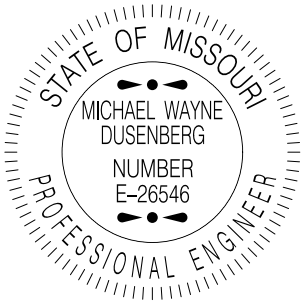
Job No.: J7S3059B
Route: FF
County: Jasper

JOB SPECIAL PROVISIONS TABLE OF CONTENTS (ROADWAY)

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

Job No.: J7S3059B
Route: FF
County: Jasper



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

Bartlett & West, Inc.
601 Monroe Street, Suite 201
Jefferson City, MO 65101
Certificate of Authority 000167
Consultant Phone: (573) 634-3181

If a seal is present on this sheet, JSP's have been electronically sealed and dated.

JOB NUMBER: J7S3059B
JASPER COUNTY, MO
DATE PREPARED: 03/03/2025

ADDENDUM DATE:

Only the following items of the Job Special Provisions (Roadway) are authenticated by this seal: All

Job No.: J7S3059B
Route: FF
County: Jasper

JOB
SPECIAL PROVISION

A. General – Federal JSP-09-02K

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 2024 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

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 (job numbers) shall be completed on or before the Contract Completion date specified below. Completion by this date shall be in accordance with the requirements of Sec 108.7.1.

Notice to Proceed Date: July 7, 2025
Contract Completion Date: June 30, 2026

2.1 Calendar Days. The count of calendar days will begin on the date the contractor starts any construction operations on the project.

Job Number	Calendar Days	Daily Road User Cost
J7S3059B	132	$3,200

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 **$1,500** 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 above 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

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 1,000 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 1,000 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 1,000 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.

2.6 Transportation Management Plan. The contractor Work Zone Specialist (WZS) shall review the Transportation Management Plan (TMP), found as an electronic deliverable on MoDOT's Online Plans Room and discuss the TMP with the engineer during the preconstruction conference. Throughout the construction project, the WZS is responsible for updating any changes or modifications to the TMP and getting those changes approved by the engineer a

minimum of two weeks in advance of implementation. The WZS shall participate in the post construction conference and provide recommendations on how future TMPs can be improved.

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

4.0 Detours and Lane Closures.

4.1 The existing Davis Boulevard and Route FF intersection will be closed to traffic during the final phase of construction to connect Davis Boulevard to Stephens Boulevard. Traffic will be maintained through the northern intersection of Davis Boulevard and 20th Street. Access will be maintained for all businesses.

4.2 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.

4.3 At least one lane of traffic in each direction on Davis Boulevard and Stephens Boulevard 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 – SW

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

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

Missouri Highway Patrol – Troop D: 417-895-6868	
MoDOT Customer Service: 417-895-7600	
Jasper County Sheriff: 417-358-8177	Jasper County Office of Emergency Management: 417-358-7000
City of Joplin Fire: 417- 623-0403	City of Joplin Police: 417-623-3131

Emergency Only Numbers
9-1-1 *55 cell phone – Missouri Highway Patrol 417-864-1160 – 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 law enforcement 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

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

Craig Switzer, Project Contact
MoDOT Southwest District
2915 Doughboy Drive
Joplin, MO 64804

Telephone Number: 417-621-6331
Email: Craig.Switzer@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-18-01FF

- 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.

- Pavement Marking Paint Requirements for Standard Waterborne and Temporary

1.0 Description. High Build acrylic waterborne pavement marking paint shall be used in lieu of standard acrylic waterborne pavement marking paint for all Standard Waterborne Pavement Marking Paint items and all Temporary Pavement Marking Paint items. Paint thickness, bead type, bead application rate, retroreflectivity requirements, and all other specifications shall remain as stated in the Missouri Standard Specifications for Highway Construction, except as otherwise amended in the contract documents.

2.0 Material Requirements. Material requirements for Sec 620.20.2.5 Standard Waterborne Paint, and Sec 620.10.2 Temporary Pavement Marking Paint shall be per Sec 1048.20.1.2 High Build Acrylic Waterborne Pavement Marking Paint.

- 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 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, suppliers, manufacturers, and truckers 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.

G. Utilities

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:

Utility Name	**Known Required Adjustment**	**Type**
AT&T – Distribution Gene Lollis 727 S. Pearl Ave. Joplin, MO 64801 Phone: 417-499-7819 Email: IL0967@att.com	Yes (see 2.0-2.2 below)	Communications
Sparklight (Cable One) Keri Bledsoe 2600 S. Davis Blvd. Joplin, MO 64804 Phone: 417-768-9183 Email: keri.bledsoe@sparklight.biz	Yes (see 3.0 below)	Communications
Liberty Utilities (EDE) Shawn Stephens 3400 Kodiak Road Joplin, MO 64804 Phone: 417-609-8793 Email: shawn.stephens@libertyutilities.com	Yes (see 4.0-4.4 below)	Power
Liberty Connect (Empire Connect) Landon Dobbs 720 Schifferdecker Ave.	Yes (see 5.0 below)	Communications

Joplin, MO 64802 Phone: 417-483-2460 Email: landon.dobbs@libertyutilities.com		
City of Joplin John Cruz 602 S. Main Street Joplin, MO 64801 Phone: 417-624-0820 ext. 1584 Email: jcruz@joplinmo.org	Yes (see 6.0 below)	Sewer
Spire Energy Richi Garcia 3025 SE Clover Drive Lee's Summit, MO 64082 Phone: 816-507-0713 Email: richi.garcia@spireenergy.com	Yes (see 7.0 below)	Gas
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	Yes (see 8.0 below)	Communications
Bluebird David Frazier 800 NW Chipman Rd., Suite 5750 Lee's Summit, MO 64063 Phone: 816-807-0145 Email: david.frazier@bluebirdnetwork.com	Yes (see 9.0 below)	Communications
Missouri American Grant Alumbaugh 2323 S. Davis Blvd. Joplin, MO 64801 Phone: 417-529-7459 Email: grant.alumbaugh@amwater.com	Yes (see 10.x below)	Water

1.1 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 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 with this specification.

2.0 AT&T.

2.1 Relocated Stephens. AT&T has a 25pr and a 24FO running parallel to existing Stephens along the west side of the roadway. There is an existing pedestal near relocated Stephens Sta 8+16, 12ft RT that will be in conflict with the proposed paved approach. This pedestal feeds a drop going east under existing Stephens. AT&T will replace the 25pr by utilizing an existing 2" conduit under exiting Stephens that comes out of their fiber handhole to the south. The fiber handhole noted above will likely need to be raised in order to accommodate the change in grade.

2.2 Route FF. Starting in the northwest quadrant of Route FF and existing Stephens Blvd., AT&T has a 100pr, a 24FO, a 48FO, and a 144FO going east and crossing under existing Stephens. In the northeast quadrant, the 48FO goes south and crosses under Route FF. The other three cables continue east along the north side of Route FF. These three parallel cables will be in conflict with the proposed retaining wall. AT&T intends to relocate all four lines currently under existing Stephens Blvd. Starting in the northwest quadrant, AT&T will bore south under Route FF to the existing south R/W line of Route FF. The cable placement will continue east following the existing and/or new south R/W line to a point falling east of the new WB to NB right turn lane. At this point, AT&T will bore to the north side of Route FF and tie back into their existing facilities. AT&T has completed relocation plans and is waiting for the new R/W to be acquired on Parcel 4. They anticipate their relocation will take 5 weeks to complete and cut over after they are given notice to proceed.

3.0 Sparklight. Sparklight has aerial facilities attached to Liberty's power poles within the project limits. They plan to transfer their aerial plant to Liberty's new poles. Sparklight anticipates the transfers will take 3 weeks to complete after Liberty has completed their primary power relocation.

4.0 Liberty Utilities. Liberty has multiple power impacts within the project limits. At the time of project advertisement, Liberty was still in the process of finalizing their relocation plans. The known impacts and proposed mitigation are outlined in the following sections.

4.1 Existing Davis Blvd. Liberty has an existing turning pole for a three-phase circuit located on relocated Davis near Sta 95+55, 18ft LT. This turning pole falls within the proposed roadway. Liberty will be relocating the anchors on this pole to the next in-line pole to the north and installing a reduced tension three phase line to the exiting pole located on relocated Davis near Sta 95+92, 87ft, LT. They will be installing an in-line lift pole on the reduced tension line just inside the DEFAM fence.

4.2 Existing Stephens Blvd. Liberty has a double three phase circuit running parallel to existing Stephens on the west side of the roadway. They will be doing an in-line shift on the pole in conflict with the relocated Stephens alignment. Liberty will be shifting the alignment of the power line to the west starting just north of relocated Davis and continuing south to the south end of the substation. The horizonal shift will allow the placement of new supporting anchors outside of the proposed pavement.

4.3 Route FF. Liberty has a three-phase crossing of Route FF near Sta 34+95. Liberty will be shifting this primary crossing approximately 37ft to the west on the south side of the roadway to provide clearance to proposed signal base 2. Liberty has a three-phase service crossing near Sta 35+43 with a lift pole on the north side of the roadway. Liberty will be relocating the transformers to their existing three phase line on the north side of Route FF so that the lift pole can be removed for the new WB to NB turn lane.

4.4 Secondary Power. As part of the proposed improvements, a new power supply will be required in the southeast quadrant of Route FF and existing Stephens Blvd. The power source for the new power supply will come from a secondary pedestal provided and installed by Liberty. Liberty will not provide a drop off of an existing pole supporting transmission so they will be installing a service pole next to the exiting transmission pole. The new secondary pedestal will be installed at the base of the service pole. The roadway contractor shall provide and install the conduit and wire from Liberty's new service pedestal to the new Type 2 Power Supply. Liberty will be installing the electric meter in their pedestal so a meterback will not be required on the Type 2 Power Supply. The Type 2 Power Supply shall be equipped with a disconnect capable of isolating the power to the individual components (signal cabinet, ITS cabinet, lighting controller). All contractor costs associated with providing the secondary power shall be included in the contractor unit bid price for the Type 2 Power Supply.

5.0 Liberty Connect. Liberty Connect has aerial fiber attached to Liberty's power poles along existing Davis Blvd and along Route FF. Their aerial plant will not be impacted by the proposed roadway improvements. Liberty Connect had a drop on the pole in the southwest quadrant of Route FF and existing Stephens Blvd. This drop goes straight north to the substation then turns east crossing existing Stephens and terminates at an electric control switch near Route FF Sta 36+46. The buried parallel fiber will be in conflict with the proposed retaining wall. Liberty is planning to convert this underground fiber to aerial utilizing Liberty's power poles.

6.0 City of Joplin. The City has an existing sanitary sewer manhole (MH 8278) in the northeast quadrant of Route FF and existing Stephens Blvd. This manhole will fall within the pavement widening for the new WB to NB right turn lane. This is a sampling manhole for the discharge from General Mills. The City will be relocating this manhole to the northeast beyond the new back of curb. The City intends to perform the manhole relocation just ahead of the roadway construction. The City has 3 existing manholes following within the roadway pavement. The locations are as follows: Relocated Davis Sta 95+82, 12' RT (MH 7170), Relocated Davis Sta 108+47, 16' LT (MH 4152), and Relocated Stephens Sta 9+27, 17.5' RT (MH 4154). There is a high probability these manholes will need elevation adjusts on the cover to match the new roadway grade. The City will perform these elevation adjustments during construction. The roadway contractor shall notify the City 3 weeks in advance of needing the adjustments made. The roadway contractor will be responsible for removing the existing hard surface (asphalt/concrete) around the existing covers for the City. The contractor shall also provide finished grade elevations for the City's crews. The City also has a manhole located on relocated Davis near Sta 96+96, 211' RT (MH 7169). This manhole falls within the grading limits for the proposed 8ft flat bottom ditch and the City will not

be relocating this manhole. The roadway contractor shall perform the grading on the proposed 8ft flat bottom ditch as shown in the plan while not disturbing the City's existing manhole.

7.0 Spire. Spire has a 6" steel main running parallel to Route FF on the north side of the roadway, a 4" steel main running parallel to existing Davis Blvd. on the east side of the roadway, and a 4" steel main running parallel to existing Stephens Blvd. on the west side of the roadway. The 6" main along Route FF will be impacted by the proposed retaining wall for the new WB to NB right turn lane. There is a high probability the 4" main on existing Davis will be impacted by the proposed ditch cut on relocated Davis near Sta 96+70, 95ft RT. There are no anticipated impacts to the 4" main on existing Stephens other than the new tie to the relocated 6" main on Route FF. At the time of project advertisement, Spire was still in the process of developing relocation plans for the project. The spot lowering for the drainage cut along existing Davis will be performed during construction. The roadway contractor shall be responsible for providing the ditch cut elevations for Spire's crew. Spire anticipates it will take them six weeks to schedule and complete the relocation of the 6" main along Route FF after they are given notice to proceed. This 6" main relocation will need to be coordinated with Lumen and Bluebird as all three utilities will be occupying the same general space between the new turn lane and retaining wall. Spire has a service drop off the 6" main feeding General Mills. This service connection is near Route FF Sta 37+00. The roadway contractor shall be responsible for providing Spire's crews with the retaining wall details at this location so that the service line can be installed clear of the retaining wall.

8.0 Lumen. Lumen has a 12FO line in duct running parallel to Route FF on the north side of the roadway. They have a handhole in the northeast quadrant of existing Stephens over this line. The existing parallel fiber and handhole will be within the limits of the new WB to NB right turn lane on Route FF. Lumen plans to incept the existing fiber line west of Liberty's substation entrance off Route FF with a new handhole and rebore back to the east under the substation entrance and existing Stephens Blvd. to a point falling east of the taper for the new right turn lane. The east limits will terminate in a new set handhole over their existing fiber line. The offset for the bore will be between the new back of curb on the right turn lane and the proposed retaining wall. Lumen has a relocation plan drawn but has not been given notice to proceed. Lumen's offset may need to be revised to accommodate Spire and Bluebird who will have facilities occupying the same general location. Lumen anticipates it will take four weeks to complete their relocation once they have been given notice to proceed.

9.0 Bluebird. Bluebird has a 144FO line in duct running parallel to Route FF on the north side of the roadway. They have a handhole in the northeast quadrant of existing Stephens over this line. The existing parallel fiber and handhole is north of the new WB to NB right turn lane on Route FF. At the time of project advertisement, Bluebird was evaluating their fiber depth at the proposed drainage pipe crossing from I-10 to I-9 and from I-8 to I-9. If spot lowing is feasible, they will lower the fiber under the two drainage pipes and install spit duct through their existing handhole and install a new handhole east of the proposed right turn lane. If spot lowing is not feasible, then Bluebird will follow suit with Lumen and rebore the line through the substation entrance and existing Stephens. Spot lowering if applicable will be done during construction with the roadway contractor providing drainage pipe elevations for Bluebird's contractor. If relocation is necessary, then Bluebird will coordinate their relocation with Lumen's contractor.

10.0 Missouri American. MO American has a 12" transite main running parallel to Route FF on the south side of the roadway, a 12" cast iron main running parallel to existing Davis Blvd. on the east side of the roadway, and a 12" ductile iron main running parallel to existing Stephens Blvd. on the west side of the roadway. Based on locate marks, the 12" transite main will be impacted by proposed signal base 1 in the southeast quad of Route FF and existing Stephens Blvd. The

12" CI main along existing Davis is likely to be impacted by the proposed ditch cuts near Sta 96+70, 95ft RT and Sta 97+12, 266ft RT of relocated Davis. MO American has an existing fire hydrant near Sta 8+13, 14.5' RT on relocated Stephens that is in conflict with the realigned roadway. They have a water meter in the northeast quadrant of Route FF and exiting Stephens that will need to be relocated outside of the new pavement for the proposed WB to NB turn lane. They also have a water valve that will fall within the limits of the new paved approach for Parcel 4. At the time of project advertisement, MO American was still developing relocation plans. Based on discussions with MO American, they will perform a spot lowing if necessary for the drainage cuts along existing Davis. They will relocate the fire hydrant on existing Stephens to the south approximately 43ft to clear the proposed paved approach. MO American will relocate water meter in the northeast quad of Route FF and existing Stephens to the northeast just behind the new curb and gutter. MO American has long range plans to renew the 12" transite line along the south side of Route FF. Since this line will be impacted by the future railroad overpass project to the west, MO American is likely to relocate this main back to the new R/W on Parcel 4. The proposed water main relocation will mitigate the signal base impact. The existing valve in the new paved approach to Parcel 4 will be relocated south to the relocated main. MO American's relocation work will occur during construction. The roadway contractor shall be responsible for providing staking services for MO American's relocation work. This includes vertical control for the ditch cuts as well as horizontal control for the back of curb needed for the hydrant and water meter relocation.

H. 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:

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

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 requirements 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 the 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.

I. <u>ADA Compliant Manhole Frame and Cover</u>

1.0 Description. This work shall consist of installing new manhole frames and covers to meet Americans with Disabilities Act (ADA) guidelines at the locations shown on the plans.

2.0 Basis of Payment. Payment for furnishing and installing the ADA compliant manhole frames and covers shall be completely covered by the contract unit price for Item No. 614-99.02, ADA Compliant Manhole Frame and Cover, per each.

J. Contractor Quality Control NJSP-15-42

1.0 The contractor shall perform Quality Control (QC) testing in accordance with the specifications and as specified herein. The contractor shall submit a Quality Control Plan (QC Plan) to the engineer for approval that includes all items listed in Section 2.0, prior to beginning work.

2.0 Quality Control Plan.

(a) The name and contact information of the person in responsible charge of the QC testing.
(b) A list of the QC technicians who will perform testing on the project, including the fields in which they are certified to perform testing.
(c) A proposed independent third-party testing firm for dispute resolution, including all contact information.
(d) A list of Hold Points, when specified by the engineer.
(e) The MoDOT Standard Inspection and Testing Plan (ITP). This shall be the version that is posted at the time of bid on the MoDOT website (www.modot.org/quality).

3.0 Quality Control Testing and Reporting. Testing shall be performed per the test method and frequency specified in the ITP. All personnel who perform sampling or testing shall be certified in the MoDOT Technician Certification Program for each test that they perform.

3.1 Reporting of Test Results. All QC test reports shall be submitted as soon as practical, but no later than the day following the test. Test data shall be immediately provided to the engineer upon request at any time, including prior to the submission of the test report. No payment will be made for the work performed until acceptable QC test results have been received by the engineer and confirmed by QA test results.

3.1.1 Test results shall be reported on electronic forms provided by MoDOT. Forms and Contractor Reporting Excel2Oracle Reports (CRE2O) can be found on the MoDOT website. All required forms, reports and material certifications shall be uploaded to a Microsoft SharePoint® site provided by MoDOT, and organized in the file structure established by MoDOT.

3.2 Non-Conformance Reporting. A Non-Conformance Report (NCR) shall be submitted by the contractor when the contractor proposes to incorporate material into the work that does not meet the testing requirements or for any work that does not comply with the contract terms or specifications.

3.2.1 Non-Conformance Reporting shall be submitted electronically on the Non-Conformance Report form provided on the MoDOT Website. The NCR shall be uploaded to the MoDOT SharePoint® site and an email notification sent to the engineer.

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

4.0 Work Planning and Scheduling.

4.1 Two-week Schedule. Each week, the contractor shall submit to the engineer a schedule that outlines the planned project activities for the following two-week period. The two-week schedule shall detail all work and traffic control events planned for that period and any Hold Points specified by the engineer.

4.2 Weekly Meeting. When work is active, the contractor shall hold a weekly project meeting with the engineer to review the planned activities for the following week and to resolve any outstanding issues. Attendees shall include the engineer, the contractor superintendent or project manager, and any foreman leading major activities. This meeting may be waived when, in the opinion of the engineer, a meeting is not necessary. Attendees may join the meeting in person, by phone or by video conference.

4.3 Pre-Activity Meeting. A pre-activity meeting is required in advance of the start of each new activity, except when waived by the engineer. The purpose of this meeting is to review construction details of the new activity. At a minimum, the discussion topics shall include: safety precautions, QC testing, traffic impacts, and any required Hold Points. Attendees shall include the engineer, the contractor superintendent, and the foreman who will be leading the new activity. Pre-activity meetings may be held in conjunction with the weekly project meeting.

4.4 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, in the opinion of the engineer, a review of the preceding work is necessary before continuation to the next stage.

4.4.1 A list of typical Hold Point events is available on the MoDOT website. Use of the Hold Point process will only be required for the project-specific list of Hold Points, if any, that the engineer submits to the contractor in advance of the work. The engineer may make changes to the Hold Point list at any time.

4.4.2 Prior to all Hold Point inspections, the contractor shall verify the work has been completed in accordance with the contract and specifications. 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. Re-scheduling of Hold Points requires a minimum 24-hour advance notification from the contractor unless otherwise allowed by the engineer.

5.0 Quality Assurance Testing and Inspection. MoDOT will perform quality assurance testing and inspection of the work, except as specified herein. The contractor shall utilize the inspection checklists provided in the ITP as a guide to minimize findings by MoDOT inspection staff. Submittal of completed checklists is not required, except as specified in 5.1.

5.1 Inspection and testing required in the production of concrete for the project shall be the responsibility of the contractor. Submittal of the 501 Concrete Plant Checklist is required.

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

K. Optional Pavements

1.0 Description. This work shall consist of a pavement composed of either Portland cement concrete or asphaltic concrete constructed on a prepared subgrade. This work shall be performed in accordance with the standard specifications and as shown on the plans or established by the engineer.

2.0 The quantities shown reflect the total square yards of pavement surface designated for each pavement type as computed and shown on the plans.

2.1 No additional payment will be made for asphaltic concrete mix quantities to construct the required 1:1 slope along the edge of the pavement, or for tack applied between lifts of asphalt.

2.2 No additional payment will be made for aggregate base quantities outside the limits of the final surface area as computed and shown on the plans. When A2 shoulders are specified, payment for aggregate base will be as shown on the plans.

2.3 The grading shown on the plans was designed for the thicker pavement option. For projects with grading in the contract, there will be no adjustment of the earthwork quantities due to adjusting the roadway subgrade for optional pavements.

2.4 The contractor shall comply with Sections 401 through 403 for the asphalt option and Sections 501 and 502 for the concrete option.

2.5 Pavement options composed of Portland cement concrete shall have contrast pavement marking for intermittent markings (skips), dotted lines, and solid intersection lane lines. The pavement markings shall be in accordance with Section 620. No additional payment will be made for the contrast pavement markings.

3.0 Method of Measurement. The quantities of concrete pavement will be measured in accordance with Section 502.14. The quantities of asphaltic concrete pavement will be measured in accordance with Section 403.22.

4.0 Basis of Payment. The accepted quantity of the chosen option will be paid for at the contract unit bid price for Item 401-99.05, Optional Pavement, per square yard.

4.1 For projects with previously graded roadbeds, any additional quantities required to bring the roadway subgrade to the proper elevation will be considered completely covered by the pay item for Subgrading and Shouldering.

4.2 Price Adjustment for Fuel. If the contractor accepts the option for fuel adjustment in the bid proposal, a fuel adjustment will be applied in accordance with Sec 109.14 for the type of pavement constructed.

L. Type D Concrete Traffic Barrier with Height Transition and Moment Slab

1.0 Description. This work covers the construction of a Type D Concrete Traffic Barrier with Height Transition and Moment Slab as shown in the plans. Work includes construction of the Type D barrier, moment slab, and height transitions on both ends of the barrier.

2.0 Construction Requirements. Construction shall be in accordance with the Missouri Department of Transportation Standard Specifications and Standard Plans.

3.0 Method of Measurement. Measurement of Type D Concrete Traffic Barrier with Height Transition and Moment Slab will be made to the nearest Linear Foot.

4.0 Basis of Payment. The accepted quantity of Type D Concrete Traffic Barrier with Height Transition and Moment Slab will be paid for at the contract unit price for item 703-993.03, Type D Barrier Transition (Moment Slab), per Linear Foot, and will be considered as full compensation for all labor, equipment, materials, and other construction costs required to complete the described work.

M. 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 is 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.

N. Access to Commercial Properties

1.0 Description. 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 to advise them of the work that will take place before working around 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 working around it or whether to have the entrances worked around one-half at a time. The contractor is required to do the work according to each individual property owner's preference. The contractor is not to disturb any existing trees, landscaping, small block walls or irrigation lines. The contractor will solely be 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.

O. Tree Clearing Restriction

1.0 Description. The project is within the known range of the federally endangered Indiana bat, tricolored (proposed threatened), northern long-eared bat. These bats are known to roost in trees in summer months. MoDOT has determined that bat habitat exist within the project area. Therefore, to avoid potential negative impacts to roosting Indiana, tricolored, or northern long-eared bats, removal of all trees will only be allowed between November 1 and March 31.

2.0 Basis of Payment. No direct pay shall be provided for any labor, equipment, time, or materials necessary to complete this work.

P. Ethernet Switch

1.0 Description. The proposed location for the new Ethernet switch installation is as follows, and as shown on the plans.

- Route FF (32nd Street) at Davis Blvd.

2.0 Ethernet Switch. The Ethernet switch and power supply will be MoDOT-furnished and configured. The contractor shall work together with MoDOT to install the Ethernet switch and power supply. The contractor shall furnish and install CAT 5 cable and fiber optic jumpers to complete connections to the fiber patch panel and installed hardware.

2.1 The Ethernet switch and power supply shall be rack mounted on the inside wall of the ITS cabinet, as directed by the engineer.

3.0 CAT 5 Cable. The contractor shall furnish and install CAT 5 cable in the ITS cabinet, and shall complete the connections between the Ethernet switch in the ITS cabinet and traffic signal

controller and battery backup system in the signal cabinet. All other devices shall be installed in the ITS cabinet and connected with CAT 5 pigtails from that equipment, such as the POE injector, video detection system encoder, or other equipment in the ITS cabinet to the switch as shown on the plans.

4.0 Method of Measurement. This item will be measured per each Ethernet switch installed, complete in place, including the CAT 5 Ethernet cable connection.

5.0 Basis of Payment. The contract unit price for installing the MoDOT-furnished Ethernet switch in the ITS cabinet shall include full compensation for installing the MoDOT-furnished Ethernet switch, furnishing and installing the CAT 5 Ethernet cable and connections, and for furnishing all labor, materials, appropriate connectors, fiber optic jumpers, tools, equipment, and incidentals, and for doing all the work involved in installing the Ethernet switch, complete in place, as shown on the plans and specified in the Standard Specifications and these Special Provisions, or as directed by the Engineer.

5.1 No additional payment will be made for furnishing and installing CAT 5 Ethernet cable, and for connecting the CAT 5 Ethernet cable to the traffic signal controller and battery backup system in the signal cabinet.

Item No.	Item Description	Unit
910-99.02	INSTALL MODOT FURNISHED ETHERNET SWITCH	EA

Q. Fiber Distribution Unit (FDU)

1.0 Description. The fiber distribution unit (FDU) shall be contractor furnished and contractor installed at the locations shown on the Plans.

2.0 Special Specification. The FDU shall act as the demarcation point between the fiber optic cable via the fiber pigtail from the splice closure and the terminal equipment via the fiber optic patch cords. The Contractor shall furnish and install 6 port ST connector panels and pre-terminated pigtails to be spliced to the backbone fiber. The approved type of optical connectors on the one end of each of the pigtails shall be ST and screw into a sleeve securely mounted to a patch panel within the FDU enclosure. The maximum optical loss across the connection shall not exceed 0.4 dB.

2.1 The FDU housings shall be din rail mounted, as shown on the plans. The FDU shall accept a minimum of forty-eight (48) fiber terminations. The cabinet shall have fiber optic cable entrances with cable sheath strain relief, leading to the FDU.

3.0 Basis of Payment. Payment for the above items shall include all costs necessary to complete the work including furnishing, installation, incidentals, and testing of a fully functional system.

Item No.	Item Description	Unit
910-99.02	48 PORT FIBER DISTRIBUTION UNIT	EA

R. ITS Cabinet, Type 332

1.0 Description. This work shall consist of furnishing and installing a new cabinet and base adapter. This work shall be in accordance with Sec 902 and 1092.

2.0 Materials. The cabinet shall be a Type 332 in accordance with the Traffic Signal Control Specifications published by the California Transportation and Housing Agency, Department of Transportation (Caltrans). The aluminum housing material shall be a minimum of 0.125 inches in thickness. The cabinet shall have a natural aluminum finish, free from blemishes. All seams shall be continuously welded and ground smooth. All fasteners must be stainless steel.

2.1 The housing shall feature two doors with latches, hinges, and door gaskets. One cabinet door shall have louvers in the lower quarter and a replaceable filter for ventilation. All cabinet doors shall be equipped with No. 2 Corbin locks. Two keys shall be provided with each cabinet. An EIA 19-inch rack shall be installed including side panels where cabinet power distribution components will be mounted.

2.2 A thermostatically controlled fan shall be installed in the top of the cabinet capable of moving 100 CFM of ventilation airflow.

2.3 LED lighting fixtures suitable for mounting at the top of the 19-in rack shall be installed in both the front and rear of the cabinet. Each shall be wired through door activated switches.

2.4 One aluminum 19-inch rack mountable shelf shall be provided. The shelf shall be secured to the rack rails at all four corners.

3.0 Splice Cabinet Electrical Distribution. A cabinet electrical distribution system consisting of the following elements shall be installed. Components shall be neatly arranged, mounted, and wired on the lower quarter of the hinge-side rack side panel.

3.1 One power wiring block for service conductors.

3.2 One 20 Amp single pole unit mount, feed-through circuit breaker One Edco SHA1210 surge suppressor or approved equivalent.

3.3 One 2-gang outlet box with duplex outlets installed (quadraplex) with cover plate.

3.4 One 12 position minimum barrier type terminal strip providing access to AC+ where cabinet fan and light circuits will be landed.

3.5 One 12 position minimum copper AC neutral buss with set screws.

3.6 One 12 position minimum copper earth ground buss with set screws.

4.0 Fiber Distribution Unit (FDU). The cabinet shall be equipped with a 19-inch rack mounted FDU to provide a termination, splicing, and connection point for fiber optic cables. Requirements for installation of the FDU are shown elsewhere in these Job Special Provisions.

5.0 Acceptance Testing. Acceptance testing of the cabinet shall include a visual inspection and shall include the testing of lights, fan, and power outlets. Testing to ensure there are properly working terminated fibers shall be completed by the contractor.

5.1 Use a device that measures resistance to ground using the three-point fall-of-potential method to ensure that the resistance from the cabinet's earth ground buss to ground does not exceed 5 ohms. Install additional ground rods if necessary to achieve this requirement.

5.2 Provide all equipment and personnel needed to safely conduct the tests, arrange for the Engineer's representative to witness the tests, and provide a written summary indicating test results.

6.0 Basis of Payment. Payment for the above items will include all costs necessary to complete the work including installation, incidentals, and testing of a fully functional system.

Item No.	Item Description	Unit
910-99.02	ITS CABINET, TYPE 332	EA

S. Closed Circuit Television (CCTV) Assembly, Contractor Furnished and Installed

1.0 General.

1.1 Description. The contractor shall install a Contractor furnished IP (Internet Protocol) closed circuit television (CCTV) assembly, as indicated in the plans, and connect it to the ITS cabinet and power supply as shown in the plans. The Contractor shall also provide cable connecting the camera to the equipment in the cabinet and to ground, set up the camera assembly, and test for proper operation.

1.2 Compatibility. The CCTV camera must be able to integrate with the Southwest District's latest Advanced Traffic Management System (ATMS) and its related interfaces.

2.0 Materials.

2.1 The camera assembly, mounting bracket, power supply, and surge suppressors will be provided by the Contractor. The cable connecting the camera to the ITS cabinet will also be provided by the contractor.

2.2 CCTV Camera. The CCTV camera purchased and installed on this project shall be selected from the list below. These are the only CCTV cameras that are tested and fully functional with the latest version of ATMS software that the Southwest District is currently operating:

CCTV Manufacturer	Model	Connection Type
CostarHD (formerly known as Cohu)	4220HD RISE Dome	Outdoor cat5e
WTI	Viper H.264 HD30L	Outdoor cat5e
Axis	Q6155-E Dome	Outdoor cat5e
Bosch	MIC 7000i	Outdoor cat5e

2.3 POE Injector. The Power Over Ethernet (POE) injector shall be of a make and model produced by the manufacturer of the camera. The POE injector shall operate on standard 120 VAC at 60 Hz electrical service and shall not be affected by transient voltages, surges, and sags

normally experienced on commercial power lines. The POE injector shall have an operating temperature range of -40 degrees F (-40 degrees C) to 158 degrees F (70 degrees C).

2.4 Surge Protection. The cable between the POE injector and the camera assembly shall be protected by a surge protection device in the cabinet that meets the following requirements:

a) UL listed and labeled to current editions of UL 497B and UL 497C.
b) Operating Temperature: -20 degrees F (- 28 degrees C) to 122 degrees F (50 degrees C).
c) Operating Humidity: 95% RH non-condensing.
d) Wall, DIN rail or 19" rack mountable.
e) Three stage protection.
f) Maximum Continuous Operating Voltage: 44-52 V.
g) Data Rate: >100 Mbps.
h) Frequency: 125 MHz.
i) Surge Capacity: 10kA per mode (8x20 µs).
j) Maximum Let-Through Voltage <90Vpk.

2.5 Cables. The contractor shall provide CAT 5e outdoor rated cable to carry power, video, and camera control between the camera and the POE injector. Between the POE injector and the Ethernet switch an outdoor rated CAT 5e patch cable with factory terminated connectors shall be used. These cables shall meet the requirements of the applicable manufacturers listed in Section 2.2 above.

2.6 Banding. The contractor shall provide stainless steel bands to affix the camera mounting bracket to the pole. The banding shall be 1-inch wide, 0.044-inch thick, stainless steel.

3.0 Construction Requirements.

3.1 The contractor shall coordinate this work, as well as any ITS (Intelligent Transportation System) network changes, with the MoDOT Southwest District ITS Group in advance via an email to John.Leporte@modot.mo.gov.

3.2 The contractor shall install the dome so that the pole does not block the camera's view of traffic, as directed by the engineer.

3.3 To confirm the existing camera pole is properly grounded, use a device that measures resistance to ground using the three-point fall-of-potential method to ensure that the resistance from the pole to ground does not exceed 8 ohms. If resistance exceeds the 8 ohms threshold report to the engineer.

3.4 Terminate all the cables on surge protectors, install the Contractor furnished power supply in the cabinet, and connect the camera power circuit to the power supply. Connect the POE injector port to the existing Ethernet switch in the cabinet.

3.5 Restrict the camera's field of view, if necessary, so that a user cannot use the camera to look in the windows of dwellings. To the extent that it does not interfere with the use of the camera for traffic management purposes, ensure that a camera cannot be used to view residential property. The camera should have clear view of all approaching traffic lanes. Prior to creating these restrictions, submit to the engineer a written description of the proposed restrictions to be installed at each camera, and the proposed method of achieving them. It shall not be possible for an

operator to override these restrictions without intervention by his or her supervisor. Affixing a mask to the inside of the clear dome shall be an acceptable method to achieve this. Highlight situations in which there is a conflict between the need to protect privacy and the need to know about traffic situations. Revise the field of view restrictions as directed by the engineer.

3.6 Apply a rain repellent coating to the outside of the lower dome, following the coating manufacturer's instructions. The coating must be recommended by the CCTV manufacturer for use on their equipment.

3.7 Fiber optic cable will be installed with a future project. The fiber optic cable installed from the ITS cabinet to the Commission's hand hole shall be installed per manufacturer's requirements and shall be comprised of 24-count, loose tube single mode, 12 fibers per tube.

4.0 Acceptance Testing.

4.1 Upon delivery of the camera assembly, the Contractor shall conduct a visual inspection and test of the camera assembly to check for manufacturing defects and shipping damage. The camera assembly shall be powered during this testing, and tests shall follow procedures developed by the manufacturer and approved by the engineer. The engineer will witness this testing and the contractor may witness this testing if he or she chooses. The Contractor shall be responsible for replacing all defective units uncovered by this testing.

4.2 After installing the camera assembly, test it using the same procedures used when the camera assembly was delivered. In addition, demonstrate that the agreed upon viewing restrictions have been implemented. If the installed camera assembly fails to operate properly, and the problem cannot be fixed by changing the wiring or setup parameters, the camera assembly will be deemed defective and the contractor shall return it to the manufacturer for replacement at the Contractor's expense. Except for costs borne by the manufacturer under their warranty agreement, the cost of replacement shall be borne entirely by the contractor.

4.3 The MoDOT ITS Group shall inspect the CCTV assembly installation as well as the related network devices for proper operations prior to acceptance.

5.0 Basis of Payment. Measurement and payment for furnishing and installing the camera assembly including equipment testing, grounding testing, and all miscellaneous hardware required for a safe, fully operational camera assembly will be made as follows:

Item No.	Type	Description
910-37.00	Each	CCTV Camera Assembly, Installed

5.1 Requirements for installation of the associated CAT 5 cable are shown elsewhere in these Job Special Provisions.

T. Ubiquiti Nanobeam Gen 2 Radio

1.0 Description. This work shall consist of installing new Ubiquiti Nanobeam Gen 2 Radios as indicated on the plans or as directed by the engineer. Radio assemblies shall be installed and connected according to the manufacturer's specifications.

2.0 Method of Measurement. Measurement for Ubiquiti Nanobeam Gen 2 Radios will be made per each.

3.0 Basis of Payment. Payment for furnishing and installing the radio assembly including all labor, equipment, materials, testing, and incidentals required for a safe, fully operational system will be made as follows:

Item No.	Type	Description
910-99.02	EA	Misc. Ubiquiti Nanobeam Gen 2 Radio

3.1 Requirements for installation of the associated CAT 5 cable are shown elsewhere in these Job Special Provisions.

U. Radio Cable, Cat 5

1.0 Description. This work shall consist of furnishing and installing new radio cable as indicated on the plans or as directed by the engineer.

1.1 The radio cable installed shall be compatible with the radios installed at the designated intersections.

2.0 Method of Measurement. Measurement of the radio cable shall be made per linear foot.

3.0 Basis of Payment. All costs associated with this work shall be considered completely covered as follows:

Item No.	Type	Description
910-99.03	LF	Cable, Radio, Ethernet CAT 5

V. CCTV Cable, Cat 5

1.0 Description. This work shall consist of furnishing and installing new CCTV cable as indicated on the plans or as directed by the engineer.

1.1 The CCTV cable installed shall be compatible with the CCTV camera installed at the designated intersection.

2.0 Method of Measurement. Measurement of the CCTV cable shall be made per linear foot.

3.0 Basis of Payment. All costs associated with this work shall be considered completely covered as follows:

Item No.	Type	Description
910-99.03	LF	Cable, CCTV, Ethernet CAT 5

W. Contractor Verification of Signal Base Locations

1.0 Description. 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.

1.1 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.

1.2 The contractor will be compensated for the additional mast arm length if required. The Contractor shall not order materials until measurements are field verified.

2.0 Basis of Payment. 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.

X. Accessible Pedestrian Pushbuttons and Signing

1.0 Description. Accessible pedestrian pushbuttons and signing will be required for all pedestrian indications at all the intersections.

2.0 Installation. Accessible signals should be installed as part of a pushbutton assembly.

3.0 Equipment.

3.1 Walk Indications. Accessible pedestrian signals shall have both audible and vibrotactile walk indications.

3.2 Vibrotactile. Vibrotactile walk indications shall be provided by a tactile arrow on the pushbutton that vibrates during the walk interval. Tactile arrows shall be located on the pushbutton, have high visual contrast (light on dark or dark on light), and shall be aligned parallel to the direction of travel on the associated crosswalk.

3.3 Audible. Accessible pedestrian signals shall have an audible walk indication during the walk interval only. The audible walk indication shall be audible from the beginning of the associated crosswalk.

3.4 Pushbutton Signage. In addition to standard pedestrian sign requirements, all pushbuttons for the locations mentioned in 1.0 shall have additional signage to indicate crosswalk direction by use of a tactile arrow and the name of the street containing the crosswalk served by the audible pedestrian signal. The sign shall be located immediately above the push button mechanism and parallel to the crosswalk controlled by the button. The street name shall be the name of the street or reasonable abbreviation whose crosswalk is controlled by the push button. Signage shall comply with ADA Accessibility Guidelines (ADAAG) 703.2 specifications for Braille and raised print.

3.4.1 Arrow. Signs shall include a tactile arrow aligned parallel to the crosswalk direction. The arrow shall be raised 0.8 mm (.03 inch) minimum and shall be 4 mm (1.5 in) minimum in length. The arrowhead shall be open at 45 degrees to the shaft and shall be 33 percent of the length of the shaft. Stroke width shall be 10 percent minimum and 15 percent maximum of arrow length. The arrow shall contrast with the background.

3.4.2 Street Name. Accessible pedestrian signals (APS) shall include street name information aligned parallel to the crosswalk direction and shall comply with Revised Draft Guidelines for Accessible Public Rights-of-Way R409.3, or shall provide street name information in audible format.

4.0 Performance.

4.1 Audible Locator Tone. Pushbuttons shall have a locator tone that tells the pedestrian that the intersection is equipped with APS and where it is. Pushbutton locator tones shall have a duration of 0.15 seconds or less and shall repeat at 1-second intervals. Pushbutton locator tones shall be intensity responsive to ambient sound and be audible 6 to 12 feet from the pushbutton, or to the building line. The locator tone shall operate during the DON'T WALK and flashing DON'T WALK intervals only and shall be deactivated when the pedestrian signal is not operative.

4.2 Verbal Wait Message. This is an acknowledge tone that tells the pedestrian that they have placed a call, and informational message that tells the pedestrian to “Wait to cross” street name at intersecting street name.

4.3 Verbal Walk Message. The verbal messages shall provide a clear message that the walk interval is in effect, as well as to which crossing it applies. If available, the audio tone feature will not be used. The verbal message that is provided at regular intervals throughout the timing of the walk interval shall be the term “walk sign,” which will be followed by the name of the street to be crossed.

4.4 Volume. Automatic volume adjustment in response to ambient traffic sound level will be provided up to a maximum volume of 100 dB. The units shall be responsive to ambient noise level changes up to no more than 5 dB louder than ambient sound. Tone or voice volume measured at 36 inches from the unit shall be 2dB minimum and 5dB maximum above ambient noise level. At installation, the signal system is to be adjusted to be audible at no more than 5 to 12 feet from the system.

5.0 Documentation and Support.

5.1 Operation and Maintenance Manuals. Two copies of the operation and maintenance manuals for each station shall be included.

5.2 USB with Audible Messages. The Contractor shall provide two copies of a USB data card to the Engineer that contains files for the manufacturer’s audible messages for complete operation of all APS signals at all stations.

6.0 Construction Requirements. Construction requirements shall conform to Sec 902, 1061, and 1092.

7.0 Method of Measurement. Method of measurement shall conform to Sec 902.

8.0 Basis of Payment. This will include all wiring, power adaptors, pushbuttons, and installation hardware needed. Payment for signing and mounting hardware will be included in the pay item for audible pedestrian signals. All costs incurred for complying with this provision, including labor, shall be considered completely covered by the contract unit price for:

Item Number	Type	Description
902-49.21	Each	Accessible Pedestrian Signal

Y. Signal Controller and Cabinet, Type 2070

1.0 Description. This work shall consist of providing and installing a new 2070 controller with cabinet at the intersection of Route FF (32nd Street) and Davis Boulevard.

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

2.1 An MMU Conflict Monitor shall be provided at no direct pay.

2.2 Signal Communication shall be provided and paid for per the contract item listed below.

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

4.0 Method of Measurement. Measurement will be made per each controller installed by the contractor and accepted by the engineer. No measurement will be made for signal communication.

5.0 Basis of Payment. Accepted signal controllers and signal communication will be paid for at the contract unit prices as follows:

Item No.	Type	Description
902-99.02	Each	Signal Controller and Cabinet, Type 2070
902-99.01	Lump Sum	Signal Communication

Z. Uninterruptible Power Supply

1.0 Description. This work shall consist of providing and installing an “Uninterruptible Power Supply” (UPS) system. The system shall be specifically constructed and approved for 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)
- 4 each Alpha Gel battery 195GXL (ALPHA-181-230-10)

2.0 Installation. The UPS system shall be installed as per the manufacture's recommendations. The system shall be mounted to the new Power Disconnect (paid as a Type 2 power supply) as designated in the project plans. In addition, the cabinet shall have circuitry to switch the signal from normal operation to flash operation during battery backup operation.

2.1 A 2C #22-gauge cable shall be installed from a programmable output on the UPS controller to the signal cabinet terminals for input on I file, slot 11, upper channel. A contractor supplied model 242 DC isolator card shall be installed in I file slot 11 to utilize controller input C1-80. The UPS controller and the signal controller input for C1-80 shall each be programmed such that after four continuous hours of battery backup operation this circuit will place the signal in programmed flashing operation.

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

4.0 Method of Measurement. Method of measurement shall conform to Sec 902.

5.0 Basis of Payment. All costs incurred by the contractor for furnishing, installing, configuring, and placing the UPS into operation, including all incidentals, shall be considered as included in and completely covered by the contract unit price as follows:

Item No.	Type	Description
902-99.02	Each	Uninterruptible Power Supply (UPS)

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

AA. Radar Detection System, Contractor Furnished, Contractor Installed

1.0 General. Radar stop bar detection shall be installed per the Signal Plan Sheets. Additionally, count detection is to be set up for each lane of travel.

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.

(e) Radar cable installed shall be appropriate for the radar devices installed at the designated intersection. Radar cable shall be included in the cost of the detection system.

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

Vehicle Detection Assignments					
	BIU	IO	Detector	Call Phase	Mvmt
PRESENCE DETECTION	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 signalized

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

Vehicle Detection Assignments					
	BIU	IO	Detector	Call Phase	Lane
COUNT DETECTION	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 made per lump sum for the radar detection system installed by the contractor and acceptable to the engineer.

5.0 Basis of Payment. Payment for installation of the radar detection system will be completely covered by the contract unit price as follows:

Item No.	Type	Description
902-99.01	Lump Sum	Radar Detection System, Contractor Furnished, Contractor Installed

BB. Protection of the CPKC Railway Company Interests

1.0 The right of way of the CPKC Railway Company, herein called "Railroad", is located within the limits of this project. However, this project has been developed with the specific intention that no involvement with the Railroad's facilities, traffic, or right of way is required for the performance of the contractual work herein. The work to be performed near the Railroad's right of way on Route FF (DOT# 330061B, MP 158.0, Heavener Sub in Joplin, MO) shall not interfere with the Railroad's operations or facilities. Under these circumstances, the requirements of Sec 104.12.3, Sec 104.12.8 through 104.12.10.5 (inclusive), and Sec 107.13.4 shall not apply.

2.0 Should the contactor violate this condition of no Railroad involvement, all terms and conditions of the interaction with the Railroad shall be solely between the Railroad and the contractor.

3.0 To report an emergency on the Railroad call: (877) 527-9464

4.0 Traffic Delay. The contractor shall be responsible for maintaining the existing traffic flow through the job site during construction. If disruption of the traffic flow occurs, the Contractor shall have a roadway flagger located on each side of the Railroad crossing to prevent traffic from backing up to within 75 feet of the Railroad crossing. If the queues are not cleared out in sufficient time and traffic backs up within 75 feet of the Railroad crossing, the contractor shall review the construction operations which contributed directly to the disruption of the traffic flow and make adjustments to the operations to prevent the queues from occurring again.

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

CC. Right-of-Way Clearance – Delayed Possession

1.0 Description. The right of way for this project has been acquired except for:

- Parcel 2 (Defam-Three, LLC) – RW and TCE
- Parcel 3A (General Mills Operations, Inc.) – RW and PE
- Parcel 3B (City of Joplin / General Mills Operations, Inc.) – RW
- Parcel 4 (Protein for Pets) – RW
- Parcel 5 (Empire Electric) – RW

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 shall 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 June 30, 2025. However, this date expressly is not a warranty by or contractually binding on the Commission as the date the five Parcels will be clear for construction. No encroachment, storage of equipment and materials, or construction on these parcels shall be permitted until the contractor is notified by the engineer that these parcels have been acquired.

2.0 The contractor shall have no claim for damage for delay, disruption, interference, or otherwise as a result of the unavailability of the **Parcels listed above in Item 1.0.** 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.

DD. Liquidated Damages Specified – Protein for Pets Entrance

1.0 Construction. The Contractor shall be allowed to completely close the west entrance into Parcel 4, Protein for Pets Opco, LLC, located at Station 34+43.89, right of Route FF. While working on and around the entrance, the contractor shall make every reasonable effort to minimize any interference to business and to pursue the work diligently.

1.1 The contractor shall contact the business to advise them of the work that will take place before closing the entrance. The contractor will solely be responsible for repairing any damage to the property caused by contractor operations.

2.0 Description. If all the grading, paving, pavement marking and signal work necessary to safely reopen the west entrance into Parcel 4 is not complete and open to traffic within 14 calendar days of its 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 in the amount of $3,200 per calendar day for each day, or partial day thereof, that grading, paving, pavement marking, and signal work is not complete, and the entrance is not open to traffic 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.

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

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

EE. Linear Grading for ADA Facilities

1.0 Description. This work shall consist of altering the existing roadside features to the required grade and cross sections shown in 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 dispose of unusable material off of 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 ADA Linear Grading 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. 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 ADA Linear Grading will be paid for at the contract unit price for item 207-99.03, ADA Linear Grading, per 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.

FF. 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 Plant 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 the 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.

GG. Contractor Furnished Surveying and Staking for ADA

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 will be responsible for all layout required on the project. Any and all staking required to ensure that improvements installed on this project meet the ADA requirements is the sole responsibility of the contractor. This responsibility will include, but not limited to the following: Construction signs, curb ramp, landing, and sidewalk construction, truncated dome installation, quantity verification, curb construction, pavement marking, pedestrian signal modifications, median strip/island construction and modifications, etc.

1.1 The above list is not all inclusive. The contractor will have the primary responsibility for these operations. Concerning the traffic control devices, the contractor shall provide the Resident Engineer with a layout plan for approval prior to the installation of signs. The RE will provide assistance for 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.

HH. Curb Ramps and Sidewalk

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 and 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/repaired 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 lines, 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 shall be considered incidental to and completely covered by the contract unit price for each of the pay items with in the contract.

II. 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 damaged side roads or entrances as described above shall 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.

JJ. 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 Specifications.

2.0 Construction Requirements. Sod shall be installed at all locations as shown on the plans or where the contractor's operations have disturbed adjacent, existing grass landscapes or as approved by the engineer. Fertilizer shall be applied to all sodded locations per the manufacturer's 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 shall 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 to satisfy the above requirements shall be considered completely covered by the contract unit price for bid item 803-10.00A, Turf Type Tall Fescue Sodding, per square yard. No direct payment will be made for fertilizing.

KK. City of Joplin Upright Curb and Gutter Section

1.0 Description. The contractor shall construct the City of Joplin Upright Curb and Gutter section in accordance with City of Joplin Standard Detail ST-04, and the City of Joplin Standard Specifications. Locations of the City of Joplin Upright Curb and Gutter sections are shown on the plans.

2.0 Method of Measurement. Measurement of City of Joplin Upright Curb and Gutter will be made along the length of the new upright curb and gutter installed, along each side of the roadway where upright curb and gutter work is to be performed. Measurement will be made to the nearest linear foot for each upright curb and gutter segment, and totaled to the nearest linear foot for final pay. Final field measurement will not be required except where appreciable errors are found, or authorized changes have been made by the engineer.

3.0 Basis of Payment. The accepted quantity of City of Joplin Upright Curb and Gutter will be paid for at the contract unit price for item 609-99.03, STD Upright C&G (City of Joplin), per Linear Foot, and will be considered as full compensation for all labor, equipment, material, and other construction costs involved to complete the described work.

LL. Special Considerations – General Mills Property

1.0 Description. The contractor shall be aware of the following requirements and considerations for the General Mills property (parcels 3A and 3B):

1.1 All contractor correspondence with General Mills shall be through the Plant Manager or their designee. Contact information for the Plant Manager will be furnished by the engineer following award of the project. The contractor shall keep the engineer informed of all correspondence and agreements with General Mills.

1.2 General Mills operates three shifts, 24-hours a day, 7-days a week. Under no circumstances shall the contractor obstruct employee, delivery, or visitor access to the plant.

1.3 The contractor shall not use General Mills parking lots for staging or storage of equipment and materials unless agreed upon by the Plant Manager. This restriction includes parking of personal vehicles by contractor and subcontractor staff.

1.4 General Mills parking lots shall remain accessible at all times during the project. The contractor shall stage work and/or build/maintain temporary entrances as needed to fulfill this requirement.

1.5 General Mills plans to build a new parking lot to encompass the area between the west property line of parcel 3B and the east right of way line of the relocated Stephens Boulevard. This includes the area of old Stephens Boulevard that will be vacated by the city of Joplin and transferred to General Mills. Should the contractor elect to pursue this work, all terms of the agreement/contract will be solely between the contractor and General Mills.

1.6 Quantities are included in the contract for the contractor to clear and grub the area between existing Stephens Boulevard and relocated Stephens Boulevard in its entirety.

1.7 General Mills has expressed interest in constructing a trailer drop lot on the west end of parcel 3A, while allowing the contractor to use the east end of parcel 3A as a staging area. Should the contractor elect to pursue this arrangement, all terms of the agreement/contract will be solely between the contractor and General Mills.

1.8 The General Mills plant will occasionally run reduced shifts during holidays or maintenance cycles. During these times, the requirements of this provision may be relaxed. The contractor shall work with the Plant Manager and the engineer to determine what, if any, requirements may be modified.

2.0 Basis of Payment. No direct payment will be made to cover the costs associated with these additional requirements unless covered elsewhere in the contract documents.