA. The contractor shall then establish a procedure for tracking the corrective action from issuance of the request to implementation of the solution. Approval from the engineer is required prior to implementation of the proposed corrective action. The contractor shall notify the engineer after the approved corrective action has been implemented.

10.0 Work Planning and Scheduling. The contractor shall include Quality Management in all aspects of the work planning and scheduling. This shall include providing a Weekly Schedule, a Work Plan for each work activity, and holding pre-activity meetings for each new activity.

10.1 A Weekly Schedule shall be provided to the engineer each week that outlines the planned project activities for the following two-week period. This schedule shall include all planned work, identification of all new activities, traffic control events, and requested Hold Point inspections for the period. Planned quantity of materials, along with delivery dates should also be included in the schedule.

10.2 A Work Plan shall be submitted to the engineer at least one week prior to the pre-activity meeting. The Work Plan shall include the following: a safety plan, list of materials to be used, work sequence, defined responsibilities for QC testing and inspection personnel, and stages of work that will require Hold Point inspections.

10.3 A pre-activity meeting is required prior to the start of each new activity. The purpose of this meeting is to discuss details of the Work Plan and schedule, including all safety precautions. Those present at the meeting shall include: the production supervisor for the activity, the Quality Manager, QC inspection and testing staff, and QA. The Quality Manager will review the defined responsibilities for QC testing and inspection personnel and will address any quality issues with the production staff. Attendees may join the meeting in person or by phone or video conference.

11.0 Basis of Payment. Payment for all costs associated with developing, implementing and maintaining the Quality Management Plan, providing Quality Control inspection and testing, and all other costs associated with this provision, will be considered included in the unit price of each contract item. No direct pay will be made for this provision.

L. DBE Prompt Payment Reporting JSP-24-05B

1.0 Description.

1.1 This provision will only apply to contracts that have a Disadvantaged Business Enterprise (DBE) goal greater than 0% and have at least one DBE subcontractor.

1.2 MoDOT monitors the payments made by prime contractors and subcontractors to DBEs for compliance with DBE payment monitoring rules as outlined in 49 CFR 26.37. To facilitate this monitoring, MoDOT requires prime contractors to report their remitted payments to DBEs and subcontractors to report their remitted payments to lower-tier DBEs.

1.3 Tracking of DBE payments are made through the Signet™ application (Signet). Signet is a third-party service, supported by the vendor, for usage by the prime contractor and all subcontractors. Signet is only a reporting tool; it does not process financial transactions. MoDOT

does not provide direct technical support for Signet. Information about Signet may be found at <https://signet-help.zendesk.com/hc/en-us>.

1.4 Upon completion of the first pay estimate on the contract, Signet will automatically send an email to the prime contractor prompting registration. The prime will be required to pay a one-time, fixed fee of \$1,000 for this contract directly to the Signet vendor. Use of Signet to track DBE payments will be available for the life of the contract, regardless of the contract value, contract duration, number of subcontractors, or payments reported. No additional fee will be charged to subcontractors that are required to report payments or DBEs that are required to verify payments through Signet. The contractor may also, at no additional cost, report payments through Signet to subcontractors that are not DBEs.

1.5 After each estimate, when contractor reporting of payments is complete, the subcontractor will receive an email notifying them of the payment and requesting verification of the reported payment. A subcontractor that has not completed registration with Signet will be prompted to do so at this time.

1.6 Users will be set up automatically based on information in MoDOT's vendor list. Additional users under each contractor may be added once registration has been completed within Signet. The current vendor list can be found at <https://www.modot.org/bid-opening-info>.

1.7 For purposes of this requirement, payer is defined as the prime contractor or subcontractor that reports a payment in Signet to a vendor that is either a subcontractor, trucker, manufacturer, regular dealer, or broker. Payee is defined as the vendor that receives notification of payment through Signet from the prime contractor or a higher-tier subcontractor. Payment is defined as issuing an Electronic Funds Transfer (EFT) or mailing a check to a payee.

2.0 Requirements. Payers must report remitted payment to DBEs within Signet, for work performed by the DBE subcontractor, DBE trucking, materials supplied from a DBE manufacturer, dealer, or broker, as well as a return of retainage (and/or other amounts withheld), within 15 calendar days.

2.1 Prime contractors must report remitted payments to DBEs within 15 calendar days of each payment it receives from MoDOT. Prime contractors must also report payments to non-DBE subcontractors if that subcontractor is making payment to a lower tier DBE subcontractor, trucker, manufacturer, regular dealer, or broker.

2.2 The payer must report the following information within Signet:

- a. The name of the payee.
- b. The dollar amount of the payment to the payee.
- c. The date the payment was made.
- d. Any retainage or other amount withheld (if any) and the reason for the withholding (if other than retainage).
- e. The DBE function performed for this payment (e.g., contracting, trucking, or supplying as a manufacturer, dealer, or broker).
- f. Other information required by Signet.

The payer must report its return of retainage (and/or other amounts withheld) in separate, standalone payment entries (i.e., without being comingled with a payment for work performed or materials supplied).

2.3 In the event that no work has been completed by a DBE during the estimate period, such that no payment is due to a DBE subcontractor, trucker, manufacturer, regular dealer, or broker, then the prime contractor will mark payment complete within Signet, and no other payments are required to be reported.

2.4 Each subcontractor making a payment to a lower-tier DBE must report remitted payments within Signet, as detailed in Section 2.2, within 15 days of receipt of each payment from the prime contractor.

2.5 DBE payees must verify in Signet each payment reported by a payer within 15 calendar days of the payment being reported by the payer. This verification includes whether the payment was received, and if so, whether it was as expected.

3.0 Basis of Payment. A fixed cost of \$1,000 will be paid on this contract for the required software to report payments to DBEs through Signet. Regardless of the number of projects in a contract, a single payment will be made under item 108-10.00, SIGNET DBE REPORTING, per lump sum. The engineer reserves the right to underrun this item for any reason. Any additional costs for registration, software, usage, time, labor, or other costs will be considered incidental and no direct payment will be made.

M. ADA Compliance and Final Acceptance of Constructed Facilities JSP-10-01C

1.0 Description. The contractor shall comply with all laws pertaining to the Americans with Disabilities Act (ADA) during construction of pedestrian facilities on public rights of way for this project. An ADA Checklist is provided herein to be utilized by the contractor for verifying compliance with the ADA law. The contractor is expected to familiarize himself with the plans involving pedestrian facilities and the ADA Post Construction Checklist prior to performing the work.

2.0 ADA Checklist. The contractor can locate the ADA Checklist form on the Missouri Department of Transportation website:

www.modot.org/business/contractor_resources/forms.htm

2.1 The ADA Checklist is not to be considered all-inclusive, nor does it supersede any other contract requirements. The ADA checklist is a required guide for the contractor to use during the construction of the pedestrian facilities and a basis for the commission's acceptance of work. Prior to work being performed, the contractor shall bring to the engineer's attention any planned work that is in conflict with the design or with the requirement shown in the checklist. This notification shall be made in writing. Situations may arise where the checklist may not fully address all requirements needed to construct a facility to the full requirements of current ADA law. In those situations, the contractor shall propose a solution to the engineer that is compliant with current ADA law using the following hierarchy of resources: 2010 ADA Standards for Accessible Design, Draft Public Rights of Way Accessibility Guidelines (PROWAG) dated November 23, 2005, MoDOT's Engineering Policy Guidelines (EPG), or a solution approved by the U.S. Access Board.

2.2 It is encouraged that the contractor monitor the completed sections of the newly constructed pedestrian facilities in attempts to minimize negative impacts that his equipment, subcontractors or general public may have on the work. Completed facilities must comply with the requirements

of ADA and the ADA Checklist or have documented reasons for the non-compliant items to remain.

3.0 Coordination of Construction.

3.1 Prior to construction and/or closure on an existing pedestrian path of travel, the contractor shall submit a schedule of work to be constructed, which includes location of work performed, the duration of time the contractor expects to impact the facility and an accessible signed pedestrian detour compliant with MUTCD Section 6D that will be used during each stage of construction. This plan shall be submitted to the engineer for review and approval at or prior to the pre-construction conference. Accessible signed detours shall be in place prior to any work being performed that has the effect of closing an existing pedestrian travel way.

3.2 *When consultant survey is included in the contract, the contractor shall use their survey crews to verify that the intended design can be constructed to the full requirements as established in the 2010 ADA Standards. When 2010 ADA Standards do not give sufficient information to construct the contract work, the contractor shall refer to the PROWAG.*

3.3 When consultant survey is not included in the contract, the contractor shall coordinate with the engineer, prior to construction, to determine if additional survey will be required to confirm the designs constructability.

4.0 Final Acceptance of Work. The contractor shall provide the completed ADA Checklist to the engineer at the semi-final inspection. ADA improvements require final inspection and compliance with the ADA requirements and the ADA Checklist. Each item listed in the checklist must receive either a "YES" or an "N/A" score. Any item receiving a "NO" will be deemed non-compliant and shall be corrected at the contractor's expense unless deemed otherwise by the engineer. Documentation must be provided about the location of any non-compliant items that are allowed to remain at the end of the construction project. Specific details of the non-compliant items, the ADA requirement that the work was not able to comply with, and the specific reasons that justify the exception are to be included with the completed ADA Checklist provided to the engineer.

4.1 Slope and grade measurements shall be made using a properly calibrated, 2 foot long, electronic digital level approved by the engineer.

5.0 Basis of Payment. The contractor will receive full pay of the contract unit cost for all sidewalk, ramp, curb ramp, median, island, approach work, cross walk striping, APS buttons, pedestrian heads, detectible warning systems and temporary traffic control measures that are completed during the current estimate period as approved by the engineer. Based upon completion of the ADA Checklist, the contractor shall complete any necessary adjustments to items deemed non-compliant as directed by the engineer.

5.1 No direct payment will be made to the contractor to recover the cost of equipment, labor, materials, or time required to fulfill the above provisions, unless specified elsewhere in the contract documents.

N. ADA Material Testing Frequency Modifications JSP-23-01

1.0 Description. This provision revises the Inspection and Testing Plan (ITP) for the construction of ADA compliant features to better match the nature of the work. The Quality Control (QC) testing frequency for the Sections identified below are to be revised as specified.

2.0 Compaction Test on Base Rock Under Sidewalk, Curb Ramps and Paved Approaches. (Revises ITP Sec 304.3.4) The required test frequency will be one per 600 tons.

3.0 Gradation Test on Base Rock Under Sidewalk, Curb Ramps and Paved Approaches. (Revises ITP Sec 304.4.1) The required frequency will be one per 500 tons.

4.0 Concrete Plan Checklists. (Revises ITP Sec 501) Submittal of the 501 Concrete Plant Checklist will be once per week when the contractor is only pouring curb, sidewalk, paved approaches, and curb ramps.

5.0 Concrete Median, Median Strip, Sidewalk, Curb Ramps, and Curb. (Revises ITP Sec 608) The required frequency will be the first truckload for the project and each 100 CUYDs for air and slump thereafter. Strength will be verified by use of cylinders or maturity meters at a minimum rate of one per 100 CUYD.

6.0 Paved Approaches. (ITP Sec 608) The required testing of one test from the first truckload per day and each 100 CUYDs for air and slump will remain per ITP. Strength will be verified by use of cylinders or maturity meters at a minimum rate of one per 100 CUYD.

7.0 Curb Concrete. (Revises ITP Sec 609) The required frequency will be the same as Sec 5.0 above.

8.0 Basis of Payment. No direct payment will be made to the contractor to fulfill the above requirements.

O. Truck Mounted Attenuator (TMA) for Stationary Activities JSP-23-04

1.0 Description. Provide and maintain Truck Mounted Attenuators (TMA) in accordance with Sec 612 and as specified herein.

2.0 Construction Requirements. Truck Mounted Attenuators (TMA) shall be used for the work activities indicated in the plans or specified herein.

2.1 Intersection Island and median Construction - any lane closure required for constructing the intersection islands or median.

2.2 Sidewalk Construction - any lane closure required for constructing the sidewalk.

2.3 Traffic Signal Equipment Installation - Any lane closure required for installing any traffic signal equipment within the project limits.

2.4 Pavement Marking – any lane closure required for installing pavement marking within the entire project limits.

2.5 US65 Southbound Ramp Lane Construction - any lane closure required for constructing the US65 southbound ramp lane construction.

2.6 Driveway Construction and Driveway Removals - any lane closure required for constructing or removing driveways.

2.7 Street Approach Construction - any lane closure required for constructing new street approaches at Grant Avenue and Jefferson Avenue.

3.0 Method of Measurement. No measurement will be made for Truck Mounted Attenuators (TMA).

4.0 Basis of Payment. Delete Sec 612.5.1 and substitute with the following:

612.5.1 No payment will be made for truck mounted attenuators (TMAs) used in mobile operations or for any TMAs designated as optional.

612.5.1.1 Payment for TMAs required for stationary work activities will be paid for at the contract unit bid price for Item 612-30.01, Truck Mounted Attenuator (TMA), per lump sum. The lump sum payment includes all work activities that require a TMA, regardless of the number of deployments, relocations, or length of time utilized. No payment will be made for repair or replacement of damaged TMAs.

P. ADA Compliant Moveable Barricade

1.0 Description. The work shall consist of providing moveable barricades to satisfy the requirements of the pedestrian traffic control plans as shown in the bidding documents. The contractor will be responsible for moving the pedestrian barricades to coincide with their planned order of work.

2.0 Construction Requirements. The contractor shall use a moveable barricade that meets the requirements as established by the ADA. The pedestrian barricades shall be of self-supporting type having a minimum length of 6 feet per unit. The face of the barricade shall not extend into adjacent sidewalk considered open for pedestrian use. The contractor will be responsible for setting and maintaining the pedestrian barricades until all the proposed improvements have been constructed.

3.0 Method of Measurement. Measurement for ADA Compliant Moveable Barricade will be made per each for each 6 feet (min.) unit provided.

4.0 Basis of Payment. Payment for all work necessary to fulfill the requirements noted above will be considered completely covered in the contract unit price for Pay Item No. 616-99.02 ADA Compliant Moveable Barricade, per each. No direct payment will be made for any necessary relocation of the ADA Compliant Moveable Barricade.

Q. Linear Grading for ADA Facilities - SW

1.0 Description. This work shall consist of altering the existing roadside features to the required grade and cross sections shown on the plans (if applicable), or to comply with typical sections,

running slopes, drop-off and side-slope standards, consistent with the guidelines set forth in the Americans with Disabilities Act (ADA). This work shall be in accordance with Sections 202 and 207 and accompanying provisions except as modified herein.

2.0 Construction Requirements. The roadside shall be brought to the required grade and cross section as established in Section 1.0 of this provision, to a uniform appearance, free of sharp breaks or humps. Minor deviations will be allowed, to take advantage of favorable topography, as approved by the engineer.

2.1 The contractor shall remove all existing roadside improvements necessary to facilitate the new sidewalk and curb ramp construction, along with any other roadside removal items at, or adjacent to the pedestrian pathway, as noted in the plans or as approved by the engineer. This shall include the removal and/or saw cutting at existing raised islands or median strips to construct the pedestrian pathway. The contractor shall pay special care to existing utility facilities to be used in place or relocated by others.

2.2 The contractor shall be responsible for all excavation and embankment work necessary to facilitate construction of new ADA compliant facilities; normally consisting of subgrade and subsequent finished grading for sidewalks, curbs, curb ramps; and may include miscellaneous grading work for items such as ditches, entrances, paved approaches, driveways and pipes, at or adjacent to proposed new sidewalk facilities.

2.3 By this provision, it may be necessary to excavate, stockpile, and haul some material within the project limits. Due to staging and/or Right-of-Way constraints, it may be necessary to waste unusable material off Right-of-Way, and/or haul a replacement volume of material back to achieve the desired grades.

2.4 All removals of Portland or Asphaltic Concrete performed under this provision will require saw-cutting a neat/clean edge along the removal lines at no direct pay, unless otherwise provided for in the contract.

3.0 Method of Measurement. Measurement of Linear Grading for ADA Facilities will be made along the length of the new sidewalk and/or curb ramp installed, along each side of the roadway where sidewalk work is to be performed, and along the centerline length of each driveway, entrance, or paved approach as shown on the plans. Measurement will be made to the nearest 1-foot for each sidewalk work area, totaled, and paid to the nearest 1-foot for final pay. Final field measurement will not be required except where appreciable errors are found, or authorized changes have been made.

4.0 Basis of Payment. The accepted quantities of Linear Grading for ADA Facilities will be paid for at the contract unit price for item 207-99.03, Linear Grading for ADA Facilities, Linear Foot, and will be considered as full compensation for all labor, equipment, material, waste fees, disposal agreements, material acquisition, or other construction costs involved to complete the described work.

4.1 No direct payment will be made for "REMOVAL OF IMPROVEMENTS" associated with the removal and disposal of sidewalks, curbs, curb ramps, entrances, and other incidentals required for construction of the new sidewalk and/or curb ramps.

R. Curb Ramps and Sidewalk – SW

1.0 Description. Construction of concrete curbs, aprons, curb ramps, transition areas, sidewalk and landings shall be in accordance with applicable portions of Sections 608 & 609 of the Standard Specification and Standard Plans for Highway Construction 608.10, as shown on the plans, and meet ADA requirements.

2.0 Construction Requirements. This work shall include, but is not limited to, sidewalk construction including landings, joint construction, aggregate base, compaction, apron modifications, transition area, curb ramp construction, Type S Curb or Type A Curb installation (as required), tie bars or dowel bars (as required), clean-up, etc. for each location shown on the plans.

The following requirements shall be applicable to construction of this project:

- Existing curb, curb and gutter, sidewalk, shoulders, etc. that are adjacent to a designated curb ramp and/or sidewalk improvement area that is damaged during construction shall be replaced/repared to match existing materials and condition.
- Variable height curb along the roadside may be constructed monolithic or separate depending on construction operations. Integral curb shall be doweled to the existing gutter or pavement. - Integral or Type S-curb shall be used along the existing right-of-way when constructing curb ramps as shown on the plans. The cost of the curb is included in pay limits of the curb ramp.
- The transition area shall be 8" thick and tied to the existing roadway pavement and existing paved approach or sidewalk it is matching.
- Curing compound for all concrete construction shall be a clear or translucent color. The white pigmented option or other colored compound will not be allowed.
- Adjacent grass areas, landscaping, irrigation systems (lines, sprinkler heads, control boxes), pavement, etc. disturbed by curb ramp or sidewalk construction shall be repaired or replaced to match or exceed existing conditions.
- Sod quantities are included for adjacent areas. More or less sod may be required depending on actual field conditions.

3.0 Method of Measurement. Curb ramps and concrete sidewalk will be measured to the nearest 1/10 square yard. Measurement of incidental items required to complete all aspects of construction for the above noted items at each new curb ramp and sidewalk location will not be made individually unless specified elsewhere in the contract.

4.0 Basis of Payment. All costs incurred by the contractor by reason of compliance to satisfy the above requirements will be considered incidental to and completely covered by the contract unit price for each of the pay items within the contract.

S. Signal Controller

1.0 Description. This work shall consist of providing and installing a new 2070 controller with cabinet at the intersections shown on the plans.

1.0 Material Requirements. The new controllers installed with this project shall consist of ATC eX 2070 controllers with OMNI-eX software as manufactured by McCain, Inc. placed inside a 332 cabinet.

2.1 The contractor shall be responsible for providing and installing all necessary items to make the new signal controllers operational. This includes but is not limited to the 2070 controller, the OMNI-eX software, and the 332 cabinet. The engineer will provide the existing cycle lengths, but the contractor shall ultimately be responsible for programming the timings into the new controllers.

3.0 Method of Measurement. Method of measurement will be made per each controller installed by the contractor and acceptable by the engineer.

4.0 Basis of Payment. Accepted signal controllers will be paid for at the contract unit price for item 902-99.02, Misc. 2070 Controller, per each.

T. Uninterruptible Power Supply

1.0 Description. This work shall consist of providing and installing an “Uninterruptible Power Supply” (UPS) system at the LP44 and Grant Ave. intersection. The system shall be specifically constructed and approved for the use with the 2070 signal controller.

1.1 In order to match other systems used in the area, the UPS shall be an Alpha FXM 1100 system. The system shall be comprised of the following items:

- 1 each Alpha outdoor enclosure S6, w/Generator option ATS/MBS & Auto GTS, battery
- cable kit (ALPHA-026-53-26)
- 1 each Novus FXM 1100 Battery backup unit without Ethernet (ALPHA-017-230-21)
- 1 each 48V Alpha guard battery monitor (ALPHA-012-306-21)
- each Alpha Gel battery 195GXL (ALPHA-181-230-10)

2.0 Installation. The UPS system shall be installed as per the manufacturer’s recommendations. The system shall be mounted to the existing Power Disconnect as shown in the plans. The UPS cabinet shall contain circuitry to separate auxiliary equipment (lighting) from primary equipment (signal controller cabinet) during battery backup operation. In addition, the cabinet shall have circuitry to switch the signal from normal operation to flash operation during battery backup operation.

3.0 Communications.

3.1 The UPS cabinet shall have Ethernet connection capability.

3.1.1 Ethernet Cable. Any Ethernet cable run outside of the signal cabinet shall be environmentally hardened, shielded, and outdoor rated 350 MHz Category 5e cable. The cable shall be riser rated, 24 AWG solid copper, have Polyolefin insulation, UV and oil-resistant PVC jacket. Pair 1 shall be Blue, White/Blue, Pair 2 shall be Orange, White/Orange, Pair 3 shall be Green, White/Green and Pair 4 shall be Brown, White/Brown. The operating temperature shall

be from -40°C to +70°C. The cable shall conform to the following standards: ISO/IEC 11801 Category 5e, NEMA WC 63, and ANSI/TIA/EIA 568-B.2 Category 5e. The cable shall be without splicing or joints for any single run. The contractor shall obtain instructions from the manufacturer about alternate architecture when the length of a single run of CAT 5e cable exceeds 320 feet.

3.1.2 RJ-45. The RJ-45 plug connectors shall be used at the UPS and signal cabinet. The supplier of the UPS shall approve the Category 5e cable, RJ-45 connector and crimping tool, and the manufacturer's instructions must be followed to ensure proper connection.

4.0 Construction Requirements. Construction requirements shall conform to Sec 902.

5.0 Method of Measurement. The method of measurement shall conform to Sec 902.

6.0 Basis of Payment. All costs incurred by the contractor for furnishing, installing, configuring and placing the UPS into operation, furnishing, installing and connecting the Ethernet cable, including all incidentals shall be considered as included in and completely covered by the contract unit price for item 902-99.02, Uninterruptible Power Supply, per each.

6.1 No direct payment will be made for programming the UPS.

U. Signal Detection Disconnection

1.0 Description. The contractor shall contact the Traffic Management Center to coordinate a new signal timing at a minimum of two (2) working days prior to the disconnection of the signal's detection capabilities or prior to the milling of an approach with inductive loop detection.

2.0 Contact Information.

Melanie Belote, Traffic Studies Specialist
Southwest District Traffic Management Center
Telephone Number: 417-829-8056
Cell Number: 417-689-3783
Email Melanie.Belote@modot.mo.gov

3.0 Basis of Payment. No direct pay will be made to the contractor to recover the cost or time required to fulfill the above provision.

V. Accessible Pedestrian Pushbutton Connectivity

1.0 Description. Connectivity to all accessible pedestrian pushbuttons shall be required for all signalized pedestrian crosswalks at all intersections as shown in the plans.

2.0 Construction Requirements. In addition to Sec 902, all accessible pedestrian pushbutton systems shall have a Bluetooth interface or other hands-free capability and be password protected. Programming of the APS buttons shall be accessible through a field service application available on both iOS and Android platforms.

3.0 Equipment requirements. The accessible pedestrian pushbutton system and its components, in form and functionality, shall meet or exceed the requirements of the following documents and standards:

- 2009 MUTCD, Section 4E.09 – 4E.13
- NEMA 250 – 4X
- NEMA TS1, TS2, TS4, Type 170, Type 2070

4.0 Documentation and Support. The contractor shall provide two (2) copies of the operation and maintenance manuals for each installed system.

5.0 Method of Measurement. No measurement providing connectivity will be made.

6.0 Basis of Payment. No direct payment for providing connectivity will be made. Payment for all work necessary to fulfill the requirements above will be considered completely covered in the contract unit price for Pay Item No. 902-49.21, Accessible Pedestrian Signal, per each.

W. Contractor Furnished, Contractor Installed Radar Detection System

1.0 Description. This work shall consist of providing radar detection for all traffic signal installations. The radar detection shall be in accordance with the standard specifications and installed to provide detection at locations as shown on the plans or as directed by the engineer in accordance with Sec 902.

2.0 Equipment. Radar equipment must meet or exceed all the following requirements.

- (a) Equipment must be FCC certified.
- (b) Equipment must meet all NEMA TS2-2003 specifications for traffic control equipment.
- (c) Each radar unit must be composed of multiple sensors to establish two-dimensional coverage.
- (d) Radar Detection must be compatible with SDLC inputs.

3.0 Construction Requirements. The contractor shall be responsible for providing and installing all necessary items to make the new radar detection system operational with stop bar presence detection and count detection for each lane of travel. Input BIU 9 shall be used for presence detector inputs according to the following chart.

Vehicle Detection Assignments					
PRESENCE DETECTION	BIU	IO	Detector	Call Phase	Mvmt
	BIU 9	1	1	1	SBL
		2	2	2	NBT
		3	3	3	EBL
		4	4	4	WBT
		5	5	5	NBL

	6	6	6	SBT
	7	7	7	WBL
	8	8	8	EBT
	9	9		
	10	10	2	NBR*
	11	11		
	12	12	4	WBR*
	13	13		
	14	14	6	SBR*
	15	15		
	16	16	8	EBR*

*Right turn presence detection only used if the RT lane is signaled

BIU 10 and 11 shall be used for count detector inputs according to the following chart.

Vehicle Detection Assignments					
COUNT DETECTION	BIU	IO	Detector	Call Phase	Lane
	BIU 10	1	17	1	SBL 1
		2	18	1	SBL 2
		3	19	1	SBL 3
		4	20	2	NBT 1
		5	21	2	NBT 2
		6	22	2	NBT 3
		7	23	2	NBT 4
		8	24	2	NBR 1
		9	25	3	EBL 1
		10	26	3	EBL 2
		11	27	3	EBL 3
		12	28	4	WBT 1
		13	29	4	WBT 2
		14	30	4	WBT 3
		15	31	4	WBT 4
		16	32	4	WBR 1
	BIU11	1	33	5	NBL 1
		2	34	5	NBL 2
		3	35	5	NBL 3
		4	36	6	SBT 1
		5	37	6	SBT 2
		6	38	6	SBT 3
		7	39	6	SBT 4
		8	40	6	SBR 1

	9	41	7	WBL 1
	10	42	7	WBL 2
	11	43	7	WBL 3
	12	44	8	EBT 1
	13	45	8	EBT 2
	14	46	8	EBT 3
	15	47	8	EBT 4
	16	48	8	EBR 1

4.0 Method of Measurement. Method of measurement will be per intersection, complete in place including all necessary incidental items to complete the work. An intersection is defined as all legs in each direction including all lanes on each leg of the intersection.

5.0 Basis of Payment. Payment for the installation of the radar detection system will be completely covered by the contract unit price for Pay Item No. 902-99.02, Contractor Furnished, Contractor Installed Radar Detection System, per each.

X. Flashing Yellow Arrow Implementation Details

1.0 Description. This project includes the implementation of flashing yellow arrow (FYA) signals at various intersections as shown on the plans.

2.0 Construction Requirements. The contractor shall follow the guidance below when implementing the Flashing Yellow Arrow.

2.1 Output file assignments for FYA compact mode in the 332 signal control cabinet are depicted below.

Type 170 Output File Assignments for Flashing Yellow Left Turn Applications						
	SW 1/PH 1	SW 2/PH 2	SW 3/2 PED	SW 4/PH 3	SW 5/PH 4	SW 6/4 PED
FTR1	RL	R	2 DW	RL	R	4 DW
	YL	Y	PH 1 L	YL	Y	PH 3 L
FTR2	FYL	G	2 W	FYL	G	4 W
	SW 7/PH 5	SW 8/PH 6	SW 9/6 PED	SW 10/PH7	SW 11/PH 8	SW 12/8 PED
FTR3	RL	R	6 DW	RL	R	8 DW
	YL	Y	PH 5 L	YL	Y	PH 7 L
FTR4	FYL	G	6 W	FYL	G	8 W

Monitor

2.2 Any and all required cabinet modules or components to make the Flashing Yellow Arrow function properly shall be supplied and installed by the contractor. This includes, but is not limited to, load switches, detector cards and loading resistors.

2.3 The contractor shall notify the Commission's representative listed below one (1) week prior to the desired implementation to obtain the required controller timing and data changes.

Melanie Belote
Senior Traffic Studies Specialist
Phone 417-689-3783
Email: Melanie.belote@modot.mo.gov

2.4 Unused load switch outputs may need to be wired to a loading resistor to satisfy conflict monitor voltage requirements. A 1500 ohm, 25W resistor shall be used.

2.5 Red "flash color" cabinet programming plugs shall be installed for all new or modified left turn phases.

2.6 The contractor shall follow the appropriate conflict monitor unit manual to properly configure and implement the flashing yellow arrow and ensure the traffic signals/phases are safely monitored. Conflict monitors on this project shall be Eberle Design, Inc(EDI), Model 2010ECLip. Website for EDI: <https://www.editraffic.com/about-us>

3.0 Basis of Payment. No direct payment will be made to the contractor for all costs incurred with compliance of this provision. All equipment and labor necessary for the work described will be considered incidental to and completely covered by other pay items provided in the contract.

Y. Retroreflective Back Plates

1.0 Description. This work shall consist of furnishing and installing new traffic signal retroreflective back plates at the locations shown on the plans and in accordance with Sec 902 and 1092.

2.0 Construction Requirements. Traffic signal retroreflective back plates shall meet the minimum requirements of Sec 1092 and shall conform to Sec 902. Retroreflective tape will not be accepted as a substitution for a retroreflective back plate.

3.0 Method of Measurement. Measurement will be made per each.

4.0 Basis of Payment. Payment for furnishing all labor, equipment, materials, and tools necessary to remove and replace the existing signal black plate with a retroreflective back plate will be completely covered by the contract unit price for:

Pay Item Number	Type / Description	Unit
902-99.02	Retroreflective Back Plates, 3 Lenses	Each

Z. Disposition of Existing Signal, Lighting and Network Equipment

1.0 Description. This work shall consist of the disposition of existing signal, lighting, and network equipment as shown on the plans and delivering it to the specified MoDOT maintenance lot.

2.0 Construction Requirements. All controllers, cabinets, cabinet equipment, network equipment, DMS equipment, antennas, radios, modems, and other equipment noted in the plans shall be removed by the contractor and delivered to the following location:

Springfield Maintenance Lot
2455 N. Mayfair
Springfield, MO 65803

2.1 The contractor shall notify the Commission's representative 24 hours prior to each delivery by calling the contact listed below.

Joe Dotson, Urban Traffic Supervisor
Phone: (417) 895-7599 or (417) 733-0664

2.2 The contractor shall exercise reasonable care in the handling of the equipment during the removal and transportation. Should any of the equipment be damaged by the contractor's negligence, it shall be replaced at the contractor's expense. Delivery shall be within 2 working days of removal. All items returned shall be tagged with the date removed, project number and location/intersection.

2.3 Equipment shown on the plans for removal not listed in section 2.0 above shall become the property of the contractor and removed from the project.

3.0 Basis of Payment. Payment for removal, handling and transportation of all equipment specified will be considered completely covered by the contract unit price for 202-20.10, Removal of Improvements, per lump sum.

AA. Remote Pushbutton Post

1.0 Description. This work shall consist of installing pushbutton posts at the locations shown on the plans.

2.0 Construction Requirements.

2.1 The post shaft shall be schedule 40 aluminum pipe that is 48 inches in length with a 4 inch diameter (4.5-inch O.D).

2.2 The post shall be installed on top of a breakaway pedestal base mounted to a foundation in the sidewalk. The sidewalk foundation shall be constructed as part of the sidewalk and have an 18-inch diameter and 12-inch depth. The breakaway pedestal base shall be mounted to the sidewalk foundation using proper sized anchor bolts according to manufacturer's instructions.

2.3 A slip form connection shall be provided on the wiring in the breakaway pedestal base to sever the connection in the event that the pushbutton post is struck by a vehicle. Access to wiring shall be provided through an access panel in the breakaway pedestal base as well as the pipe post cap. The cap shall be secured and weather proofed when it is not opened for access.

2.4 The final product shall meet or exceed Americans with Disabilities Act (ADA) requirements for pedestrian facilities.

3.0 Method of Measurement. Final measurement of remote pushbutton posts will be made per each. This shall include the dome cap, post, breakaway base, anchor rods, concrete forming tube, concrete, removal of existing concrete medians, median strips or concrete pavement, and all miscellaneous appurtenances to construct the post as shown on the plans.

4.0 Basis of Payment. Payment for furnishing all labor, equipment, materials, and tools necessary to place remote pedestrian pushbutton posts will be completely covered by the contract unit price for:

Pay Item Number	Type / Description	Unit
902-99.02	Remote Pushbutton Post	Each

BB. Removal and Delivery of Existing Signs JSP-12-01C

1.0 Description. All Commission-owned signs removed from the project shall be disassembled, stored, transported, and disposed of as specified herein. Sign supports, structures and hardware removed from the project shall become the property of the contractor.

2.0 Disassembly and Delivery.

2.1 All Commission-owned signs, (excluding abandoned billboard signs), designated for removal in the plans, or any other signs designated by the Engineer, shall be removed from the sign supports and structures, disassembled, stored, transported, and delivered by the contractor to the recycling center for destruction.

2.2 The contractor shall coordinate and make arrangements with the recycling center for delivery of the signs. Sign panels shall be disassembled and/or cut into sizes as required by the recycling center.

2.3 The contractor shall provide the Engineer with a "Sign Delivery Certification" attesting to completion of delivery of all existing sign material from the project to the recycler. In addition, the contractor shall provide to the Engineer a final "Sign Certification of Destruction" from the recycler that documents the total pounds of scrap sign material received from the project and attests that all such material will not be re-purposed and will be destroyed in a recycling process. The contractor can locate the required certification statements from the Missouri Department of Transportation website:

<https://www.modot.org/forms-contractor-use>

2.4 Funds received from the disposal of the signs from the recycling center shall be retained by the Contractor.

3.0 Basis of Payment. All costs associated with removing, disassembling and/or cutting, storing, transporting, and disposing of signs shall be considered as completely covered by the contract unit price for Item No. 202-20.10, "Removal of Improvements", per lump sum.

CC. No Value Engineering Proposals for 2.5 Inch Perforated Square Steel Tube (PSST) Posts and Concrete Post Anchors for 2.5 Inch Perforated Square Steel Tube (PSST) Posts

This project will require 2.5 In. Perforated Square Steel Tube (PSST) Posts and Concrete Post Anchors for 2.5 In. Perforated Square Steel Tube (PSST) Posts as specified in the plans. No Contractor initiated Value Engineering Change Proposals (VECPs) or Practical Design Value Engineering Change Proposals (PDVECPs) will be accepted for any part of installing existing signs or new signs on new Perforated Square Steel Tube (PSST) Posts and Concrete Post Anchors different than the 2.5 Inch Perforated Square Steel Tube (PSST) Posts and Concrete Post Anchor for 2.5 Inch Perforated Square Steel Tube (PSST) Posts that is required.

DD. Option of Accelerated PCCP Concrete on Paved Approaches

1.0 Description. The contractor has the option of using an accelerated Portland cement concrete pavement (PCCP) for use in paved approaches as shown on the plans or as approved by the engineer.

2.0 Construction Requirements. All materials, mixture and placement requirements shall be in accordance with all applicable portions of Section 501, 502, and 613, except as specified herein.

2.1 The concrete mixture shall obtain a compressive strength of 3,500 pounds per square inch prior to opening to traffic. A non-chloride accelerator will be allowed as approved by the engineer.

3.0 Method of Measurement. No measurement of accelerated PCCP will be made.

4.0 Basis of Payment. No direct payment for accelerated PCCP will be made. Any accelerated PCCP concrete used in paved approaches will be considered included in and completely covered by the unit price for Paved Approach, 8 in., Item No. 608-50.08, Sq. Yd.

EE. Protection Measures for Recharge Areas of Protected Species

1.0 Description. Portions of this project area include designated Ozark cavefish and Tumbling Creek cave snail recharge areas. To ensure the protection of these endangered species, as well as other sensitive species that may be present in these areas, the following restrictions should be applied for work taking place within the recharge areas.

2.0 Restrictions. Personnel shall take the following precautions when working within the designated recharge area to eliminate/minimize the potential for contamination of the groundwater system.

2.1 Debris Control. Construction debris, as well as petroleum products, paint, other chemicals, will be prevented from entering the water or otherwise contaminating the streamside environment. Reports of any accidental releases of petroleum products, or other contaminants that could harm fish and other aquatic life, will be reported immediately to the MoDOT Environmental Section. See below the "Hazardous Waste and Endangered Species Contacts" for the list of contacts and phone numbers. If no MoDOT contact is available at the provided numbers, contact the following:

Missouri Department of Natural Resources 573-634-2436
United States Fish and Wildlife Service:
Dave Mosby 573-234-2132 extension 113, cell 573-999-2747

These numbers shall be readily available on the job site at all times. Personnel or their Supervisors shall be responsible for immediate reporting in the event of a spill.

2.1.1 Bridges. For work on bridges over waterways, personnel shall take precautions to prevent construction materials/debris from falling into the waterway beneath these structures. Personnel shall plug all bridge drains and implement any other measures necessary to prevent any construction materials/debris or overspray/liquid from getting into the waterways. Silt fence, or other treatment as specified by the engineer, shall be placed at all four bridge corners to prevent any construction materials/debris from washing off the roadway or the bridge and flowing down the bank into the waterway.

2.2 Spill Prevention. The contractor shall not refuel, conduct material transfers, or perform maintenance on equipment while the equipment is located within or over any visible stream channels (wet or dry) or sinkholes. Equipment shall not be parked in these areas. Use best management practices while fueling and maintaining equipment to prevent spills and to catch any material that is accidentally spilled. MoDOT has an approved State Operating Permit and a Pollution Prevention Plan developed in coordination with, and approved by, the Missouri Department of Natural Resources. MoDOT will assure strict adherence to this Permit and Plan throughout the course of the project. Any violation of the Plan will result in temporary suspension of work until corrective measures are implemented to comply with this provision. Personnel shall keep equipment properly maintained to avoid spills and leaks. Personnel shall inspect equipment before it is brought to the job site, and must replace or repair any faulty equipment.

2.3 Spill Containment. A spill is defined as fuel, lubricants, paints, solvents, etc. reaching the ground where the fluid could be absorbed into the ground or run-off into an absorbent ground area. Initial reporting of any spill shall be made to MoDOT Environmental Section. See below the "Hazardous Waste and Endangered Species Contacts" for the list of contacts and phone numbers. If no MoDOT contact is available at the provided numbers, contact the following:

Missouri Department of Natural Resources 573-634-2436

United States Fish and Wildlife Service:

Dave Mosby 573-234-2132 extension 113, cell 573-999-2747

These numbers shall be readily available on the job site at all times. Personnel or their Supervisors shall be responsible for immediate reporting in the event of a spill.

Personnel shall maintain absorbent material and other containment measures capable of containing any spill of less than 50 gallons. Such measures could consist of earthen berms, spill absorbing materials, and any other approved methods used for spill control. Personnel shall also have a mobile spill kit on-site throughout the course of the project.

All empty containers of lubricants, fuels, and solvents shall be properly disposed.

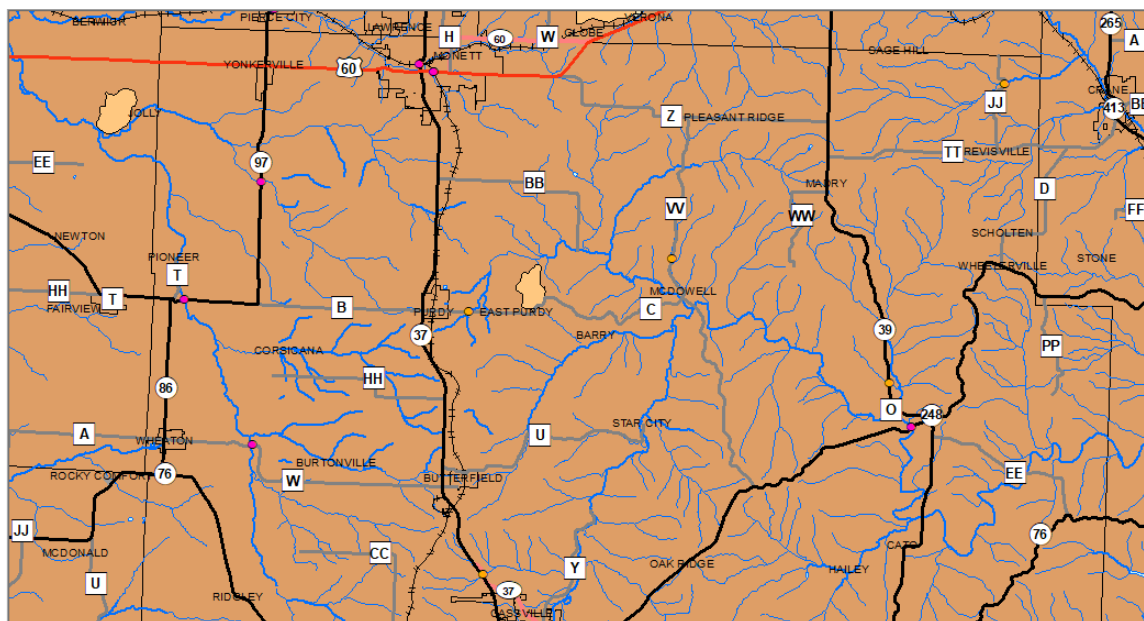
2.4 Erosion Control. Erosion control measures shall be implemented in order to reduce suspended solids, turbidity and downstream sedimentation that may enter the ecosystem of any cave, surface water, or ground water sink. MoDOT will ensure strict adherence to the design, placement and maintenance of such temporary and permanent erosion control measures as stated in Division 800, Section 806 et seq., Missouri Standard Specifications for Highway Construction.

Pollution refers to sedimentation and contamination. As described above, MoDOT has a State Operating Permit and a Pollution Prevention Plan that were developed in coordination with, and approved by, the Missouri Department of Natural Resources. Section III of the Plan prohibits MoDOT from polluting any waters of the state. The Pollution Prevention Plan shall be implemented throughout the duration of the project.

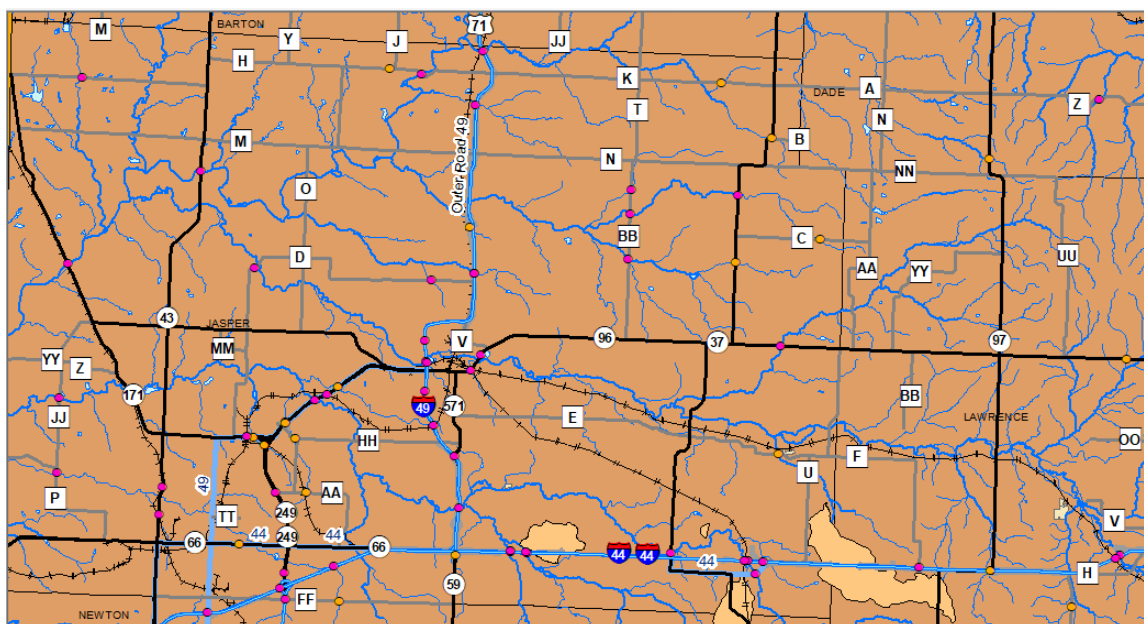
2.5 Weather Requirements. To eliminate/minimize the potential for contamination of the groundwater system, no operations shall be performed within designated recharge areas if it is raining or if the National Weather Service forecast is predicting any form of precipitation within ten (10) hours after the proposed completion time of the operation.

2.5.1 Temperature Requirements. Section 620 of the Engineering Policy Guide also provides minimum temperature requirements for pavement marking applications, insuring effective application of various pavement marking materials.

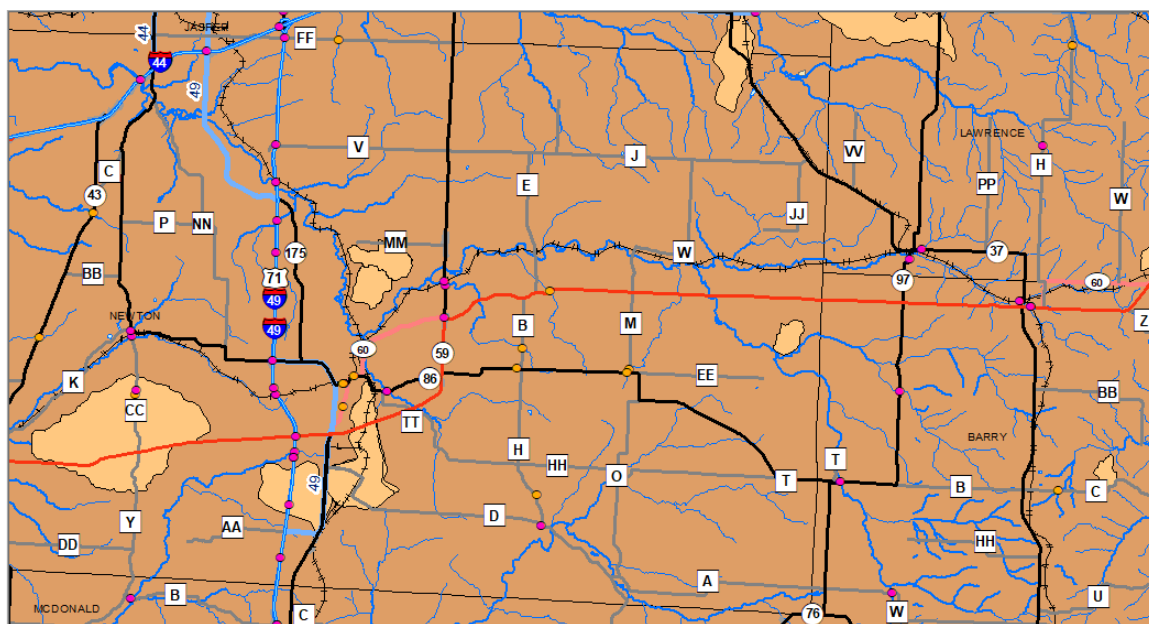
3.0 Basis of Payment. No direct payment will be made to the contractor to recover the cost of equipment, labor, materials or time required to fulfill the above special provisions except as specified elsewhere in the contract document.



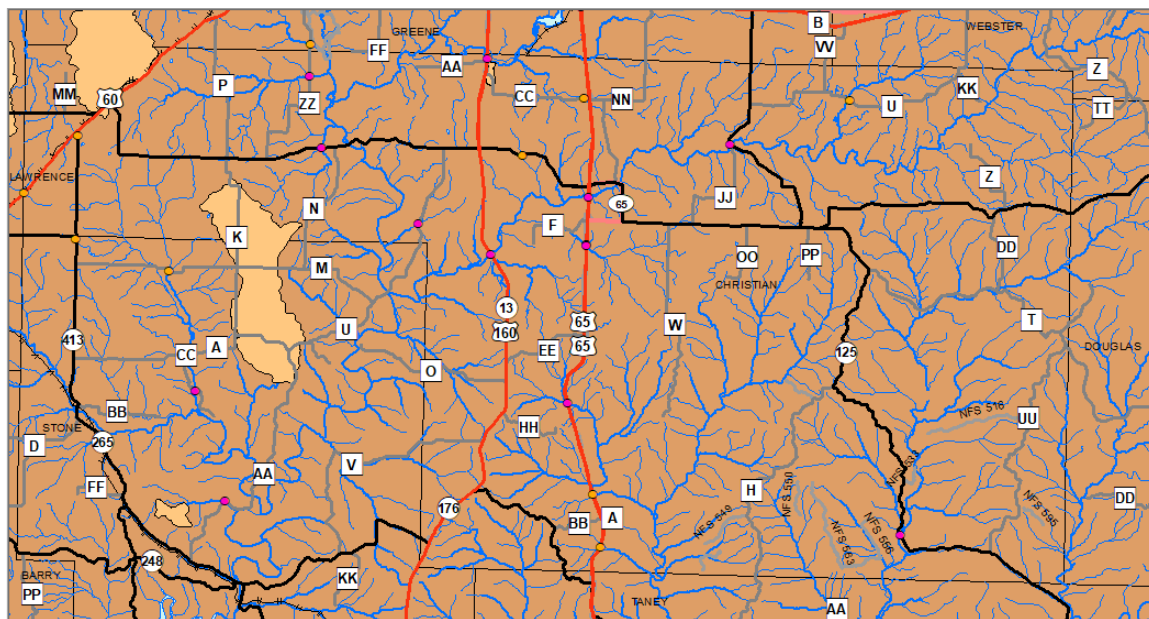
Newton County Recharge Area 2021



Jasper County Recharge Area 2021

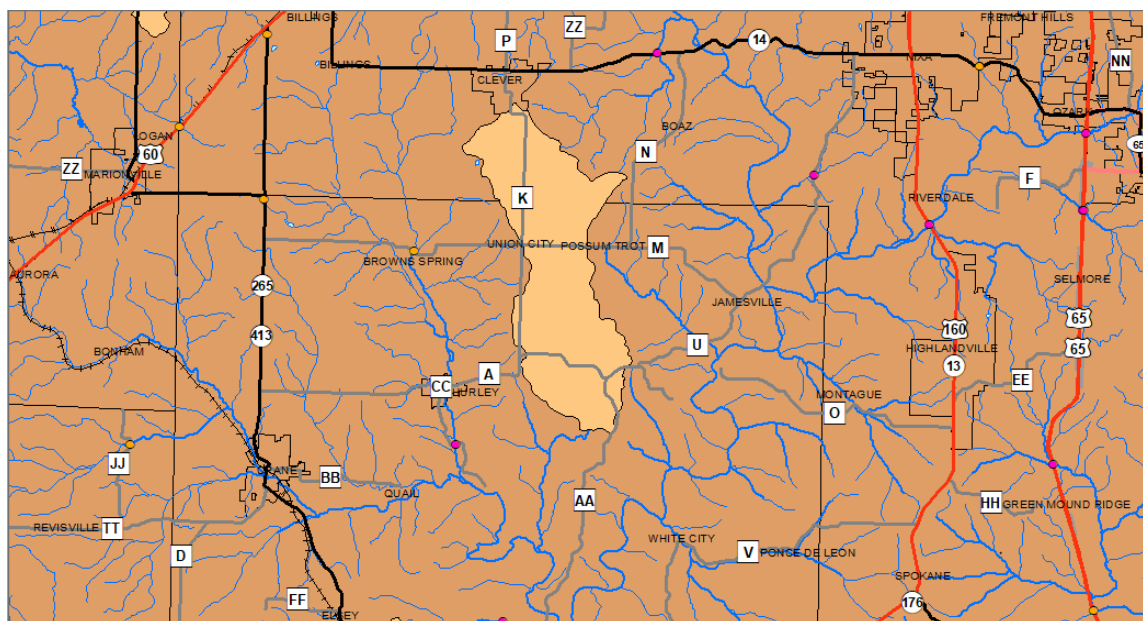


Barry County Recharge Area 2021

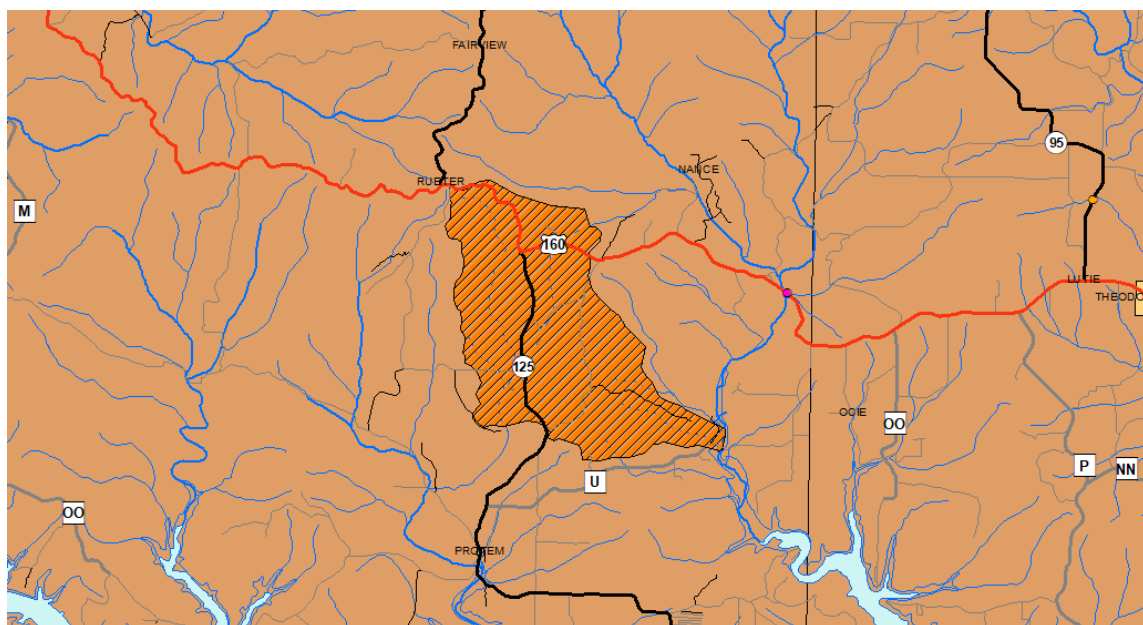


Christian County Recharge Area 2021

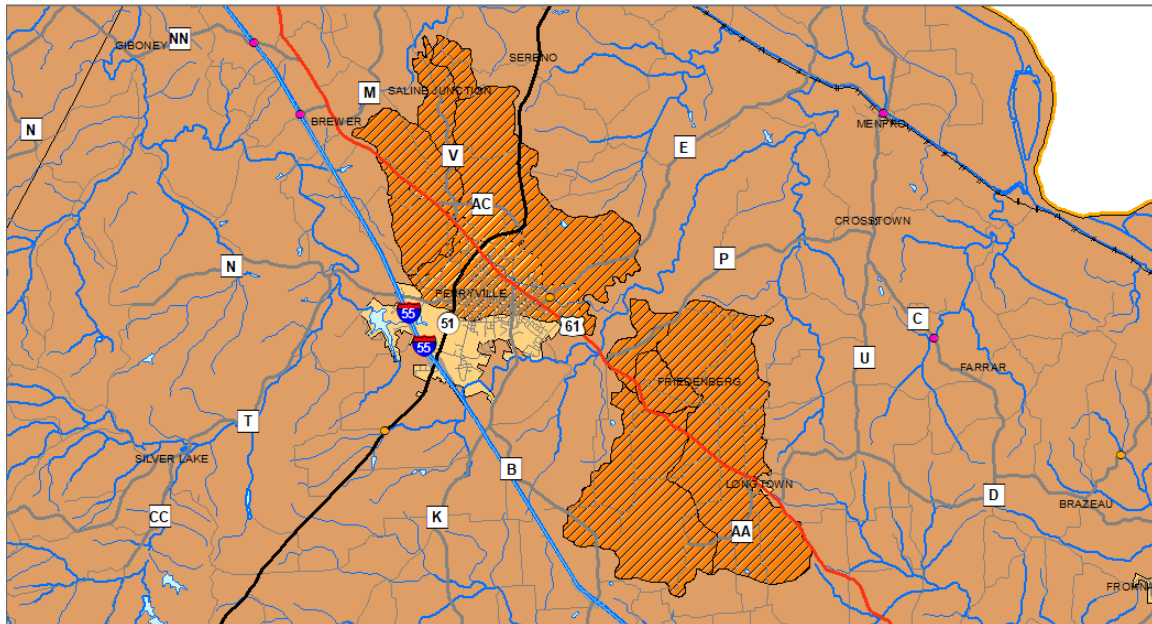




Stone County Recharge Areas 2021



Taney County Recharge Area 2021



Perry

Perry County Recharge Area 2021

HAZARDOUS WASTE AND ENDANGERED SPECIES CONTACTS

Updated 2/18/2022

Spill Reporting Procedures in Cave Recharge Areas and Work Over Streams:

Standard spill reporting procedures apply, which include **first sending an email to the group “spillreporting”** (spillreporting@modot.mo.gov).

Contacts for Hazardous Waste:

- NW, NE, CD (Howard, Boone, Callaway, Cole, Gasconade, Osage):
Kevin Kelly: 573-526-2904 (office), 573-508-7678 (cell)
- KC, SW, CD (Cooper, Moniteau, Morgan, Miller, Camden, Laclede):
Ethank Musick: 573-522-5562 (office), 573-508-6907 (cell)
- SE, STL, CD (Maries, Pulaski, Phelps, Crawford, Washington, Dent):
Andy Stivers: 573-526-3599 (office), 573-395-6439 (cell)
- **Kyle Grayson**, Environmental Compliance Manager: 573-526-5648 (office), 573-508-3255 (cell)

In addition, spills within cave recharge areas or over active streams shall also be reported to the following Threatened and Endangered Species contacts:

Contacts for T&E:

- **Bree McMurray**, Senior Environmental Specialist: 573-526-0606 (office), 573-508-2205 (cell)
- If Bree is unavailable:
 - **Chris Shulse**, Environmental Compliance Manager: 573-526-6678 (office), 573-406-2207 (cell)
 - **Kyle Grayson**, Environmental Compliance Manager: 573-526-5648 (office), 573-508-3255 (cell)
 - **Melissa Scheperle**, Environmental and Historic Preservation Manager: 573-526-6684 (office), 573-508-2848 (cell)
- If all listed Environmental T&E staff are unavailable, default to USFWS Contaminants Specialist contacts:
 - **Dave Mosby:** 573-234-2132, ext. 113 (office), 573-476-9552 (work cell), 573-999-2747 (personal cell)
 - **Leslie Lueckenhoff:** 573-234-5020 (work), 573-353-3016 (cell)

For the **Tumbling Creek Cave area**, the primary contact/local owner is:

- **Tom Aley**, Ozark Underground Lab, Protem MO: 417-785-4289

Missouri Department of Transportation Hazardous Waste Contact Information

Manager: Melissa Scheperle (Melissa.Scheperle@modot.mo.gov, 573-526-6684)



<u>District</u>	<u>Contact Specialist</u>	<u>Email Address</u>	<u>Phone</u>
1 - NW - Northwest	Kevin Kelly	Kevin.Kelly@modot.mo.gov	573-526-2904
2 - NE - Northeast	Kevin Kelly	Kevin.Kelly@modot.mo.gov	573-526-2904
3 - KC - Kansas City	Ethan Musick	Ethan.Musick@modot.mo.gov	573-522-5562
4 - CD Central District	various	various	
5 - SL - St. Louis	Andy Stivers	Andy.Stivers@modot.mo.gov	573-526-3599
6 - SW - Southwest	Ethan Musick	Ethan.Musick@modot.mo.gov	573-526-5562
7 - SE - Southeast	Andy Stivers	Andy.Stivers@modot.mo.gov	573-526-3599

Last updated: 10/16/2020

FF. Use of Right-of-Way, Permanent Easements, and Temporary Construction Easements

1.0 Description. The Commission has acquired right-of-way, permanent easements, and temporary construction easements for the contractor to use during construction on several commercial properties. The contractor shall not disturb any existing trees, landscaping, sprinkler heads, or irrigation lines within these developed areas unless noted on the plans. The contractor shall solely be responsible for repairing any damage to the property caused by contractor operations.

2.0 Construction Requirements. The contractor shall limit their operations to existing public right-of-way and the acquired new right-of-way, permanent easements, and temporary construction easements as specified above. Most of the adjacent parcels along this project are of commercial use. The contractor shall not stage their equipment during non-working hours in either public right of way, permanent easements, or the temporary construction easements. The contractor may elect to work out an agreement that is separate from this contract with individual property owners for storage of material and equipment during construction. The contractor shall comply with Division 100 of the Standard Specifications for storage of material and equipment.

3.0 Basis of Payment. No direct payment will be made for compliance to this provision.

GG. Access to Commercial Properties

1.0 Description. This improvement is in a highly commercial area. While working on and around commercial entrances, the contractor shall make every reasonable effort to minimize any interference to business and to pursue the work diligently. Under no circumstances shall the contractor block ingress/egress to and from businesses during the normal business hours of each business unless approved by the property owner and the engineer.

1.1 The contractor shall contact each business at least one (1) week in advance to advise them of the work that will take place before working on each business entrance. In some cases where a property has more than one entrance, the property owner may have a preference on whether to have one entrance closed while it is worked on or whether to have the entrances worked on one-half at a time. The contractor is required to do the work according to each individual property owner's preference. The contractor shall not disturb any existing trees, shrubs, landscaping, small block walls or irrigation lines. The contractor shall be solely responsible for repairing any damage to the property caused by contractor operations.

2.0 Basis of Payment. No direct payment will be made to the contractor for all costs incurred with compliance of this provision.

HH. Damage to Existing Pavement, Shoulders, Side Roads and Entrances

1.0 Description. This work shall consist of repairing any damage to existing pavement, shoulders, side roads and entrances caused by contractor operations. This shall include, but is not limited to, damage caused by the traffic during contractor operations within the project limits including the work zone signing.

2.0 Construction Requirements. Any cracking, gouging, or other damage to the existing pavement, shoulders, side roads or entrances from general construction shall be repaired within

twenty-four (24) hours of the time of damage at the contractor's expense. Repair of the damaged pavement, shoulders, side roads, or entrances shall be as determined by the engineer.

3.0 Method of Measurement. No measurement of damaged pavement or shoulder areas or side roads or entrances as described above will be made.

4.0 Basis of Payment. No payment will be made for repairs to existing pavement, shoulders, side roads or entrances damaged by contractor operations.

II. Pavement Edge Treatment for Drop Off Conditions

1.0 Description. This work shall consist of providing pavement edge treatment due to construction methods used by the contractor.

2.0 Construction Requirements. The contractor shall perform construction operations so there will be no drop off exceeding 2 inches adjacent to traffic. The contractor shall install pavement edge treatment at locations where the drop off is greater than 2 inches adjacent to traffic.

3.0 Method of Measurement. No measurement of pavement edge treatment as described above will be made. Treatment of any drop off greater than 2 inches shall be considered incidental to and completely covered by other pay items provided in the contract.

4.0 Basis of Payment. No direct payment will be made to comply with this provision.

JJ. Contractor Furnished Surveying and Staking – SW

In addition to the requirements of Section 627 of the Missouri Standard Specifications for Highway Construction, the following shall apply:

1.0 Description. The contractor shall be responsible for all layout required on the project. This responsibility shall include, but not be limited to the following: Construction signing, transition milling, pavement marking, loop detectors, etc.

1.1 The above list is not all inclusive. The contractor shall have the primary responsibility for these operations. The contractor shall provide the Resident Engineer with a staking plan layout for approval prior to the installation of signs. The RE will provide assistance during this layout provided a request is submitted to the RE or Construction Project Manager 48 hours in advance. This will ensure that all permanently mounted traffic control devices remain consistent with District policy and avoid re-staking. If the contractor installs any signs without engineer approval, all costs associated with re-staking and/or relocation will be at the contractor's expense.

1.2 The intent of this provision is to increase the quality of our work zones and minimize negative impacts to the contractor's schedule that can result from delays in staking.

1.3 Any adjustments to the plan quantities or line numbers established in the contract shall be approved by the Engineer.

2.0 Basis of Payment. No direct payment will be made to cover the costs associated with these additional requirements. All costs will be considered completely covered by the unit bid price submitted for Contractor Furnished Surveying and Staking.

KK. Modified Type A Gutter

1.0 Description. This work shall consist of constructing a Modified Type A Gutter as shown on the plans and in accordance with Section 609 of the Standard Specifications.

2.0 Construction Requirements. The contractor shall refer to the construction plans detailing the locations with Modified Type A Gutter. The contractor shall also pay special attention during construction to ensure proper drainage is achieved upon completion of construction. The contractor shall transition and match the curb type of the adjoining curb sections.

3.0 Method of Measurement. Measurement will be made to the nearest linear foot along the flow line of the limits of the Modified Type A Gutter.

4.0 Basis of Payment. All labor, equipment and materials required to construct the Modified Type A Gutter as shown on the plans and by this provision will be considered completely covered by Pay Item No. 609-99.03, Modified Type A Gutter, linear foot.

LL. Type A or Type B Curb and Gutter Construction

1.0 Description. This work shall consist of constructing curb and gutter as shown on the plans or as directed by the engineer. This work shall be in accordance with Sec 609 and standard drawing 609.00.

2.0 Construction Requirements. The curb and gutter LP44 (Chestnut Expressway) was originally constructed as Type A Curb and Gutter but some sections have been reconstructed over the years to include areas of Type B Curb and Gutter. In areas shown for replacement in the plans, the contractor shall match the curb and gutter type of the adjoining sections.

3.0 Method of Measurement. Curb and gutter will be measured to the nearest linear foot along the face of the curb.

4.0 Basis of Payment. All labor, equipment and materials required to construct Type A or Type B Curb and Gutter as shown on the plans will be considered completely covered by Pay Item No. 609-10.51, Type A Curb and Gutter, linear foot or Pay Item No. 609-10.52, Type B Curb and Gutter, linear foot.

MM. Modified Type S Curb

1.0 Description. This work shall consist of constructing curb as shown on the plans or as directed by the engineer. This work shall be in accordance with Sec 609 and standard drawing 609.00 except as modified by the project drawings or by these provisions.

2.0 Construction Requirements.

2.1 Type S Curbs without reinforcement shall be constructed to a maximum height of 12 inches.

2.2 Modified Type S Curbs constructed with a height exceeding 12 inches but less than or equal to 30 inches shall be constructed and reinforced as shown on the plans. Additional bury depth will be required for heights exceeding 18 inches.

3.0 Method of Measurement. Curb will be measured to the nearest linear foot along the face of the curb.

4.0 Basis of Payment.

4.1 The accepted quantities of Type S Curbs with a height exceeding 6 inches but less than or equal to 12 inches will be paid for at the contract unit price for Pay Item No. 609-10.11, Concrete Curb (Over 6 IN. Height) Type S, linear foot.

4.2 The accepted quantities of Modified Type S Curbs with a height exceeding 12 inches but less than or equal to 30 inches will be paid for at the contract unit price for Pay Item No. 609-99.03, Modified Type S Curb, linear foot.

4.3 No direct payment will be made for the following:

- (a) Excavation below the upper surface of the concrete of these items.
- (b) Any work necessary for backfilling the completed items.
- (c) Furnishing or installing reinforcement.

NN. Steel Plate

1.0 Description. This work shall consist of installing a steel plate as shown on the plans.

2.0 Construction Requirements. The contractor shall refer to the construction plans detailing the locations of the steel plates. The contractor shall pay special attention during construction to ensure proper drainage is achieved where the steel plates are to be installed.

2.1 The one half ($\frac{1}{2}$) inch steel slip-resistant plate shall be installed flush with the top of the Modified Type A Gutter or sidewalk and secured to the top of the angle iron. The steel slip-resistant plate shall have a minimum static coefficient of friction of 0.6 and be ADA compliant.

3.0 Method of Measurement. Measurement will be made to the nearest square foot.

4.0 Basis of Payment. All labor, equipment and materials required to install the steel plate as shown on the plans and by this specification will be considered completely covered by Pay Item No. 604-99.04, Steel Plate, square foot. No direct payment will be made for other incidental items required for installation of the steel plates.

OO. Modified Paved Approach

1.0 Description. This work shall consist of constructing modified paved approaches as shown on the plans in accordance with Sec 608.

2.0 Construction Requirements. The modified paved approaches shall be constructed as shown on the plans in accordance with Sec 608.

3.0 Method of Measurement. The modified paved approaches will be measured in accordance with Sec 608.

4.0 Basis of Payment. All costs incurred for constructing modified paved approaches as shown on the plans, complete in place, will be paid for at the contract unit price for Pay Item 608-50.08, Paved Approach, 8 in, per square yard.

PP. Positive Drainage

1.0 Description. The contractor shall be made aware that this project alters the drainage collection and routing throughout the project. Care shall be taken during construction to provide proper drainage.

2.0 Construction Requirements. The contractor shall maintain positive drainage for all properties and shall not create locations of ponding or other drainage concerns to property owners. The contractor shall alert the engineer of any potential concerns during construction that may affect the ability to maintain positive drainage.

3.0 Basis of Payment. No direct payment will be made for compliance with this provision. All equipment and labor necessary for the work described shall be considered incidental to and completely covered by other pay items provided in the contract.

QQ. Sodding and Fertilizing

1.0 Description. This work shall consist of installing sod and fertilizer in accordance with Sections 801 and 803 of the Standard Specification.

2.0 Construction Requirements. Sod shall be installed at all locations as shown on the plans or where the contractors' operations have disturbed adjacent, existing grass landscapes or as approved by the engineer. Fertilizer shall be applied to all sodded locations per Manufacturers Recommendations. The type of sod and fertilizer shall be as noted below.

Fertilizer
Starter Fertilizer 12-12-12 or 10-10-10

Sod
Turf Type Tall Fescue

3.0 Method of Measurement. Measurement of sodded areas will be made to the nearest square yard. The area required for fertilizer shall match the final area for sod. Plan quantities were estimated from sidewalk locations with adjacent grassy areas. More or less quantity of said

materials may be needed depending upon construction requirements at each location. The Engineer shall verify and approve the contractor's location and quantity of newly sodded areas.

4.0 Basis of Payment. All costs incurred by the Contractor by reason of compliance to satisfy the above requirements will be considered incidental to and completely covered in the bid item 803-10.00A, Turf Type Tall Fescue Sodding, measured per square yard.

RR. Seeding and Mulching Requirements JSP-25-03

1.0 Seeding. Seeding shall be in accordance with Sec. 805 except as otherwise stated herein. Cool season grasses shall be utilized in accordance with Standard Plan 805.00.

1.1 Temporary Seeding. Temporary seeding shall be in accordance with Sec. 806.50 except as otherwise stated herein.

2.0 Mulching. Mulching shall be in accordance with Sec. 802 except as otherwise stated herein.

3.0 Method of Measurement. No measurement will be made for seeding, temporary seeding or mulching. Seeding and mulching of all disturbed areas, including any additional areas disturbed beyond what is shown on the plans, shall be considered included in the single lump sum item provided.

4.0 Basis of Payment. All labor, equipment, and materials necessary to complete all seeding, temporary seeding and mulching shall be completely covered under the lump sum price for item 805-99.01, Seeding and Mulching - Cool Season Grasses.

SS. Cooperation Between Contractors – SW

1.0 Description. The contractor shall be aware that other contracts will be administered in the vicinity and timeframe as this contract.

1.1 Job Numbers J8S3166, J8S3167, J8S3224, J8S3171, and J8P3192 provides for resurfacing and the upgrade of pedestrian facilities to comply with ADA on Interstate Loop 44 (Chestnut Expressway) and various other locations in Greene and Christian Counties. Construction is scheduled for 2024 and 2025.

1.2 Job Numbers J8P3050C, J8S3162, J8S3169, J8S3149, J8S3172, J8S3190, and JSU0085 provide for resurfacing, ADA, safety and operational improvements on Greene County Route 744 (Kearney Street in Springfield) from the Springfield-Branson National Airport to Mulroy Road, and on Mulroy Road from Route OO to I-44. These projects will be let in combination. Construction is scheduled for 2024 and 2025.

1.3 Job Numbers J8S0745, J8S3215, J8S3153 and J8S3133 provides for resurfacing, ADA, safety and operational improvements on Greene County Route D (Sunshine Street) in Springfield. Construction is scheduled for 2025 and 2026.

1.4 Job Numbers J8I3044C, J8I3225, J8S3156, and JSU0076 provides for resurfacing and capacity improvements on Greene County Interstate 44 in Springfield. Construction is scheduled for 2025 and 2026.

1.5 Job Number J8S3157 provides for bridge replacement and ADA improvements on Greene County Route 413 (Sunshine Street) in Springfield. Construction is scheduled for 2024 and 2025.

2.0 Requirements. The contractor shall coordinate work so as not to interfere with or hinder the progress or completion of the work being performed by the other contractor. The contractor shall also coordinate work to minimize impacts to the traveling public between the work zones.

2.1 The contractor will not be granted additional time due to conflicts with other contractors, unless approved by the engineer.

3.0 Basis of Payment. No direct payment or additional time will be made to the contractor to recover the cost of equipment, labor, materials, or time required to fulfill the above provisions, unless specified elsewhere in the contract document.

TT. Lump Sum Temporary Traffic Control JSP-22-01B

1.0 Delete Sec 616.11 and insert the following:

616.11 Method of Measurement. Measurement for relocation of post-mounted signs will be made to the nearest square foot of sign area only for the signs designated for payment on the plans. All other sign relocations shall be incidental. Measurement for construction signs will be made to the nearest square foot of sign area. Measurement will be made per each for each of the temporary traffic control items provided in the contract.

616.11.1 Lump Sum Temporary Traffic Control. No measurement will be made for temporary traffic control items grouped and designated to be paid per lump sum. The list of lump sum items provided in the plans or contract is considered an approximation and may be subject to change based on field conditions. This is not a complete list and may exclude quantities for duplicate work zone packages used in simultaneous operations. The contractor shall provide all traffic control devices required to execute the provided traffic control plans for each applicable operation, stage, or phase. No measurement will be made for any additional signs or devices needed except for changes in the traffic control plan directed by the engineer.

2.0 Delete Sec 616.12 and insert the following:

616.12 Basis of Payment. All temporary traffic control devices authorized for installation by the engineer will be paid for at the contract unit price for each of the pay items included in the contract. Whether the devices are paid individually, or per lump sum, no direct payment will be made for the following:

- (a) Incidental items necessary to complete the work, unless specifically provided as a pay item in the contract.
- (b) Installing, operating, maintaining, cleaning, repairing, removing, or replacing traffic control devices.
- (c) Covering and uncovering existing signs and other traffic control devices.

(d) Relocating temporary traffic control devices, including permanent traffic control devices temporarily relocated, unless specifically included as a pay item in the contract.

(e) Worker apparel.

(f) Flaggers, AFADs, PFDs, pilot vehicles, and appurtenances at flagging stations.

(g) Furnishing, installing, operating, maintaining, and removing construction-related vehicle and equipment lighting.

(h) Construction and removal of temporary equipment crossovers, including restoring pre-existing crossovers.

(i) Provide and maintaining work zone lighting and work area lighting.

616.12.1 Lump Sum Temporary Traffic Control. Traffic control items grouped together in the contract or plans for lump sum payment shall be paid incrementally per Sec 616.12.1.1. Alternately, upon request from the contractor, the engineer will consider a modified payment schedule that more accurately reflects completion of traffic control work. No payment will be made for any additional signs or devices needed except for changes in the traffic control plan directed by the engineer. Additional items directed by the engineer will be paid for in accordance with Sec 109.4. No adjustment to the price will be made for overruns or underruns of other work or for added work that is completed within existing work zones.

616.12.1.1 Partial payments. For purposes of determining partial payments, the original contract amount will be the total dollar value of all original contract line items less the price for Lump Sum Temporary Traffic Control (LSTTC). If the contract includes multiple projects, this determination will be made for each project. Partial payments will be made as follows:

(a) The first payment will be made when five percent of the original contract amount is earned. The payment will be 50 percent of the price for LSTTC, or five percent of the original contract amount, whichever is less.

(b) The second payment will be made when 50 percent of the original contract amount is earned. The payment will be 25 percent of the price for LSTTC, or 2.5 percent of the original contract amount, whichever is less.

(c) The third payment will be made when 75 percent of the original contract amount is earned. The payment will be 20 percent of the price for LSTTC, or two percent of the original contract amount, whichever is less.

(d) Payment for the remaining balance due for LSTTC will be made when the contract has been accepted for maintenance or earlier as approved by the engineer.

616.12.1.2 Temporary traffic control will be paid for at the contract lump sum price for Item:

Item No.	Unit	Description
616-99.01	Lump Sum	Misc. Lump Sum Temporary Traffic Control

UU. **Right-of-Way Clearance**

1.0 Description. The right of way for this project has been acquired except for the parcels listed below.

 **REVISED**

Parcel No.	Property Owner
4	Leigh Ventrues LLC
5	Carol Marshall Hanson
9	Westwood Industrial Park LTD
11	Reid Property Trust
12	DJJD Holdings LLC
14	Dime Two LLC
15	Salvation Army
16	JEK Properties LLC
17	Brian Eady
19	Karma Enterprises, LLC
20	Liberty Enterprises Group LLC
21	SSMB, LLC

 **REVISED**

1.1 The contractor shall inform itself of the location of these parcels. No encroachment, storage of equipment and materials or construction on these parcels will be permitted until notification by the engineer is given that these parcels have been acquired.

1.2 The contractor shall schedule its work utilizing the available right of way until these parcels are cleared for construction, which is estimated to be October 6, 2025. However, this date expressly is not a warranty by or contractually binding on the Commission as the date these **12** parcels listed above will be clear for construction.

 **REVISED**

1.3 The contractor shall have no claim for damage for delay, disruption, interference or otherwise as a result of the unavailability of these **12** parcels. The contractor may be given an extension of time upon proof of actual delay caused by the unavailability of these parcels as approved by the engineer.

 **REVISED**