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Letting April 25, 2025

Notice to Bidders, Specifications and Proposal

Contract No. 85774
ROCK ISLAND County
Section 22-00159-00-PV, 22-00159-01-PV (East Moline)
Route FAU 5757 (15th Avenue)
Project VI5U-891 ()
District 2 Construction Funds

Prepared by

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Checked by

(Printed by authority of the State of Illinois)

Illinois Department of Transportation

NOTICE TO BIDDERS

1. **TIME AND PLACE OF OPENING BIDS.** Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. April 25, 2025 at which time the bids will be publicly opened from the iCX SecureVault.

2. **DESCRIPTION OF WORK**. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

   Contract No. 85774
   ROCK ISLAND County
   Section 22-00159-00-PV, 22-00159-01-PV (East Moline)
   Project VI5U-891 ()
   Route FAU 5757 (15th Avenue)
   District 2 Construction Funds

Pavement reconstruction, sidewalks, storm sewer, curb and gutter, traffic signals, lighting, and landscaping on 15 Avenue from 6th Street to 13th Street in East Moline.

3. **INSTRUCTIONS TO BIDDERS**. (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 101.09 of the Standard Specifications for Road and Bridge Construction, become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.

   (b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.

4. **AWARD CRITERIA AND REJECTION OF BIDS**. This contract will be awarded to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to re-advertise the proposed improvement, and to waive technicalities.

By Order of the
Illinois Department of Transportation

Gia Biagi,
Acting Secretary

CONTRACT 85774

INDEX
FOR
SUPPLEMENTAL SPECIFICATIONS
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2025

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS, frequently used RECURRING SPECIAL PROVISIONS, and LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS.

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-22) (Revised 1-1-25)

SUPPLEMENTAL SPECIFICATIONS

RECURRING SPECIAL PROVISIONS

The following RECURRING SPECIAL PROVISIONS indicated by an "X" are applicable to this contract and are included by reference:

LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

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BDE SPECIAL PROVISIONS

The following special provisions indicated by an "X" are applicable to this contract. An * indicates a new or revised special provision for the letting.

	File Name	Pg.		Special Provision Title	Effective	Revised
	80099	104	☒	Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2022
	80274	106	☒	Aggregate Subgrade Improvement	April 1, 2012	April 1, 2022
	80192		☐	Automated Flagger Assistance Device	Jan. 1, 2008	April 1, 2023
	80173		☐	Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
	80426		☐	Bituminous Surface Treatment with Fog Seal	Jan. 1, 2020	Jan. 1, 2022
	80241		☐	Bridge Demolition Debris	July 1, 2009	
	5053I		☐	Building Removal	Sept. 1, 1990	Aug. 1, 2022
	5026I		☐	Building Removal with Asbestos Abatement	Sept. 1, 1990	Aug. 1, 2022
	80460	109	☒	Cement, Finely Divided Minerals, Admixtures, Concrete, and Mortar	Jan. 1, 2025	
	80384	120	☒	Compensable Delay Costs	June 2, 2017	April 1, 2019
	80198		☐	Completion Date (via calendar days)	April 1, 2008	
	80199		☐	Completion Date (via calendar days) Plus Working Days	April 1, 2008	
	80461		☐	Concrete Barrier	Jan. 1, 2025	
	80453		☐	Concrete Sealer	Nov. 1, 2023	
	80261		☐	Construction Air Quality – Diesel Retrofit	June 1, 2010	Jan. 1, 2025
*	80029	124	☒	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Jan. 2, 2025
	80229		☐	Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
	80452		☐	Full Lane Sealant Waterproofing System	Nov. 1, 2023	
	80447		☐	Grading and Shaping Ditches	Jan 1, 2023	
	80433	127	☒	Green Preformed Thermoplastic Pavement Markings	Jan. 1, 2021	Jan. 1, 2022
	80456		☐	Hot-Mix Asphalt	Jan. 1, 2024	Jan. 1, 2025
	80446		☐	Hot-Mix Asphalt – Longitudinal Joint Sealant	Nov. 1, 2022	Aug. 1, 2023
	80438		☐	Illinois Works Apprenticeship Initiative – State Funded Contracts	June 2, 2021	April 2, 2024
	80450		☐	Mechanically Stabilized Earth Retaining Walls	Aug. 1, 2023	
*	80464	129	☒	Pavement Marking Inspection	April 1, 2025	
	80441		☐	Performance Graded Asphalt Binder	Jan 1, 2023	
	80459		☐	Preformed Plastic Pavement Marking	June 2, 2024	
	3426I	130	☒	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2022
	80455	131	☒	Removal and Disposal of Regulated Substances	Jan. 1, 2024	April 1, 2024
	80445		☐	Seeding	Nov. 1, 2022	
	80457		☐	Short Term and Temporary Pavement Markings	April 1, 2024	April 2, 2024
*	80462	133	☒	Sign Panels and Appurtenances	Jan. 1, 2025	April 1, 2025
	80448	134	☒	Source of Supply and Quality Requirements	Jan. 2, 2023	
	80340		☐	Speed Display Trailer	April 2, 2014	Jan. 1, 2022
	80127		☐	Steel Cost Adjustment	April 2, 2004	Jan. 1, 2022
	80397	135	☒	Subcontractor and DBE Payment Reporting	April 2, 2018	
	80391	136	☒	Subcontractor Mobilization Payments	Nov. 2, 2017	April 1, 2019
*	80463	137	☒	Submission of Bidders List Information	Jan. 2, 2025	Mar. 2, 2025
	80437	138	☒	Submission of Payroll Records	April 1, 2021	Nov. 2, 2023
	80435		☐	Surface Testing of Pavements – IRI	Jan. 1, 2021	Jan. 1, 2023
*	80465	140	☒	Surveying Services	April 1, 2025	
*	80466		☐	Temporary Rumble Strips	April 1, 2025	
	20338	141	☒	Training Special Provisions	Oct. 15, 1975	Sept. 2, 2021
	80429		☐	Ultra-Thin Bonded Wearing Course	April 1, 2020	Jan. 1, 2022
	80439	144	☒	Vehicle and Equipment Warning Lights	Nov. 1, 2021	Nov. 1, 2022
	80458		☐	Waterproofing Membrane System	Aug. 1, 2024	
*	80302	145	☒	Weekly DBE Trucking Reports	June 2, 2012	Jan. 2, 2025
	80454		☐	Wood Sign Support	Nov. 1, 2023	
	80427	146	☒	Work Zone Traffic Control Devices	Mar. 2, 2020	Jan. 1, 2025
	80071		☐	Working Days	Jan. 1, 2002	

GUIDE BRIDGE SPECIAL PROVISION INDEX/CHECK SHEET

Effective as of the: November 8, 2024 Letting

Pg #	√	File Name	Title	Effective	Revised
	☐	GBSP 4	Polymer Modified Portland Cement Mortar	June 7, 1994	April 1, 2016
	☐	*GBSP 13	High-Load Multi-Rotational Bearings	Oct 13, 1988	June 28, 2024
	☐	GBSP 14	Jack and Remove Existing Bearings	April 20, 1994	April 13, 2018
	☐	GBSP 16	Jacking Existing Superstructure	Jan 11, 1993	April 13, 2018
	☐	GBSP 18	Modular Expansion Joint	May 19, 1994	Oct 27, 2023
	☐	GBSP 21	Cleaning and Painting Contact Surface Areas of Existing Steel Structures	June 30, 2003	Oct 23, 2020
	☐	GBSP 25	Cleaning and Painting Existing Steel Structures	Oct 2, 2001	April 15, 2022
	☐	GBSP 26	Containment and Disposal of Lead Paint Cleaning Residues	Oct 2, 2001	Apr 22, 2016
	☐	GBSP 28	Deck Slab Repair	May 15, 1995	Feb 2, 2024
	☐	GBSP 29	Bridge Deck Microsilica Concrete Overlay	May 15, 1995	April 30, 2021
	☐	GBSP 30	Bridge Deck Latex Concrete Overlay	May 15, 1995	April 30, 2021
	☐	GBSP 31	Bridge Deck High-Reactivity Metakaolin (HRM) Conc Overlay	Jan 21, 2000	April 30, 2021
	☐	GBSP 33	Pedestrian Truss Superstructure	Jan 13, 1998	Oct 27, 2023
	☐	GBSP 34	Concrete Wearing Surface	June 23, 1994	Oct 4, 2016
	☐	*GBSP 45	Bridge Deck Thin Polymer Overlay	May 7, 1997	June 28, 2024
	☐	GBSP 53	Structural Repair of Concrete	Mar 15, 2006	Aug 9, 2019
	☐	GBSP 55	Erection of Curved Steel Structures	June 1, 2007	
	☐	GBSP 59	Diamond Grinding and Surface Testing Bridge Sections	Dec 6, 2004	April 15, 2022
	☐	GBSP 60	Containment and Disposal of Non-Lead Paint Cleaning Residues	Nov 25, 2004	Apr 22, 2016
	☐	GBSP 61	Slipform Parapet	June 1, 2007	April 15, 2022
	☐	GBSP 67	Structural Assessment Reports for Contractor's Means and Methods	Mar 6, 2009	Oct 5, 2015
	☐	GBSP 71	Aggregate Column Ground Improvement	Jan 15, 2009	Oct 15, 2011
	☐	GBSP 72	Bridge Deck Fly Ash or GGBF Slag Concrete Overlay	Jan 18, 2011	April 30, 2021
	☐	GBSP 78	Bridge Deck Construction	Oct 22, 2013	Dec 21, 2016
	☐	GBSP 79	Bridge Deck Grooving (Longitudinal)	Dec 29, 2014	Mar 29, 2017
	☐	GBSP 81	Membrane Waterproofing for Buried Structures	Oct 4, 2016	March 1, 2019
	☐	GBSP 82	Metallizing of Structural Steel	Oct 4, 2016	Oct 20, 2017
	☐	*GBSP 83	Hot Dip Galvanizing for Structural Steel	Oct 4, 2016	June 28, 2024
	☐	GBSP 85	Micropiles	Apr 19, 1996	Oct 23, 2020
148	☒	GBSP 86	Drilled Shafts	Oct 5, 2015	Oct 27, 2023
	☐	GBSP 87	Lightweight Cellular Concrete Fill	Nov 11, 2001	Apr 1, 2016
	☐	GBSP 88	Corrugated Structural Plate Structures	Apr 22, 2016	April 13, 2018
	☐	GBSP 89	Preformed Pavement Joint Seal	Oct 4, 2016	March 24, 2023
	☐	GBSP 90	Three Sided Precast Concrete Structure (Special)	Dec 21, 2016	March 22, 2024
	☐	GBSP 91	Crosshole Sonic Logging Testing of Drilled Shafts	Apr 20, 2016	March 24, 2023
	☐	GBSP 92	Thermal Integrity Profile Testing of Drilled Shafts	Apr 20, 2016	March 24, 2023
	☐	*GBSP 93	Preformed Bridge Joint Seal	Dec 21, 2016	June 28, 2024
	☐	GBSP 94	Warranty for Cleaning and Painting Steel Structures	Mar 3, 2000	Nov 24, 2004
	☐	GBSP 96	Erection of Bridge Girders Over or Adjacent to Railroads	Aug 9, 2019	
	☐	GBSP 97	Folded/Formed PVC Pipeliner	April 15, 2022	
	☐	GBSP 98	Cured-in-Place Pipe Liner	April 15, 2022	
	☐	GBSP 99	Spray-Applied Pipe Liner	April 15, 2022	
	☐	GBSP 100	Bar Splicers, Headed Reinforcement	Sept 2, 2022	Oct 27, 2023
	☐	*GBSP 101	Noise Abatement Wall, Ground Wall	Dec 9, 2022	June 28, 2024
	☐	*GBSP 102	Noise Abatement Wall, Structure Mounted	Dec 9, 2022	June 28, 2024
	☐	GBSP 103	Noise Abatement Wall Anchor Rod Assembly	Dec 9, 2022	

An * indicates a new or revised special provision.

CONTRACT SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", adopted January 1, 2022, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways" and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the "Supplemental Specifications and Recurring Special Provisions" indicated on the Check Sheet included herein which apply to and govern the construction of 15th Avenue and associated roadway improvements, and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

LOCATION OF PROJECT

The project involves 15th Avenue in East Moline, Section 22-00159-01-PV. The project is located in Rock Island County in Section 25, Township 18N, Range 1W of the 4th principal meridian. The project's design limits are located along 15th Avenue from 6th Street to 13th Street.

DESCRIPTION OF WORK

The project involves reconstruction with new pavement including underdrains, curb and gutters, sidewalk, and storm drainage. There will also be on-street parallel parking that will be constructed using permeable pavers. ADA ramps into buildings, wayfinding signage, a gateway sign, street lighting, and site amenities of benches and trash receptacles are included.

CONTRACT TIME

Interim Completion Date: The Contractor shall schedule their operations so as to complete all work specified for Stages 1 through 3 (6th Street to 9th Street) as shown in the plans and open the roadway to traffic on or before December 1, 2025.

The Contractor will be allowed to close 15th Avenue to vehicular traffic in stages as shown in the plans and in accordance with the Sequence of Construction special provision. The Contractor shall be substantially completed with the stages identified to be completed in 2025 and have all traffic lanes open prior to winter shutdown without the need of traffic control devices. Closures, lane reductions, or uneven lanes will not be allowed for winter shutdown periods. Access to all adjacent properties via sidewalks and driveways must be open and unrestricted over winter shutdown periods. Should any contract work specified for Stages 1 through 3 (6th Street to 9th Street) not be completed in 2025, including sidewalk, curbs and pavements, if removed, must be replaced in kind prior to winter shutdown.

Final Completion Date: The Contractor shall schedule their operations so as to complete all work and open the entire length of roadway to traffic on or before November 20, 2026. The Contractor shall take note the completion date is based on an expedited work schedule. The Contractor will be allowed 10 working days, after the final completion date, to complete punchlist items.

Failure to Complete the Work on Time: Should the Contractor fail to complete the necessary work to comply with the overall completion date plus 10 working days, the Contractor shall be

liable, not as a penalty, but as liquidated and ascertained damages, for each working day beyond the contract working days or extended time as may be allowed and subject to the conditions of Article 108.09 of the Standard Specifications and any special provisions included herein.

SEQUENCE OF CONSTRUCTION

The Contractor shall submit a progress schedule to the Resident Engineer before any work begins. The schedule shall identify the proposed sequence of work per Stage as identified in the plans, the controlling item of work for each stage, and a calendar day schedule based on typical working day conditions. The progress schedule shall be updated by the Contractor as the work proceeds. Payment under this contract may be withheld if the Contractor has not submitted a satisfactory progress schedule.

Proposed improvements shall be constructed in an orderly and continuous manner. The Contractor shall make daily progress and not interrupt construction activity unless weather or unexpected utility conflicts prevent progress. The Contractor shall be solely responsible for providing sufficient materials, labor and equipment to complete the project within the contract time. All utility companies listed in the plans have been contacted and conflicts with proposed improvements discussed. The Contractor shall be responsible for coordinating with utility companies for all relocations or adjustments not completed prior to start of construction in order to complete the project within the contract time. Once the Contractor begins to remove driveways, sidewalks, or street pavement, the Contractor is expected to work expeditiously in completing the project. The Contractor shall inform the Resident Engineer on a weekly basis what work will be performed the next week. The Contractor shall also inform the Resident Engineer of any changes to the weekly work plan at the earliest opportunity.

TRAFFIC CONTROL AND PROTECTION, (SPECIAL)

This work shall consist of all the furnishing of labor, materials, and equipment necessary to control and direct traffic traveling within the project limits for the purposes of protecting persons and property within the work zone from damage and injury. The Contractor’s efforts shall be guided by the standard detail drawings produced by the Illinois Department of Transportation and accepted standard practice. Section 701 of the Standard Specifications provides material and equipment requirements and operational practices to be employed by the Contractor. Section 701 is modified by this special provision to remove responsibility from the Engineer and City of East Moline for the administration, approval, and consent of the traffic control.

The construction drawings include project specific Stage Construction plans to be followed by the Contractor. The traffic control measures shall be tailored to the Sequence of Work that is employed by the Contractor. The Contractor is solely responsible for traffic control and protection within the project limits from the inception of the work until the final completion. The Resident Engineer is available to the Contractor for consultation about the minimum requirements of the Standard Details and Standard Specifications. Any modifications to the sequence of staging or maintenance of traffic shall be approved by the Engineer prior to implementation.

Traffic control and protection measures shall also be placed along intersecting streets to notify drivers of the construction activity ahead. The Contractor shall place traffic control and protection

measures as needed, specifically advance signing in accordance with the standard details referenced in the Plans and to the satisfaction of the Engineer.

Where construction activities involve sidewalks on both sides of the street, the work shall be staged so that both sidewalk are not out of service at the same time.

The Contractor shall sweep and remove any soil tracked onto the street by the end of the workday or before four (4) hours has elapsed, whichever is sooner.

Basis of Payment: All labor, materials, and equipment required to plan and implement a traffic control plan throughout the contract duration will be paid for at the contract unit price per Lump Sum for TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

TRAFFIC CONTROL PLAN

Traffic control shall be in accordance with the applicable sections of the "Standard Specifications for Road and Bridge Construction," the applicable guidelines contained in the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways," these Special Provisions, and any special details and Highway Standards contained herein and in the plans. Special attention is called to Section 701 and Articles 107.09 and 107.14 of the "Standard Specifications for Road and Bridge Construction" and the following Highway Standards relating to traffic control:

701301, 701311, 701501, 701611, 701701, 701801, 701901, District 2 Detail – 40.1

General:

Where construction activities involve sidewalks on both sides of the street, the work shall be staged so that both sidewalks are not out of service at the same time.

The contractor shall be responsible for the traffic control devices at all times during construction activities and shall coordinate the items of work to keep traffic hazards and/or inconveniences to a minimum.

All advanced warning signs shall be new or in like new condition at the start of the project. Unless otherwise specified, they shall be 48 inches by 48 inches, with a black legend on a fluorescent orange reflective background.

The Contractor shall allow access to private property along the closed portions of the road or sidewalk where no other public way provides access. Open holes, trenches, and drop offs shall be fenced and/or barricaded to protect local traffic and pedestrians. Flagger(s) will be required when work encroaches on the open lane(s). No lane closures will be permitted without flagger protection.

Existing traffic signs shall be maintained by the Contractor in a manner to ensure adequate protection from motorists using the street during construction. If it becomes necessary to remove existing signs for construction operations, temporary signs shall be installed and maintained by the Contractor at locations designated by the Engineer. Any existing traffic signs or posts damaged by the Contractor shall be replaced at his own expense.

Signs:

When covering existing city-owned signs, no tape shall be used on the reflective portion of the sign. Contact the District sign shop for covering techniques.

Any plates or direct applied sheeting used to alter signs shall have the same sheeting as the base sign.

No more than one kind of alteration shall be used to alter a sign.

Any post stubs without a sign in place and visible shall have a reflector placed on each post.

Devices:

A minimum of 3 drums spaced at 4 feet shall be placed at each return when the sideroad is open.

Pavement Marking:

All temporary pavement markings that will be operational during the winter months (December through March) shall be paint.

Short term pavement markings on a milled surface shall be paint.

Contractor Access:

The contractor shall present a plan of the access that will be used during construction of said project by the Contractor or Subcontractor and Residents to the Engineer at the time of the Pre-Construction Meeting. The Engineer and Contractor shall both examine the plan noting any areas of concern before construction begins.

Upon completion of the project the Engineer shall examine the streets prior to approving final payment to the Contractor. Any areas that have been damaged due to construction activity shall be repaired by the Contractor to the satisfaction of the Engineer. When work is complete, the Contractor shall arrange, within a reasonable time period, to clean up and restore areas where equipment or material has been stored on the right-of-way or easement. This work shall be included in the cost of the contract.

The Engineer may restrict the movement of construction vehicles on the completed surface in order to prevent damage to these surfaces.

At road closure locations where Type III Barricades are installed in a manner that will not allow Contractor access to the project without relocation of one or more of the barricades, the arrangement of the barricades at the beginning of each work day may be relocated, when approved by the Engineer, in the manner shown on Highway Standard 701901 for Road Closed to Through Traffic. "Road Closed" signs (R11-2), supplemented by "Except Authorized Vehicles" signs (R3-I101), shall be mounted on both the near-right and far-left barricade(s). At the end of each workday the barricades shall be returned to their in-line positions. This work will be included in the cost of the contract, and no extra compensation will be allowed.

Traffic Control for Road Closure:

This work shall be done according to the Road Closure Standard and Section 701 of the Standard Specifications.

“ROAD CLOSED AHEAD” (W20-3(O)-48) with flasher and the appropriate arrow plate (W1-6(O)-36x18 or W1-7(O)-36x18) shall be required on all side roads within the limits of the mainline “ROAD CLOSED AHEAD” signs.

7th Street shall be considered Condition I Major sideroad closures for signing as shown on the District Standard Traffic Control for Road Closure Detail.

The Contractor shall notify the City two (2) weeks prior to closure of a roadway segment.

Signing and devices required to close the road, according to the Traffic Control for Road Closure detail and contained herein, shall be the responsibility of the Contractor.

The “ROAD CLOSED” sign on the Type III barricades shall be unobstructed and visible to traffic at all times. No equipment, debris, or other materials shall be stored within 20 feet of the first set of Type III barricades, unless approved by the Engineer.

The Contractor shall not drive around the outside of the Type III barricades, but shall relocate the barricades temporarily for access. When it is necessary for the barricades to be moved for access, the Contractor shall move the devices into the left lane and/or left shoulder area behind barricades that are to remain in place. At no time shall the barricades be turned parallel to traffic flow for access purposes.

If a path becomes evident around the outside of the barricades, the Contractor shall be required to place additional Type III barricades to prevent driving around the existing barricades. Additional barricades shall be included in the cost of applicable Traffic Control Standards

This work shall be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

Road Closure – Closures within Closures: The road closure shall be completed using Type III barricades in compliance with Standards 701901, and signing according to Traffic Control for Road Closure detail. Two flashers shall be installed above each Type III barricade. The "ROAD CLOSED" (R11-2) or “ROAD CLOSED TO THRU TRAFFIC” (R11-4) signs shall be placed as shown in Standard 701901. Flashers shall be installed above all warning signs involving a night time road closure. If a portion of the road is completely closed between a sideroad and any entrances, the roadway will be kept open to local access in the other direction between that closure and the next road.

The Contractor shall be required to notify the City of East Moline and affected residents prior to a complete closure.

All cost involved in conforming with this provision shall be considered a part of the Lump Sum for TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

TREE REMOVAL (UNDER 6 UNITS DIAMETER) &
STUMP REMOVAL ONLY

This work shall consist of performing tree removal for trees less than 6 units in diameter or stumps where trees have been previously removed by others at locations shown in the plans. This work shall be conducted in accordance with Section 201 of the Standard Specifications and the special provision included herein.

All trees and stumps within right-of-way shall be removed to a depth of not less than 12 inches below the elevation of the subgrade. All excess chips and debris from this operation shall be removed from right-of-way.

This work will be measured for payment and paid for at the contract unit price per Unit diameter for TREE REMOVAL (UNDER 6 UNITS DIAMETER) or STUMP REMOVAL ONLY, which price shall be considered in full for all labor, equipment, and materials required to complete the work.

PAVEMENT REMOVAL

Existing HMA and concrete pavement materials shall be removed and paid for as described in Section 440 of the Standard Specifications. The thickness of existing pavements was determined by coring at various locations throughout the project. Existing thicknesses from the cores samples are provided in the contract plans. Existing aggregate base materials are not included in the pavement thickness and are not to be measured for payment.

When portions of the existing pavement and appurtenances are to remain in place, the contractor shall form a perpendicular straight joint by full-depth machine sawing at the ends and at all edges of portions to be removed to prevent surface spalling when the pavement is broken out. Saw cutting will not be measured separately for payment.

Basis of Payment: The work associated with removal of temporary pavements constructed as part of these improvements shall be measured and paid for at the contract unit price per Square Yard for PAVEMENT REMOVAL.

STORM SEWER REMOVAL

This work shall be completed in accordance with Section 551 of the Standard Specifications. Backfill of storm sewers removed under and within 2 feet of the pavement subgrade, curb and gutters, or sidewalk shall be backfilled according to Section 208 of the Standard Specifications. This backfill will be paid for at the contract unit price per cubic yard of TRENCH BACKFILL. All other locations of storm sewer removal will not have backfill materials measured for payment and backfilling shall be considered included in the cost of the various storm sewer removal pay items.

REMOVE AND RELOCATE SIGN PANEL AND POLE ASSEMBLY

Sign panels and pole assemblies identified for relocation in the plans shall be removed and protected from damage until the sign can be erected. Signs and/or poles damaged in the removal process or, while in storage, shall be replaced with new materials at no additional cost to the contract. Work shall be completed in accordance with Section 724 of the Standard Specifications.

Basis of Payment: The work shall be paid for at the contract unit price per Each for REMOVE AND RELOCATE SIGN PANEL AND POLE ASSEMBLY.

REMOVE AND RELOCATE SIGN PANEL

Sign panels identified for relocation in the plans shall be removed and protected from damage until the sign can be erected. Signs damaged in the removal process or, while in storage, shall be replaced with new materials at no additional cost to the contract. Work shall be completed in accordance with Section 724 of the Standard Specifications.

Basis of Payment: The work shall be paid for at the contract unit price per Each for REMOVE AND RELOCATE SIGN PANEL.

WATER VALVES TO BE ADJUSTED

This work includes all labor, equipment, and materials required to adjust any water valves to the proposed finished grade at locations shown in the plans. This work shall be in accordance with the applicable sections of the Standard Specifications and the Standard Specification for Water and Sewer Main Construction in Illinois, Current Edition and shall include any necessary excavating and backfilling to adjust the water valve to proper grade.

Basis of Payment: This work shall be measured and paid for at the contract unit price per Each for WATER VALVES TO BE ADJUSTED.

FIRE HYDRANTS TO BE ADJUSTED

Description: All existing fire hydrants as shown on the plans that do not conform to the new ground line shall be adjusted in such a manner that the hydrants conform to the new ground line and are left in good condition. This work shall be done as directed by the Engineer. Any fire hydrants damaged by the Contractor shall be repaired, or replaced, at his expense.

This work shall be completed in accordance with Section 564 of the Standard Specifications, Section 45 of the Standard Specifications for Water and Sewer Construction in Illinois, the details in the plans, and as specified herein.

Basis of Payment: This work shall be paid for at the contract unit price per Each for FIRE HYDRANTS TO BE ADJUSTED, which price shall include all labor, equipment, and materials, including pipe, fine aggregate, and thrust blocking required to complete this item as specified, and to the satisfaction of the Engineer.

FIRE HYDRANTS TO BE RELOCATED

This work shall consist of the relocation of an existing fire hydrant, including the hydrant's existing valves. Where indicated on the plans, the existing fire hydrant shall be removed and reinstalled at a new location in accordance with the detail provided in the plans.

General. This work shall be completed in accordance with Section 564 of the Standard Specifications, Section 45 of the Standard Specifications for Water and Sewer Construction in Illinois, the details in the plans, and as specified herein.

Construction. The Contractor will be responsible for protecting the fire hydrants during construction. It is recommended that the hydrants be covered with a protective bag to ensure no chips, scratches or other damage is done to the hydrants during construction. Any damage to the factory installed paint shall be repaired by the Contractor, as approved by the Engineer. Fire hydrants shall be set plumb and level with their nozzles paralleled with or at right angles to the roadway, with the pumper nozzle normal to the roadway. They shall conform to the established grade, with nozzles at a minimum of eighteen (18) inches above finished grade.

This work shall include excavation, trench dewatering; removal of the existing fire hydrant assembly, cutting the existing 6" water lead, relocating the existing fire hydrant assembly, furnishing and installing fittings, backfilling the entire excavation with trench backfill up to the proposed subgrade; and disposal of all surplus materials.

Upon completion of relocating or adjusting the fire hydrant, it shall be tested and disinfected as specified in Section 561 of the Standard Specifications.

Basis of Payment. This work will be paid for at the contract unit price per Each for FIRE HYDRANTS TO BE RELOCATED.

SANITARY MANHOLES TO BE ADJUSTED

Description: This work shall be done in accordance with Section 602 of the Standard Specifications and the Standard Specifications for Water and Sewer Main Construction in Illinois latest edition. All manhole components, including solid cast iron frame and adjusting rings, shall be sealed watertight with butyl rope joint sealant.

Basis of Payment: This work shall be paid for at the contract unit price Each for SANITARY MANHOLES TO BE ADJUSTED, which price shall include the cost of all excavation, backfill, chimney seals, butyl rope, frame and lid and all other appurtenances all in accordance with the plans and these specifications.

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (PROJECT SPECIFIC)

This work shall consist of the removal and disposal of regulated substances according to Section 669 of the Standard Specifications as revised below.

Contract Specific Work Areas. The excavated soil and groundwater within the work areas listed below shall be managed as either "uncontaminated soil", hazardous waste, special waste or non-special waste. For stationing, the lateral distance is measured from centerline and the farthest distance is the offset distance or construction limit, whichever is less.

Site 30 – Supermercado Monarca (former-Dave's Standard Service) - 755 15th Avenue, Rock Island County, Illinois

Zone A – The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05 (b)(1). COC Sampling parameter: pH.

Site 76 – Quad City Auto Upholstery – 722 15th Avenue, Rock Island County, Illinois
Zone A – The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05 (b)(1). COC sampling parameter: pH.

Site 126 – Cones on the Corner – 1152 15th Avenue, Rock Island County, Illinois
Zone A – The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05 (a)(1). COC sampling parameter: manganese and pH.

Zone B – The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05 (b)(1). COC Sampling parameter: pH.

Zone C – The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05 (a)(2). COC sampling parameter: manganese.

Work Zones
Three distinct OSHA HAZWOPER work zones (exclusion, decontamination, and support) shall apply to projects adjacent to or within sites with documented leaking underground storage tank (LUST) incidents, or sites under management in accordance with the requirements of the Site Remediation Program (SRP), Resource Conservation and Recovery Act (RCRA), or Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or as deemed necessary. For this project, the work zones apply for the following ISGS PESA Sites: **None**

Additional information on the above sites collected during the Phase I Engineering process is available through Crawford, Murphy and Tilly (CMT).

DETECTABLE WARNINGS

Description: This work shall consist of the construction of precast concrete paver for detectable warnings at crosswalks as detailed in the plans at locations shown in the plans.

Summary: This special provision includes material and construction requirements for precast concrete truncated dome pavers.

Submittal Requirements: The following submittals shall be provided to the Landscape Architect/Engineer for review and approval.

1. Product Data for Truncated Dome Pavers and Edge restraints.
2. Samples for Verification: For full-size units of each type of unit paver indicated. Joint materials. Edge restraints.

Quality Assurance: The following shall be provided for review and approval prior to commencement of construction of pavers.

1. Installer Qualifications: A qualified unit paving installer with a minimum five (5) years of experience working on project of similar construction, scale, and scope.

2. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.
    a. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

Delivery, Storage, And Handling: Store pavers on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.

Cold-Weather Protection: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen subgrade or setting beds.

Material Requirements: Materials used for concrete paver pavement construction shall comply with the following.

1. Source Limitations: Obtain each type of unit paver, joint material, and setting material from single source with resources to provide materials and products of consistent quality in appearance and physical properties.
2. Detectable Warnings (Solid Interlocking Paving Units): Pressed concrete truncated dome architectural paver meeting the following specifications:
    a. Color: Red
    b. Nominal Size: 12” Width x 12” Length x 2 ¾” Thickness
    c. Compressive Strength: Greater than 8,000 PSI average, with no individual unit less than 7,500 PSI (ASTM C140)
    d. Water Absorption: Less than 6% (ASTM C 140)
    e. Flexural Strength: Greater than 1,200 pounds average (ASTM C 140)
    f. Freeze / Thaw: Less than 1% loss of dry weight, 100 cycles (ASTM C 1262)
    g. Center Load: 1,850 lbs. (WTCL 99)
3. Manufacturer’s certification stating the product is fully compliant with accessibility standards shall be submitted for review and approval before acceptance of product.
4. Edge Restraints: Fabricated from stainless steel to meet requirements indicated on drawings.
5. Graded Aggregate for Granular Subbase: Installed as indicated on drawings and completed in accordance with applicable portions of Section 311 of the Standard Specifications and as directed by the Engineer.
6. Sand for Leveling Course: Sound, sharp, washed, natural sand or crushed stone complying with gradation requirements in ASTM C33/C33M for fine aggregate.
7. Sand for Joints: Manufactured Polymeric Sand designed for paver joint installations.

Construction Requirements: Construction of decorative concrete paver pavement shall comply with the following:

1. Examination: Examine surfaces indicated to receive unit paving, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.
2. Concrete Substructure Installation: Installed as indicated on drawings and completed in accordance with applicable portions of Section 420 of the Standard Specifications and as directed by the Engineer
3. Granular Subbase Installation: Installed as indicated on drawings and completed in accordance with applicable portions of Section 311 of the Standard Specifications and as directed by the Engineer.
4. Paver Installation, General Requirements:
    a. Do not use unit pavers with chips, cracks, voids, discolorations, or other defects that might be visible or cause staining in finished work.
    b. Mix pavers from several pallets or cubes, as they are placed, to produce uniform blend of colors and textures.
    c. Cut unit pavers with motor-driven masonry saw equipment to provide clean, sharp, unchipped edges. Cut units to provide pattern indicated and to fit adjoining work neatly. Use full units without cutting where possible. Hammer cutting is not acceptable. For concrete pavers, a block splitter may be used.
    d. Joint Pattern: As indicated on drawings.
    e. Tolerances:
        i. Do not exceed 1/32-inch unit-to-unit offset from flush (lippage) or 1/8 inch in 10 feet from level, or indicated slope, for finished surface of paving.
        ii. Do not exceed 1/16-inch unit-to-unit offset from flush (lippage) nor 1/8 inch in 24 inches and1/4 inch in 10 feet from level, or indicated slope, for finished surface of paving.
5. Edge Restraint Installation: Provide edge restraints and anchor to concrete slab as indicated. Install edge restraints before placing unit pavers.
6. Paver Installation on Sand Setting Bed:
    a. Place sand leveling course over concrete substructure and screed to thickness indicated on plans, taking care that moisture content remains constant and density is loose and uniform until pavers are set and compacted.
    b. Treat leveling course with herbicide to inhibit growth of grass and weeds.

c. Set pavers with a joint width indicated on plans, being careful not to disturb leveling base. Use string lines to keep straight lines. Fill gaps between units that exceed 3/8 inch with pieces cut to fit from full-size unit pavers.

d. Vibrate pavers into leveling course with a low-amplitude plate vibrator capable of a 3500- to 5000-lbf compaction force at 80 to 90 Hz. Use vibrator with neoprene mat on face of plate or other means as needed to prevent cracking and chipping of pavers. Perform at least three passes across paving with vibrator.

e. Compact pavers when there is sufficient surface to accommodate operation of vibrator, leaving at least 36 inches of uncompacted pavers adjacent to temporary edges.

f. Before ending each day's work, compact installed concrete pavers except for 36-inch width of uncompacted pavers adjacent to temporary edges (laying faces).

g. As work progresses to perimeter of installation, compact installed pavers that are adjacent to permanent edges unless they are within 36 inches of laying face.

h. Before ending each day's work and when rain interrupts work, cover pavers that have not been compacted and cover leveling course on which pavers have not been placed with nonstaining plastic sheets to protect them from rain.

i. Install polymeric sand per manufacturer’s instructions.

j. Do not allow traffic on installed pavers until sand has been vibrated into joints.

k. Repeat joint-filling process 30 days later as needed.

7. Repairing, Pointing, And Cleaning: Remove and replace unit pavers that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Provide new units to match adjoining units and install in same manner as original units, with same joint treatment and with no evidence of replacement.

ADA compliant truncated dome paver work for detectable warnings at crosswalks will be paid for at the contract unit price per Square Foot as **DETECTABLE WARNINGS**, which price shall include all labor and equipment necessary, including excavation, subgrade preparation, base course and concrete substructure installation, edge restraint installation, dowels, other noted appurtenances, and paver installation as indicated on drawings to complete the work specified herein.

TRIAXIAL GEOGRID REINFORCEMENT, TYPE 1

This work shall consist of furnishing and installing geogrid in accordance with the Standard Specifications and the manufacturer's requirements at the locations shown in the plans and details.

The triaxial geogrid shall be manufactured from a punched polypropylene sheet to form equilateral triangular apertures. The aperture openings shall be suitable for the specified aggregate base course with a maximum side dimension of 2 inches. The material shall have resistance to

chemical degradation and ultra-violet light weathering. The triaxial geogrid shall be installed directly on top of properly prepared and leveled aggregate base.

This work will be measured for payment and paid for at the contract unit price per Square Yard for TRIAXIAL GEOGRID REINFORCEMENT, TYPE 1, which price shall be considered in full for all labor, equipment, and materials required to complete the work.

CONCRETE PAVER PAVEMENT

This work shall consist of furnishing and installing concrete pavers at the locations shown in the plans and details.

Submittals: The following must be submitted for approval.

1. Shop Drawings: Submit design details, unit details, cross-sections, paver pattern, and layouts

2. Samples:
    a. Brown: Submit one (1) full-sized Permeable Articulating Concrete Block (P-ACB) sample.
    b. Color: Submit 4" x 4" samples representative of color(s) selected within this specification or noted on Contract Documents

3. Geosynthetic: Submit product data sheet(s) and test reports for geosynthetic(s) proposed for use within the specification.

4. Submit to the Engineer the manufacturers' printed installation manual, literature, layout drawings, and product specifications.

5. Certification of Compliance
    a. Test Reports – Indicate compliance with requirements of Contract Documents including:
        i. P-ACB unit compressive strength, moisture content and density on like units, tested in accordance to ASTM C140 by independent laboratory per unit requirements of ASTM D6684, Table 1.
        ii. Sieve analysis of all aggregate grades indicated in Contract Documents, sampled according to ASTM D75 and tested in accordance to ASTM C136.
        iii. Specified standard sizes of coarse aggregates shall comply with sizes given in accordance to ASTM D448, Table 1.
        iv. Results of the porosity analyses of all aggregate grades indicated in Contract Documents, sampled according to ASTM D75 and tested in accordance to ASTM C29, with full reporting of all information.
            1. The "% voids" calculation result of ASTM C29 denotes the volume of voids over the total volume of aggregate, which is porosity, and must be reported and illustrated as such in the respective submittals.
            2. A minimum 40% porosity is required.

b. Performance Compliance – Indicate compliance with requirements of Contract Documents including:
    i. Infiltration Performance – Submit independent laboratory test report indicating in-place infiltration performance of: Average of five (5) tests of one thousand (1,000) inches per hour (in/hr.). Test should be conducted a minimum one (1) test every 2,000 linear feet of installed paver length. Test shall be performed in accordance to ASTM C1781 or C1701 and based on an outdoor working surface with typical base material and installation.
    ii. Structural Performance - Design of the P-ACB shall be capable of supporting AASHTO H-20, HS-20 and HS-25 truck loading with proper subgrade and base installation. The P-ACB's shall be analyzed as unreinforced concrete arches supporting a uniform truck tire load with impact per AASHTO standards as tested by an independent laboratory.
    iii. Maintainability – Provide a maintenance study of previous installations based on at least 24 months by an independent or third-party representative which includes pre and post infiltration testing documentation in multiple locations in accordance with ASTM C1781 or C1701. The study shall show that after manufacturers' recommended maintenance that the original infiltration performance of the permeable system can effectively be restored to 80% +/- 10% of initial infiltration rates.

6. Substitutions
    a. No material shall be considered as an equivalent to the P-ACB specified herein unless it meets all areas of this specification without exception.
    b. Manufacturer's requesting to submit materials as equivalent must provide records, data, independent laboratory test results, samples, certifications, and documentation meeting all areas of this specification without exception. Any requests must be submitted to Engineer 15 days prior to bid date.

Scheduling

1. Contractor shall contact P-ACB manufacturer to determine necessary lead time to produce unit material order.
2. Schedule manufacture and delivery of P-ACB's to coincide with construction schedule to prevent storage for extended periods.
3. Approximately two (2) weeks prior to the start of the installation, a meeting shall occur with representative(s) from the design team, general contractor, site contractor, installation contractor and manufacturers' representative.

Delivery, Storage, and Handling

1. P-ACB individual blocks must be delivered on wooden pallets and marked accordingly.
2. All P-ACB's shall be sound and free of defects that would interfere with proper placement or that would impair the strength of longevity of the installation.
3. Minor cracks incidental to the usual method of manufacture; scuffing or chipping that results from customary methods of handling in shipping, delivery and placement shall not be deemed grounds for rejection.

Products

1. PaveDrain® P-ACB
    a. Color: Brown
    b. Type: Closed-cell pre-manufactured individual concrete blocks with an arched storage chamber for additional stormwater runoff capacities as per shop drawings &/or Contract Documents. Blocks may be hand-placed or mechanically installed.
    c. Physical and Performance Requirements: At the time of delivery to the work site, the units shall conform to the requirements prescribed in Table 1.

TABLE 1 PHYSICAL & PERFORMANCE CHARACTERISTICS		
Item	***Description***	***Values***
Dimensional Tolerance	Length x Width x Height ASTM D6684 Section 5.3.2	12” x 12” x 5.65” (+/- 1/8”)
Compressive Strength	ASTM D6684 / ASTM C140	Avg. of three units: 4,000 psi min. Individual units: 3,500 psi min.
Block Unit Weight		Arched Block: 45-50 lbs/sf Solid Block: 55-60 lbs/sf
Loading Capabilities	Truck Load Traffic Rating	AASHTO H-20, HS-20, HS-25
Joint Filler Between Blocks	Material Used	NONE Required
Percent Open Space		Surface: 7% Storage: 20%
Water Absorption (Max. %)	ASTM D6684 Table 1 / ASTM C140	Avg. of three units: 9.1% lb/ft3 Individual units: 11.7% lb/ft3
Density (Min. lb/ft3)		Avg. of three units: 130 lb/ft3 Individual units: 125 lb/ft3
Storage Capacity	Above Aggregate Within Arch	0.0833 cf/block
Post-Installation, Verified Surface Infiltration Rates	ASTM C1781 Test Method	Avg. of five (5) tests or one (1) per 2,000 linear feet of installed concrete block: 1,000 in/hr min.

2. The Permeable Articulating Concrete Blocks shall be PaveDrain® as represented or distributed by the following:
    a. PaveDrain, LLC. (888) 575-5339, info@pavedrain.com www.pavedrain.com

Transition And Edge Restraints

1. Transition: Utilize PaveDrain end block, solid block and half block shapes to make smooth transitions with curbs and other rigid surfaces as per shop drawings &/or plans.
2. Edge Restraint: Type and dimensions as per the plans.

Execution:
Examination And Inspection

1. The Contractor shall verify that the subgrade has been excavated, shaped, stabilized and compacted in accordance with the IDOT standard specifications and conforms to the lines, grades and cross-sections shown in the plans.

2. Verify that native subgrade has been compacted to a maximum of 95% Modified Proctor in accordance to ASTM D 1557. Do not over-compact or rut native subgrade.
3. Immediately prior to placing the PaveDrain units, the final prepared sub-base aggregate shall be inspected by the Engineer and witness to a proof roll test by a fully loaded dump truck. Unsatisfactory conditions must be corrected prior to installation of the PaveDrain units.

Aggregate Base Course Installation

1. All base aggregates shall be compacted to 95 percent maximum density determined by a modified proctor test in six to eight (6-8") inch lifts with a roller compactor and final grade level compacted with a minimum 10,000 lb. vibratory plate compactor in at least two passes in both the perpendicular and parallel directions. Open-graded base aggregate installation shall not damage or dislodge the geotextile. The base course shall be firm and non-yielding, compacted until it does not creep or weave in front of the roller or compacting vehicle.
2. Finished grade shall be a smooth, plane surface with no sign of movement and conform to the lines, grades and cross-sections shown on Contract Documents. Allowable deviation from design grade is 1/2 inch.

PaveDrain Permeable Articulating Concrete Block Installation

1. Refer to the PaveDrain Installation Manual (latest edition)
2. Hand Placing Pavedrain Units
    a. The Contractor shall determine the best starting point of the PaveDrain unit installation to conform to the lines, grades and elevations shown on the Contract Documents.
    b. Place PaveDrain units tight together in running bond pattern such that one unit is directly in contact with one half of the two adjacent units. Place units in such a manner as to ensure that the pattern remains square to curbs, transitions or adjacent pavements.
    c. Verify that each PaveDrain unit makes contact with the geogrid or open-graded aggregate sub-base and is tightly engaged with adjacent units.
    d. When necessary, saw cut partial units from solid PaveDrain blocks (minimal cutting is anticipated). Transitions against curbs and other rigid pavements should be made with maximum one-half (1/2) inch gaps utilizing solid, end and half PaveDrain units.
    e. The Supplier will provide design and construction advice during the design and installation phases of the project. The Supplier will not supervise, direct, control, or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work.
3. Adjustments
    a. Minor adjustments to properly engage PaveDrain units shall be made with a dead blow hammer or rubber mallet.
    b. Once all PaveDrain units have been installed, minor differential heights between units can be corrected with a small non-vibratory single or double barrel roller compactor or vibratory plate compactor. When using plate compactor, protect units with nonwoven geotextile or mat to eliminate scuffing.

c. Inspect completed installation and replace any cracked or damaged units.

Tolerances

1. No individual PaveDrain unit shall protrude more than one-quarter (1/4) inch within the plane of final placed units/mats.
2. No gap between the individual PaveDrain units shall exceed one-half (1/2) inch.

Concrete Sealant

1. A concrete sealant shall be applied once the PaveDrain has been installed. A sealant is an economical way to assist the PaveDrain System to resist the damage caused by salting of adjacent hardscape surfaces. It will also assist in maintaining the color of PaveDrain System.

Finishing

1. The joints between the PaveDrain units DO NOT require backfilling with smaller aggregate joint material or sand in order to function properly. The joints are designed to be left open; this includes following maintenance of the PaveDrain system.

Post Installation Certification

1. Upon completion of the PaveDrain installation, the surface infiltration rate of the permeable pavement area shall be verified in accordance with ASTM C1781 or C1701 to confirm the required infiltration rate as per Table 1 in this specification.
2. If the system fails to perform as required in Table 1 of this specification, it shall be removed and replaced at the supplier's expense.
3. The expenses associated with this post installation infiltration verification are included in the cost of the permeable system and provided by the supplier.

Inspection and Maintenance of P-ACB System

1. Refer to the PaveDrain Maintenance Manual (latest edition)
2. Maintenance shall be required when either of the following two conditions are met:
    a. The surface infiltration rates of more than 75% of the total permeable surface falls below 10% of the rate required in Table 1.
    b. Surface ponding remains for 24 hours in an area greater than 10 square feet of the permeable surface.

The Contractor will be responsible for ensuring the aggregate base and concrete pavers are kept clean, free of sediment and debris during construction to the satisfaction of the Engineer. At the completion of the project, the Contractor will be responsible for cleaning the concrete pavers, passing a visual inspection, and the required performance test, to the satisfaction of the Engineer prior to final acceptance from the City. The cleaning of concrete pavers and performance testing shall not be paid for separately but shall be included in the unit price cost for this item.

This work will be paid for at the contract unit price per Square Yard for CONCRETE PAVER PAVEMENT, which price shall include all labor, materials and equipment necessary to perform the work as specified herein.

GEOTECHNICAL FABRIC (SPECIAL)

This work shall be done in accordance with Section 210 of the Standard Specifications, except as modified herein.

210.02 Materials. Revise this Article to read:

"210.02 Materials. Geotechnical Fabric shall be woven monofilament geotextile fabric with AOS of 0.5mm, meeting IUM material specification 592, and meeting the strength requirements of Article 1080.02 and drainage requirements of Article 1080.05."

210.03 Installation Requirements. Add the following to the end of this Article:

"Enough slack at the limits of the fabric shall be provided to allow fabric to be wrapped up the sides of the permeable subbase and across the top of the permeable subbase to be anchored under the curb and gutter a minimum of 6 inches as shown on the details in the Plans. Overlaps shall be made in the horizontal plane only; overlaps shall not be made in the vertical plane.

Fabric shall be carefully cut around utility structures. A strip of 4-foot-wide fabric shall be wrapped around the outside circumference of the utility structure so that fabric overlaps 2 feet on itself. The strip shall overlap the fabric on subgrade by 2 feet and vertically up the outside wall of the structure by 2 feet and secured to prevent leaking/infiltration. Secure strip with CA-7 in the corner where utility riser meets the subgrade."

210.04 Placement of Granular Blanket. Replace the first three paragraphs of this Article with the following:

"210.04 Placement of Granular Cover. The permeable subbase shall be constructed to the width and depth required on the plans. The material shall be back dumped on the fabric in a sequence beginning at the outer edges of the excavated area with subsequent placement towards the middle.

Placement of material on the fabric shall be accomplished by spreading dumped material off of previously placed material with a bulldozer blade or end loader, in such a manner as to prevent tearing or shoving of the cloth. Dumping of material directly on the fabric will only be permitted to establish an initial working platform. No vehicles or construction equipment shall be allowed on the fabric prior to placement of the subbase material.

The entire first lift of the subbase (8" minimum) shall be placed and compacted before any loaded trucks are allowed on the subbase."

210.05 Method of Measurement. Replace the second sentence of this Article with the following:

"Measurement shall include fabric wrapped up the sides of the permeable subbase and over the top of the permeable subbase to end of the portion anchored under the curb and gutter. All excess fabric shall be cut away and will not be measured for payment."

201.06 Basis of Payment. Revise this Article to read:

"201.06 Basis of Payment**.** Geotechnical fabric will be paid for at the contract unit price per Square Yard for GEOTEXTILE FABRIC, SPECIAL. Permeable subbase will be paid separately."

AGGREGATE BASE COURSE, TYPE CA-7

Description. This work shall consist of furnishing all labor, equipment, and material for the installation of Aggregate Base Course, Type CA-7. This work shall be in accordance with Section 351 of the Standard Specifications except as modified herein.

Construction Requirements. Coarse Aggregate, of the type and gradation specified, shall be constructed in accordance with Section 351 of the Standard Specifications for Road and Bridge Construction. The following shall apply and be held over the Standard Specification:

351.02 Materials. Add the following to the end of the Article:

"The CA-7 aggregates shall be washed to remove fine particles and preserve the infiltration capacity of the subgrade soil."

Modify the first sentence in the second paragraph of 351.05 to: Moisten, spread, and compact the aggregate base material on the prepared infiltration aggregate layer in one lift.

Material shall be stockpiled such that material is free from standing water, uniformly graded, free from organic material, sediment, or debris.

Care shall be taken not to crush the aggregate during compaction.

The work shall be protected from sediment deposition and damage. Aggregate base materials contaminated with sediment shall be removed and replaced with clean material and compacted in a manner approved by the Engineer.

Surface tolerance of the compacted aggregate base shall not deviate by more than ±1" in. over a 10'-foot straight edge.

Method of measurement. Aggregate base course of the gradation specified will be measured for payment in tons in accordance with Article 311.08 of the Standard Specification.

Basis of payment. Aggregate base course of the gradation specified will be paid for at the contract unit price per Ton for AGGREGATE BASE COURSE, TYPE CA-7.

INFILTRATION AGGREGATE

Description. This work shall consist of furnishing all labor, equipment, and material for the installation of Infiltration Aggregates as shown on the plan detail for bioretention basins. This work shall be in accordance with Section 601 of the Standard Specifications except as modified herein.

Construction Requirements. Aggregates, of the type and gradation specified, shall be constructed in accordance with Section 601 of the Standard Specifications for Road and Bridge Construction. The following shall apply and be held over the Standard Specification:

The aggregates and sand shall be clean (washed) to remove fine particles and preserve the infiltration capacity. Aggregates shall be spread in 6" lifts per each gradation as specified in the plan detail.

Material shall be stockpiled such that material is free from standing water, uniformly graded, free from organic material, sediment, or debris.

Care shall be taken not to crush the aggregate during compaction.

The work shall be protected from sediment deposition and damage. Aggregate materials contaminated with sediment shall be removed and replaced with clean material and compacted in a manner approved by the Engineer.

Basis of payment. Infiltration aggregates of the gradations specified will be paid for at the contract unit price per Cubic Yard for INFILTRATION AGGREGATE.

RIVER ROCK

Description: This work shall consist of furnishing and placing River Rock in the location specified in the plans in accordance with article 281.04 of the Standard Specifications. The River Rock shall be placed on a non-woven geotextile fabric and the rock shall be sized from 2" to 4" gradation. The Contractor shall provide the Engineer samples of river rock to choose from prior to furnishing and placing. Color of river rock shall be similar to coloration of the special decorative stone mulch within the bioretention basins.

Basis of Payment: The work shall be measured and paid for at the contract unit price per TON for RIVER ROCK which price shall include all materials, equipment, and labor necessary to complete the work as specified.

PLANTING SOIL MIX FURNISH AND PLACE, 30"

Description: This work shall consist of furnishing and placing topsoil suitable for planting in accordance with Section 211 of the Standard Specifications and the provisions provided herein.

The soil shall be a uniform, well blended mix, free of stones, roots or other similar objects larger than two inches. No other materials or substances shall be mixed or dumped within the landscape planting areas that may be harmful to plant growth or prove a hindrance to the planting or maintenance operations. The soil mix shall be free of Bermuda grass, Quack grass, Johnson grass, or other noxious weeds.

The planting soil for typical planting areas shall follow the topsoil material requirements of Section 1081.05 of the Standard Specifications.

The planting soil for BMP Bioretention Basin planting areas shall consist of a mixture of sand or crushed glass cullet of equivalent grade, topsoil, and compost components, to obtain an engineered soil mix meeting the following specifications:

- USDA Texture class: sandy loam or loamy sand. Mineral fraction consists of no less than 40% well-graded sand or glass cullet and no greater than 10% clay (dry weight basis)
- Organic content: 3- 10% (dry weight basis)
- pH: 5.5 – 7.5
- Soluble Salts (Salinity): less than 500 mg/kg (500ppm)
- Phosphorous: soil p-index should be between 15 and 40
- Permeability: Minimum 0.50 inches/hour (per field test utilizing ASTM methods)

Soil chemical parameters should be tested according to Recommended Chemical Soil Test Procedures for the North Central Region, North Central Regional Research Publication No. 221, Revised 1998. Soil organic matter should be determined according to the "Loss of Weight on Ignition" procedure in the above-referenced publication. The manual is available online at the following address: http://extension.missouri.edu/explorepdf/specialb/sb1001.pdf.
Volumetric proportions of the components making up the bio-retention soil mix shall be as follows:

- Sand or glass cullet: ≤ 30% maximum by volume
- Compost: 20 - 40% by volume
- Topsoil: > 40% by volume

Tests on amended soil shall be performed for every 500 cubic yards of soil mix.

Compost shall be finished (aged), and composted material shall be of plant origin. Compost shall have a C:N ratio ≤ 25:1.

The engineered soil shall be loosely placed within the planting areas without manual compaction. The material shall be kept clean from contamination and not be stockpiled onsite. The engineered soil within the bioretention basins shall be evenly watered as directed by the Engineer prior to placement of plants to eliminate potential settlement. If settlement occurs during operations, the Contractor shall regrade the material and add more engineered soil if necessary to attain the grades specified on the plans. The work associated with watering and adding additional engineered soil due to settlement shall not be considered for additional payment.

Basis of Payment: The work shall be measured and paid for at the contract unit price per Square Yard for PLANTING SOIL MIX FURNISH AND PLACE, 30" which price shall include all materials, equipment, and labor necessary to complete the work as specified.

MULCH SPECIAL

Description: This work shall consist of installing decorative stone mulch where specified in the plans for Bioretention Basin planters on a weed fabric barrier. The stone shall be washed, course aggregate, with an approximate gradation of 5/8" to 1". The stone shall be laid in 2" thickness on

top of a weed fabric barrier meeting the requirements of Article 1081.14. Prior to ordering, the Contractor shall provide the Engineer three samples to choose from. Color of decorative stone mulch shall be similar to coloration of river rock.

Basis of Payment: The work to furnish and place Mulch Special with weed fabric barrier will not be measured separately for payment but shall be included in the cost of the various perennial plant pay items included in this contract.

GEOTEXTILE FABRIC

Description: This work shall be done in accordance with Section 601 of the Standard Specifications, except as modified herein.

Geotextile fabric shall be a non-woven material to allow infiltration of water into subgrade soils, but not infiltration of soil particles into bioretention soils or aggregates. Fabric shall be placed in the bioretention basin and aggregate forebay as shown on the plan detail prior to placement of river rock, infiltration aggregates and planting soil mix.

Basis of Payment: This work will be paid for at the contract unit price per Square Yard for GEOTEXTILE FABRIC.

ABANDON AND FILL EXISTING STORM SEWER

Description: Where existing storm sewers are to be abandoned in place, the pipe openings shall be sealed using concrete or brick masonry units with grout. The remaining sewer shall be filled with controlled low-strength material in accordance with the requirements of Sections 593 and 1019 of the Standard Specifications to prevent the infiltration of ground water into the abandoned pipe.

Basis of Payment: This work will be paid for at the contract unit price per Foot for ABANDON AND FILL EXISTING STORM SEWER.

TRENCH DRAIN

Description: This work shall consist of installing a cast-in-place concrete trench drain with cast iron grate and frame per the plan detail and in the locations shown on the plans.

Grate and frame shall be heavy-duty to support potential vehicular loading. Opening sizing in the grate must meet bicycle compatibility and ADA accessibility requirements.

Temporary forms shall be placed for the construction of the cast-in-place concrete trench walls. The cast iron frames shall be secured to the temporary forms prior to placing the concrete trench to ensure proper casting into place within the concrete trench. The Contractor shall follow the manufacturer’s requirements for proper installation and permanent securing of the frames within the concrete by use of rebar or another permanent fastener/connector. The Contractor shall verify

the frames butt edge-to-edge and the grates fit properly with either no gap or a gap no greater than 3/16” prior to placement of concrete.

Top of concrete trench shall meet the lines and grades as shown on the plans for the pavement gutters and should not sit above the surrounding pavement elevations. Inverts for the trench channel shall meet the slopes provided in the trench grate schedules on the plans.

Basis of Payment: This work will be paid for at the contract unit price per Foot for TRENCH DRAIN.

PIPE DRAINS 15” (SPECIAL) & 18” (SPECIAL)

Description: This work shall consist of constructing pipe underdrains of the required inside diameter in accordance with Section 601 of the Standard Specifications and the provision herein. Pipe underdrains shall be a perforated pipe, without fabric, installed in a fabric lined trench backfilled with coarse aggregate. Coarse Aggregate shall be a CA-16 gradation.

Basis of Payment: This work will be paid for at the contract unit price per Foot for PIPE DRAINS 15” (SPECIAL) and PIPE DRAINS 18” (SPECIAL) which shall include all labor, equipment, and materials necessary to complete the work as specified.

REMOVING INLETS (SPECIAL)

Description: This work shall consist of removing existing drainage inlets at the locations shown in the plans in accordance with Section 605 of the Standard Specifications, the plan details, and the provision herein. Where existing inlets are constructed above an existing storm sewer pipe, the existing inlet structure and any riser pipes should be fully removed. The remaining hole in the existing storm sewer shall be sealed to be watertight by adhering an ice and water shield, 40 mil thickness minimum per the plan detail. The existing pipe surface should be cleaned and the shield material adhered to the surface per the manufacturer’s requirements to ensure a water tight seal.

Basis of Payment: This work will be paid for at the contract unit price per Each for REMOVING INLETS (SPECIAL) which shall include all labor, equipment, and materials necessary to complete the work as specified.

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18 (SPECIAL) & CONCRETE CURB, TYPE B (SPECIAL)

Description: This work shall consist of constructing concrete curb and gutter or curb in accordance with Section 606 of the Standard Specifications, the plan details, and the provision herein. Type B-6.18 (Special) and Curb, Type B (Special) shall be constructed around the bioretention basins per the details shown in the plans, including additional depth and reinforcement as shown or as directed by the Engineer.

Basis of Payment: This work will be paid for at the contract unit price per Foot for COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18 (SPECIAL) and CONCRETE CURB, TYPE B (SPECIAL) which shall include all labor, equipment, and materials necessary to complete the work as specified.

LUMINAIRE, LED, SPECIAL

Description: This work shall consist of furnishing and installing a luminaire in accordance with Section 821 of the Standard Specifications, the details in the plans, and the following additions or exceptions.

Materials:

Luminaire:

The luminaire is to be cast aluminum construction with tempered glass diffuser lens and threaded weatherproof cord grip(s). Housing to have polymer sealing gasket and stainless-steel hardware with integral heat sink, sealed LED optical module for IP65 rating, constant current LED driver which operates on input voltages from 120-277vac, 60 hz factory wired driver independently sealed and U.L. listed for wet locations. The luminaire shall have a type V medium IES distribution with 4000K color temperature and catenary mounting bracket. Finish shall be a black textured finish.

Basis of Payment: This work will be paid for at the contract unit price Each for LUMINAIRE, LED, SPECIAL which price shall include all labor, equipment, and material necessary to complete the work as specified.

SUPPLEMENTAL SPECIFICATION FOR SECTION 1066.04 AERIAL CABLE ASSEMBLY

This Supplemental Specification amends the provisions of the Standard Specification for Road and Bridge Construction, adopted January 1, 2022 and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

Revise Article 1066.04 to read:

1066.04 Aerial Cable Assembly. The aerial cable shall be an assembly of insulated copper conductors according to Articles 1066.02 and 1066.03 and a steel messenger wire according to ANSI/ICEA S-76-474. The cable assembly may have the messenger wire intertwined with the insulated cables or lashed to the insulated cables by a factory wrap.

The cable shall be assembled according to ANSI/ICEA S-76-474.

Steel Messenger wire shall be sized accordingly to support the insulated copper conductors as well as LED Catenary Luminaires.

LIGHT POLE (SPECIAL)

Description: This work shall consist of furnishing and installing a luminaire and associated light pole in accordance with Section 821 of the Standard Specifications, the details in the plans, and the following additions or exceptions.

Materials:

Luminaire:

The luminaire is to be a medium scale, decorative downlight fixture with spun aluminum bell styled dome with round edge. Housing and reflector be made out of single-piece die-cast aluminum construction with integral heat sink, sealed LED optical module for IP65 rating, constant current LED driver which operates on input voltages from 120-277vac, 60 hz factory wired driver independently sealed and U.L. listed for wet locations. The luminaire shall have a type IV IES distribution with 4000K color temperature. Finish shall be a black textured finish.

Pole and Arm:

Pole shall be a 26’ in nominal height, 6” square straight aluminum shaft with 0.250 wall thickness, and 20A, self-testing GFCI receptacle with weatherproof while in use cover 2’-0” and 16’-0” above finished grade, single hooked planter arm, banner arm brackets for 60”x24” banner. Pole base shall be a low profile cast aluminum base.

The pole shall include an integral Vibration damper.

Pole and base cover shall be black textured finish.

Anchorage:

Anchorage bolt and pattern shall be as required by the manufacturer.

Basis of Payment: This work will be paid for at the contract unit price Each for LIGHT POLE (SPECIAL) which price shall include all labor, equipment, and material necessary to complete the work as specified.

LIGHTING CONTROLLER (SPECIAL)

Description: This work shall consist of furnishing, transporting, and installing the Lighting Controller (Special) on concrete foundation and all electrical cable connections in the unit in accordance with Section 825 of the Standard Specifications, the plans, and as directed by the Engineer.

Materials

The Controller Combination Unit shall be 200AMP, 120/240 VAC, 1-phase, 3 wire, with 225 Amp 120/240 VAC, Sigle phase, 4 wire Panelboard with 225AMP Main Circuit Breaker, 42 Poles with forty-two 20 Amp, 1 Pole circuit breakers, Photocell, multipole lighting contactor rated 30 Amps, and 12 pole electrically held contactor, integral photocell, Hand-Off-Auto selector switch, Rainproof – NEMA 3R Aluminum Enclosure, painted Black). Ameren approval of meter components must be satisfied. Unit exterior will be free of defects and have no sharp edges.

Basis of Payment: Work will be paid for at the Contract Unit Price per Each of LIGHTING CONTROLLER (SPECIAL) for the combination unit specified in the plans, which price shall be considered payment in full for all labor, equipment, and material necessary to complete the work as specified.

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

Description: In addition to the requirements of Section 895 of the Standard Specifications, the following shall apply: This item shall consist of the removal and transporting of existing traffic signal equipment (mast arm assemblies, traffic posts, pedestrian signal heads, push buttons, signs, etc.) as detailed in the plans. The signal equipment shall become the property of the contractor for salvage. The bid price shall reflect any salvage value for the supports and hardware.

This work will be paid for at the contract unit price Each for REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT. The price shall be payment in full for removing the equipment, storing, salvaging, and/or disposing of it as required.

PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, BRACKET MOUNTED (SPECIAL)

This work shall consist of furnishing and installing pedestrian signal heads of the type and material specified in accordance with Section 881 of the Standard Specifications, except as described herein.

The pedestrian signal indications shall consist of illuminated solid symbols of a walking person and an upraised hand. The countdown timer heads will not be allowed at 15TH Street due to the signals being interfaced with the railroad controller and with possible shortened time due to trains approaching.

This work will be paid for at the contract unit price per Each for PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, BRACKET MOUNTED, SPECIAL of the type and of the material specified

VIDEO VEHICLE DETECTION SYSTEM

The following video vehicle detection systems meet the specifications outlined in this section and are currently approved for use in District 2:

Iteris Vantage Next (4 Camera System)
Auroscope Vision (4 Camera System)

The quantity and type of cable that will be required to complete the installation will vary depending on the equipment manufacturer.

The Contractor shall be responsible for determining the cable type and quantities of cable required for the video detection installations. All cable used shall meet current Department specifications, manufacturer's recommendations, and shall be subject to approval by the Engineer.

Each system to be installed shall be the latest model. Each intersection shall include four (4) cameras plus one (1) spare to be delivered to the Resident Engineer, the processor unit, connectors, software, and all cabling necessary back to the controller. All the equipment shall be compatible with the controller to be installed on this project. All equipment shall be installed according to manufacturer's recommendations. The video detection cameras shall be capable of being zoomed and focused from a connection in the controller cabinet.

The video vehicle detection system shall include all necessary cables, electrical junction boxes, electrical and coaxial surge suppression, hardware, software, programming, and any camera brackets that are required for installation. These items should be taken into consideration and shall be included in the bid price 4 camera system and 1 spare camera for the VIDEO VEHICLE DETECTOR SYSTEM.

If the unit requires the use of a power strip, the power strip/surge suppressor shall conform to the following minimum specifications:

- Let Through Voltage: 25-60dB
- Operating Voltage: 120VAC, 50/60H
- UL Suppressed Voltage Rating: 330V
- Energy Rating: 320J
- Peak Current NM/CM: 13k Amps NM, 13k Amps CM
- EMI/RFI Noise Filtration: >25-60dB

A total of one 12" color video monitor and trackball with USB connect shall be included in the installation, to allow for the setup and monitoring of the video detection system.

All vehicle video detection systems shall be equipped with the latest software or firmware revisions.

The video vehicle system shall be configured and installed to NEMA TS2 Standards.

The Contractor shall be responsible for furnishing and installing all necessary camera brackets that are required for the camera installation. The camera mounting brackets shall be of aluminum or steel construction with a natural or white powder coated finish. All brackets shall be submitted to the Department for approval prior to installation. The material and installation shall be completed to the satisfaction of the Engineer.

The minimum requirements for a video vehicle detection system are listed below:

1.0 General

This Specification sets forth the minimum requirements for a system that monitors vehicles on a roadway via processing of video images and provides detector outputs to a traffic controller or similar device. All video detection systems must be approved by the Department. Currently, only Iteris Vantage Next and Econolite Autoscope Vision video detection systems are approved for use within District 2.

1.1 System Hardware

The system shall consist of four video cameras, one spare camera and an automatic control unit (ACU). The ACU shall process all detected calls and shall be equipped with the latest firmware revisions.

1.2 System Software

The system shall be able to detect either approaching or receding vehicles in multiple traffic lanes. A minimum of 24 detection zones shall be user-definable per camera. The user shall be able to modify and delete previously defined detection zones. The software shall provide remote access operation and shall be the latest revision.

2.0 Functional Capabilities

2.1 Real-Time Detection

2.2 The ACU shall be capable of simultaneously processing information from up to four (4) video sources. The video shall be digitized and analyzed at a rate of a minimum of 30 times per second.

2.3 The system shall be able to detect the presence of vehicles in a minimum of 96 detection zones within the combined field of view of the image sensors.

3.0 Vehicle Detection

3.1 Detection Zone Placement

The video detection system shall provide flexible detection zone placement anywhere and at any orientation within the combined field of view of the image sensors. In addition, detection zones shall be coordinated with the signal phases. Each detection zone shall provide a minimum of two kinds of detection (extend, delay, presence or counting) as each phase may require. The type of detection provided by the detection zone is to be determined by the active status of the zone's governing phase.

3.2 Optimal Detection

The video detection system shall reliably detect vehicle presence when the image sensor is mounted 30 feet (10 m) or higher above the roadway, when the image sensor is adjacent to the desired coverage area, and when the length of the detection area or field of view (FOV) is not greater than ten (10) times the mounting height of the image sensor. The image sensor shall not be required to be mounted directly over the roadway, however, extension poles shall be include in the cost when the mounting location requires the proper height adjustment for sight and lane coverage. A single image sensor, placed at the proper mounting height with the proper lens, shall be able to monitor six (6) to eight (8) traffic lanes simultaneously.

3.3 Detection Performance

Overall performance of the video detection system shall be comparable to inductive loops. Using standard image sensor optics and in the absence of occlusion, the system shall be able to detect vehicle presence with 98% accuracy under normal conditions, (days & night) and 96% accuracy under adverse conditions (fog, rain, snow). The ACU shall output a constant call for each enabled detector output channel if a loss of video signal occurs in any camera. The ACU shall be capable of processing a minimum of twenty detector zones placed anywhere in the field of view of the camera.

4.0 ACU Hardware

4.1 ACU Mounting

The ACU shall be shelf or rack mountable. Nominal outside dimensions excluding connectors shall not exceed 7.25" x 19" x 10.5" (H x W x D).

4.2 ACU Environmental

The ACU shall be designed to operate reliably in the adverse environment found in the typical roadside traffic cabinet. It shall meet the environmental requirements set forth by the NEMA (National Electrical Manufacturers Association) TS1 and TS2 standards as well as the environmental requirements for Type 170 and Type 179 controllers. The minimum operating temperature range shall be from -31 to +165 degrees F at 0% to 95% relative humidity, noncondensing.

5.0 ACU Electrical

5.1 The ACU shall be modular in design and provide processing capability equivalent to the Intel Pentium microprocessor. The bus connections used to interconnect the modules of the ACU shall be gold-plated DIN connectors.

5.2 The ACU shall be powered by 89 - 135 VAC, 60 Hz, single phase, and draw 0.25 amps, or by 190 - 270 VAC, 50 Hz, single phase, and draw 0.12 amps. If a rack mountable ACU is supplied, it shall be capable of operating from 10 to 28 VDC. The power supply shall automatically adapt to the input power level. Surge ratings shall be as set forth in the NEMA TS1 and TS2 specifications.

5.3 Serial communications to a remote computer equipped with remote monitoring software shall be through an RS-232 serial port. A 9-pin "D" subminiature connector on the front of the ACU shall be used for serial communications.

5.4 The ACU shall be equipped with a NEMA TS2 RS-485 SDLC interface for communicating input and output information. Front panel LEDs shall provide status information when communications are open.

5.5 The ACU and/or camera hookup panel shall be equipped with four RS-170 (B&W)/NTSC (color) composite video inputs for coaxial camera connections so that signals from four image sensors can be processed in real-time.

5.6 The ACU shall be equipped with a port to provide communications to a computer running the remote access software.

5.7 The ACU and/or camera hookup panels used for a rack mountable ACU shall be equipped with a video output port.

5.8 The ACU shall be equipped with viewable front panel detection LED indications.

6.0 Camera

6.1 The video detection system shall use medium resolution, color, image sensors as the video source for real-time vehicle detection. As a minimum, each image sensor shall provide the following capabilities:

a. Images shall be produced with a CCD sensing element with horizontal resolution of at least 500 lines and vertical resolution of at least 350 lines.

b. Useable video and resolvable features in the video image shall be produced when those features have luminance levels as low as 0.1 lux at night.

c. Useable video and resolvable features in the video image shall be produced when those features have luminance levels as high as 10,000 lux during the day.

d. Automatic gain, automatic iris, and absolute black reference controls shall be furnished.

e. An optical filter and appropriate electronic circuitry shall be included in the image sensor to suppress "blooming" effects at night.

6.2 The image sensor shall be equipped with an integrated zoom lens with zoom and focus capabilities that can be changed using either configuration computer software or hand-held controller. The machine vision processor (MVP) may be enclosed within the camera.

6.3 The image sensor and lens assembly shall be housed in an environmental enclosure that provides the following capabilities:

a. The enclosure shall be waterproof and dust-tight to NEMA-4 specifications.

b.The enclosure shall allow the image sensor to operate satisfactorily over an ambient temperature range from -31F to +165F while exposed to precipitation as well as direct sunlight.

c. The enclosure shall allow the image sensor horizon to be rotated in the field during installation.

d. The enclosure shall include a provision at the rear of the enclosure for connection of power and video signal cables fabricated at the factory. Input power to the environmental enclosure shall be either 115 VAC 60 Hertz or 24 VAC/DC 60 Hertz.

e. A heater shall be at the front of the enclosure to prevent the formation of ice and condensation in cold weather, as well as to assure proper operation of the lens' iris mechanism. The heater shall not interfere with the operation of the image sensor electronics, and it shall not cause interference with the video signal.

f. The enclosure shall be light-colored and shall include a sun shield to minimize solar heating. The front edge of the sunshield shall protrude beyond the front edge of the environmental enclosure and shall include provision to divert water flow to the sides of the sunshield. The amount of overhang of the sun shield shall be adjustable to prevent direct sunlight from entering the lens or hitting the faceplate.

g. The total weight of the image sensor in the environmental enclosure with sunshield shall be less than 6 pounds.

h. When operating in the environmental enclosure with power and video signal cables connected, the image sensor shall meet FCC class B requirements for electromagnetic interference emissions.

6.4 The video output of the image sensor shall be isolated from earth ground. All video connections from the image sensor to the video interface panel shall also be isolated from earth ground.

6.5 The video output, communication, and power to the image sensor shall include transient protection to prevent damage to the sensor due to transient voltages occurring on the cable leading from the image sensor to other field locations.

6.6 A stainless steel junction box shall be available as an option with each image sensor for installation on the structure used for image sensor mounting. The junction box shall contain a terminal block for terminating power to the image sensor and connection points for coaxial cables from the image sensor and from the ACU.

6.7 A video interface panel shall be included for installation inside of the traffic cabinet. The panel shall provide coaxial cable / twisted pair connection points and a transient suppressor for each image sensor. The shield side of the coaxial cable connection at the transient suppressor shall be connected to earth ground via the transient suppressor. If the coaxial cable / twisted pair used to connect the video signal from the image sensor to the ACU are to be routed through a conduit containing unbundled AC power cables, a video isolation amplifier shall be installed in addition to the video interface panel if interference is present. There will be no additional compensation for providing the video isolation amplifier if necessitated by the presence of video interference. The isolation amplifier shall buffer the video signal and provide transient suppression. The isolation amplifier shall have a minimum common mode rejection ratio at 60 Hz of 100 dB.

6.8 The image sensor shall be connected to the ACU such that the video signal originating from the image sensor is not attenuated more than 3 dB when measured at the ACU. When the connection between the image sensor and the ACU is coaxial cable, the coaxial cable used shall be a low loss 75-ohm precision video cable suited for outdoor installation.

7.0 Software

7.1 The system shall include the remote access software that is used to setup and configure the video detection system. The software shall be of the latest revision.

7.2 All necessary cable, adapters, and other equipment shall be included with the system.

8.0 Installation and Training

8.1 The supplier of the video detection system shall supervise the installation and testing of the video and video vehicle detection equipment. A factory certified representative from the supplier shall be on-site during installation.

8.2 Training shall be available upon request.

9.0 Warranty, Maintenance, and Support

9.1 The video detection system shall be warranted by its supplier to the City of East Moline for a minimum of two (2) years from date of turn-on. This warranty shall cover all material defects and shall also provide all parts and labor as well as unlimited technical support.

9.2 Ongoing software support by the supplier shall include updates of the ACU and supervisor software. These updates shall be provided free of charge during the warranty period.

9.3 The supplier shall maintain a program for technical support and software updates following expiration of the warranty period. This program shall be made available to the contracting agency in the form of a separate agreement for continuing support.

9.4 The Contractor shall provide copies of the supplier warranty to the Engineer prior to Final Acceptance.

Basis of Payment:

The above work will be paid for at the contract unit price Each for **VIDEO VEHICLE DETECTION SYSTEM** which price will be payment in full for all labor, equipment, and materials required to supply, install, configure, and test the video vehicle detection system described above, complete.

ELECTRICAL CABLE IN CONDUIT, RAILROAD, NO. 14 3C

The cable shall meet the requirements of Section 873 of the Standard Specifications, except for the following:

Add to Article 873.02 of the Standard Specifications:

The railroad interconnect cable shall be three conductor stranded #14 copper cable in a clear polyester binder, shielded with #36 AWG tinned copper braid with 85% coverage, and insulated with .016" polyethylene (black, blue, red). The jacket shall be black 0.045 PVC or polyethylene.

Add the following to Article 873.05 of the Standard Specifications:

Basis of Payment: This work shall be paid for at the contract unit price per Foot for ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C, which price shall be payment in full for furnishing, installing, and making all electrical connections in the traffic signal controller cabinet. Connections in the railroad controller cabinet shall be performed by railroad personnel.

GATEWAY MONUMENT SIGN COMPLETE

Description: This work shall consist of providing all labor, materials, and equipment necessary to fabricate, furnish, and install the steel truss and columns of the overhead gateway sign structure.

All components as shown within the design plans, including but not limited to structural steel sections, bolts, connection plates, and anchor bolts shall be included in the cost of Gateway Monument Sign Complete.

The work for painting the columns and truss elements, as indicated on the plans, shall also be included for payment for Gateway Monument Sign Complete.

Foundation elements shall be paid for separately as Drilled Shaft in Soil and Reinforcement Bars, Epoxy Coated.

Luminaire:

The luminaire is to be extruded aluminum construction with clear acrylic lens, polyester power coat finish. The luminaire shall be 141lm/LF, 48" in length, constant current LED driver which operates on input voltages from 120-277vac, 60º x 60º distribution with 300 nominal lumens per foot, 3000K color temperature, 80CRI and U.L. listed for wet locations.

Submittals:

The Contractor shop drawings of structural steel elements and luminaire shall be submitted for review by the Engineer.

Materials and Fabrication:

Materials and fabrication shall conform to Section 505 of the Standard Specifications.

Method of Measurement: The contract unit price shall include all structural steel elements for the sign truss, columns, bolts, anchor bolts, and sign infill, all labor for fabrication, erection, and equipment required to complete this work.

Basis of Payment: This work shall be paid for at the contract unit price per Each for GATEWAY MONUMENT SIGN COMPLETE.

SIDEWALK, SPECIAL

This work shall consist of constructing cast-in-place portland cement concrete sidewalk for ramps, landings and stairs on prepared subgrade and 4” subbase granular material, type B to the lines and grades specified in the plans details and at the locations shown in the plans. This work shall be in accordance with Section 424 of the Standard Specifications except as modified herein.

Ramps and landings shall be constructed with a variable depth thickness as shown in the plans. Minimum thickness of concrete shall be 5”. Concrete placed for this work shall be a high-early-strength portland cement concrete mix to minimize closure time for business entrances.

Sidewalk, Special will be measured for payment in square feet in accordance with Article 424.12 of the Standard Specification.

Basis of payment. Sidewalk will be paid for at the contract unit price per Square Foot for SIDEWALK, SPECIAL.

PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH COLORED

Description: This work consists of decorative integrally coloring the concrete as specified in drawings and at locations shown on the drawings and/or directed by the Engineer in the field.

Coloring shall match the adjacent permeable concrete paver pavement. Contractor shall provide mockups for review and approval of coloring. Engineer in the field shall approve the color match in mock sample.

Products:

Concrete: Portland cement concrete in accordance with Section 1020 - Portland Cement Concrete of IDOT Standard Specifications.

1. Integral Color pigment shall be synthetic mineral-oxide pigments or colored water-reducing admixtures; color stable, nonfading, and resistant to lime and other alkalis (ASTM C 979/C 979M), specifically designed for coloring concrete as manufactured by one of the following:

b. Solomon Colors, 4050 Color Plant Road, Springfield, IL 62702, (t) 800- 624-0261 , www.solomoncolors.com.
c. Davis Colors, 3700 East Olympic Blvd., Los Angeles, CA 90023, (t) 800- 35 6-4848, www.daviscolors.com.
d. L.M. Shofield Company, 4155 Scofield Rd, Douglasville, GA 30134, (t) 770-920-6000, www.scofield.com.

2. Concrete Sealer shall be according to Section 1026 Standard Specifications.
3. The pigment for integrally colored concrete has no influence on the mix design.

The following guidance will prevent color variations.

1. A water/cement ratio range of± 0.02 is recommended.
2. A calcium chloride accelerating admixture shall not be used.

Color: As indicated in the Drawings. Provide Manufacturer standard color options for selection.

Construction Requirements:

1. Construction shall be in compliance with Section 503-Concrete Structures, I DOT Standard Specifications and these specifications.
2. Colored concrete shall be integrally and uniformly colored to achieve manufacturer's color guide.

Submittal Requirements: The following submittals shall be provided to the Landscape Architect for review and approval.

1. Product Data for Decorative Pavers, Truncated Dome Pavers, and Edge restraints.
2. Mock Sample.
    a. Contractor shall provide cast in place mock sample containing PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH COLORED.

    b. Mock samples shall be provided a minimum of 15 days prior to the order of CEMENT CONCRETE SIDEWALK, 5 INCH COLORED placement.

    c. Mock sample shall be a minimum of 4 feet in length by 4 feet in height by 5-inch thickness.

    d. Location of mock sample shall be placed on site nearby adjacent existing substructure for comparison and approved by Engineer.

    e. This mock sample is the basis for Engineer in field approval of color match to adjacent existing structure and shall stand as the standard for overall color appearance.

The Integrally Colored Concrete work will be paid for at the contract unit price per Square Foot as CEMENT CONCRETE SIDEWALK, 5 INCH COLORED, which price shall include all equipment, materials, labor, coloring, pouring and finishing/stamping, to complete this work as specified to the satisfaction of the Engineer.

CONCRETE PAVERS, TYPE A & TYPE B

Description: This work shall consist of the construction of decorative precast concrete paver pavement as detailed in the plans at locations shown in the plans.

Summary: This special provision includes material and construction requirements for decorative precast concrete pavers, truncated dome pavers, and edge restraints.

Submittal Requirements: The following submittals shall be provided to the Landscape Architect for review and approval.

1. Product Data for Decorative Pavers, Truncated Dome Pavers, and Edge restraints.
2. Samples for Verification: For full-size units of each type of unit paver indicated. Joint materials. Edge restraints.

Quality Assurance: The following shall be provided for review and approval prior to commencement of construction of pavers.

1. Installer Qualifications: A qualified unit paving installer with a minimum five (5) years of experience working on project of similar construction, scale, and scope.
2. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.
    a. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

Delivery, Storage, And Handling: Store pavers on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.

Cold-Weather Protection: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen subgrade or setting beds.

Material Requirements: Materials used for concrete paver pavement construction shall comply with the following.

1. Source Limitations: Obtain each type of unit paver, joint material, and setting material from single source with resources to provide materials and products of consistent quality in appearance and physical properties.
2. Concrete Pavers, Type A (Solid Interlocking Paving Units): Pressed concrete truncated dome architectural paver meeting the following specifications:
    a. Nominal Size: 12” Width x 12” Length x 2 ¾” Thickness
    b. Compressive Strength: Greater than 8,000 PSI average, with no individual unit less than 7,500 PSI (ASTM C140)
    c. Water Absorption: Less than 6% (ASTM C 140)
    d. Flexural Strength: Greater than 1,200 pounds average (ASTM C 140)
    e. Freeze / Thaw: Less than 1% loss of dry weight, 100 cycles (ASTM C 1262)
    f. Center Load: 1,850 lbs. (WTCL 99)
3. Manufacturer’s certification stating the product is fully compliant with accessibility standards shall be submitted for review and approval before acceptance of product.

4. Concrete Pavers, Type B (Solid Interlocking Paving Units): Pressed concrete architectural paver meeting the following specifications:
    a. Nominal Size: 12” Width x 12” Length x 2 ¾” Thickness
    b. Compressive Strength: Greater than 9,500 PSI average, with no individual unit less than 8,000 PSI (ASTM C140)
    c. Water Absorption: Less than 4.5% (ASTM C 140)
    d. Flexural Strength / Modulus of Rupture: Meets or Exceeds Standard (ASTM 1782)
    e. Freeze / Thaw: Less than 1% loss of dry weight, 100 cycles (ASTM C 1262)
    f. Center Load: 2,000 lbs. (WTCL 99)
5. Edge Restraints: Fabricated from stainless steel to meet requirements indicated on drawings.
6. Graded Aggregate for Granular Subbase: Installed as indicated on drawings and completed in accordance with applicable portions of Section 311 of the Standard Specifications and as directed by the Engineer.
7. Crushed Compacted Clean Aggregate for Leveling Course: Installed as indicated on drawings and completed in accordance with applicable portions of Section 311 of the Standard Specifications and as directed by the Engineer.
8. Sand for Joints: Manufactured Polymeric Sand designed for paver joint installations.

Construction Requirements: Construction of decorative concrete paver pavement shall comply with the following:

1. Examination: Examine surfaces indicated to receive unit paving, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.
2. Concrete Substructure Installation: Installed as indicated on drawings and completed in accordance with applicable portions of Section 420 of the Standard Specifications and as directed by the Engineer
3. Granular Subbase Installation: Installed as indicated on drawings and completed in accordance with applicable portions of Section 311 of the Standard Specifications and as directed by the Engineer.
4. Paver Installation, General Requirements:
    a. Do not use unit pavers with chips, cracks, voids, discolorations, or other defects that might be visible or cause staining in finished work.
    b. Mix pavers from several pallets or cubes, as they are placed, to produce uniform blend of colors and textures.
    c. Cut unit pavers with motor-driven masonry saw equipment to provide clean, sharp, unchipped edges. Cut units to provide pattern indicated and to fit adjoining work neatly. Use full units without cutting where possible. Hammer cutting is not acceptable. For concrete pavers, a block splitter may be used.
    d. Joint Pattern: As indicated on drawings.
    e. Tolerances:
        i. Do not exceed 1/32-inch unit-to-unit offset from flush (lippage) or 1/8 inch in 10 feet from level, or indicated slope, for finished surface of paving.

ii. Do not exceed 1/16-inch unit-to-unit offset from flush (lippage) nor 1/8 inch in 24 inches and1/4 inch in 10 feet from level, or indicated slope, for finished surface of paving.

5. Edge Restraint Installation: Provide edge restraints and anchor as indicated. Install edge restraints before placing unit pavers.
6. Paver Installation on Compacted Crushed Aggregate Bed:
    a. Place crushed aggregate setting course over compacted aggregate subbase and screed to thickness indicated on plans, taking care that moisture content remains constant and density is loose and uniform until pavers are set and compacted.
    b. Treat leveling course with herbicide to inhibit growth of grass and weeds.
    c. Set pavers with a joint width indicated on plans, being careful not to disturb leveling base. Use string lines to keep straight lines. Fill gaps between units that exceed 3/8 inch with pieces cut to fit from full-size unit pavers.
    d. Vibrate pavers into leveling course with a low-amplitude plate vibrator capable of a 3500- to 5000-lbf compaction force at 80 to 90 Hz. Use vibrator with neoprene mat on face of plate or other means as needed to prevent cracking and chipping of pavers. Perform at least three passes across paving with vibrator.
    e. Compact pavers when there is sufficient surface to accommodate operation of vibrator, leaving at least 36 inches of uncompacted pavers adjacent to temporary edges.
    f. Before ending each day's work, compact installed concrete pavers except for 36-inch width of uncompacted pavers adjacent to temporary edges (laying faces).
    g. As work progresses to perimeter of installation, compact installed pavers that are adjacent to permanent edges unless they are within 36 inches of laying face.
    h. Before ending each day's work and when rain interrupts work, cover pavers that have not been compacted and cover leveling course on which pavers have not been placed with nonstaining plastic sheets to protect them from rain.
    i. Install polymeric sand per manufacturer’s instructions.
    j. Do not allow traffic on installed pavers until sand has been vibrated into joints.
    k. Repeat joint-filling process 30 days later as needed.

7. Repairing, Pointing, And Cleaning: Remove and replace unit pavers that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Provide new units to match adjoining units and install in same manner as original units, with same joint treatment and with no evidence of replacement.

ADA compliant truncated dome paver work will be paid for at the contract unit price per Square Foot as **CONCRETE PAVERS TYPE A**, which price shall include all labor and equipment necessary, including excavation, subgrade preparation, base course installation, edge restraint installation, other noted appurtenances, and paver installation as indicated on drawings to complete the work specified herein.

Decorative paver work will be paid for at the contract unit price per Square Foot for **CONCRETE PAVERS TYPE B**, which price shall include all labor and equipment necessary, including excavation, subgrade preparation, base course, edge restraint installation, other noted appurtenances, and paver installation as indicated on drawings to complete the work specified herein.

SIGN & POST, SMALL ENTRANCE SIGN, AND INFORMATION KIOSK COMPLETE

Description:

This work shall include:

1. Provide production-ready digital files and production of graphic output.
2. Fabrication of all sign types indicated on the Drawings and summarized in the Quantities.
3. Site observation to verify existing site conditions and dimensions. Site observation shall note all potential installation conflicts between sign installation locations and regulatory signage.
4. Shop drawings, layouts, samples, and prototypes for Engineer approval.
5. Structural design and calculations when appropriate to substantiate design. It is required that the Sign Contractor include a certified engineer's review and stamp for all signage elements and footings.
6. Review and coordinate, furnish, and install all supports and footings required for the installation of all signs.
7. Installation of Signage.
8. Coordination of all utilities.

Additional Information: The Contractor should contact the City of East Moline to obtain the current Greater Downtown Wayfinding Layout Diagrams for guidance on proposed sign messaging and locations.

Quality Assurance: The following shall be provided for review and approval prior to commencement of fabrication and installation of signage.

1. Contractor's Qualifications:
    a. The Contractor, Fabricator or its Subcontractor, must be experienced in producing and installing graphics and signs similar to those indicated for this Project, with a record of successful in-service performance of not less than five (5) years, and sufficient production capacity to produce the sign units required without causing delays in the work schedule.
    b. If the installer is a different company than the sign fabricator, notify the Engineer in advance providing the installer's name, address, telephone number, and contact person.
    c. The Sign Contractor shall be responsible for providing structural design drawings produced and sealed by a qualified Engineer who is licensed to practice in the jurisdiction of the project.
    d. It shall be the responsibility of the Contractor to design, furnish, and install the elements, the structural support system and connections and accessories required to provide a complete installation.
    e. Any structural members indicated on the Signage Plans and Signage Details Sheets are intended for aesthetic or design intent only. Such indication on the drawings shall not negate the requirement for structural design and review.

f. Supports, anchors and footings should be appropriately sized for the sign total.
g. Design of graphics, supports, anchors, footings, and utilities shall be coordinated with locations of adjacent site and building elements.
h. The structural integrity, installation methods, workmanship, finishes, appearance and durability of each element in the project shall meet or exceed the highest established industry quality standard. Execution of any testing procedures required for this quality assurance shall be the responsibility of the Contractor directly in charge of those elements. Test results shall be documents with actual material and/or production samples.

2. Type Reproduction:

   a. Type fonts and/or sign copy shown in the drawing set shall not be used in lieu of production-ready templates or production-ready digital art. They are intended as guidelines for layouts and type size only and are based on scale calculations of the message lengths within given and estimated sign areas. Should conflicts arise in the message layout, the Designer shall be notified before the Sign Contractor proceeds with fabrication.
   b. Sign Contractor must purchase specified original font software from font suppliers; Designer will not supply font software or digital copies of fonts. Conversions, translations, or “close matches” are not acceptable.
   c. Standard, commercially available and customized type shall be accurately and cleanly reproduced unless otherwise specified in writing.
   d. Unless otherwise shown on drawings, letter forms shall be aligned to maintain a baseline parallel to the sign format. Margins shall be maintained as shown in the sign layouts.

3. Proof Reading:

   a. Engineer shall review spelling, punctuation and grammar. Should the Sign Contractor detect any errors or omissions, they shall be brought to the attention of the Designer before proceeding with fabrication.
   b. Copy must be approved by the Engineer in writing. Do not proceed with fabrication until the Engineer has approved copy in writing.

4. Painting:

   a. The Contractor or its subcontractor shall have no less than five (5) years of successful experience in painting work similar in scope to the work of this project and who are fully qualified to fulfill the requirements of this specification.
   b. For each individual system: Provide primer and other undercoat paint produced by the same manufacturer as finish coat.
   c. Apply coatings only under manufacturer's recommended environmental conditions.
   d. Do not apply coatings during inclement weather except within enclosed, conditioned spaces.

5. Code Compliance: All work and material shall be in accordance with all applicable codes and standards and shall be acceptable to all authorities having jurisdiction.

Performance Requirements: Signage units shall be engineered to withstand stresses induced by

wind loads, live loads, dead loads, temperature, shrinkage, fabrication, handling and erection in accordance with applicable codes. Furnish engineer's certificate stating that sign design meets or exceeds requirements of Contract Documents.

Submittals: The drawings in this package are for design intent only. The Sign Contractor is responsible for the proper engineering of all items. The internal structure, dimensions, and specifications for all items shall be indicated in the shop drawings. Designer will not provide electronic files of design intent drawings – it is intended that the Sign Contractor/Fabricator produce original, CADD-generated shop drawings. In certain cases, artwork will be provided for specified patterns, logos and custom profiles. Submittals shall include:

1. Shop drawings for all items including:
    a. Complete fabrication and installation drawings for each sign type, indicate dimensions, materials, finishes, fastening, anchorage, joining, sealing, backing, utility requirements, rough-in, paving, foundation, expansion joints and adjacent related site conditions.
    b. Note applicable standards, such as ASTM and other on drawings.
    c. Each sign type with all graphic elements.
    d. Accurately reproduced letter styles.
2. Engineer's signed and sealed shop drawings and calculations.
3. Product data for materials used.
    a. Submit only manufacturer's standard drawings and catalog sheets, brochures, diagrams, schedules, charts, illustrations, test results, and other standard descriptive data pages. Mark-up each copy to clearly identify pertinent materials and products. Delete all non-applicable data.
4. Art and copy layouts for proofing.
5. Submit samples for verification showing a complete range of color, pattern, texture, and finishes for each material selected and compliance with requirements indicated. Provide (3) three of each unless noted otherwise:
    b. 6" x 6" actual paint samples on aluminum substrate as specified in this Section.
    c. 12" x 12" color sample of each type of graphic on the material/substrate, showing the base PMS color matches for background and text.
    d. Progress Photos, as requested by the Engineer.
    e. Records of stain, sealer and top-coat, paint mixing equations and any other pertinent information for use in making repairs and replacement parts in the future.
6. Electronic production-ready vector-based artwork files are to be given to the Engineer upon project completion on labeled CDs, DVDs, or USB compatible storage device.
7. Cleaning and Maintenance Data: Include procedures for operation and maintenance including stain/graffiti removal.
8. Warranties: Submit warranties from manufacturers, fabricators and installers.

Delivery, Storage, and Handling:

1. Inspect material upon receipt from the manufacturer. Reject any defective or damaged materials and replace with new.
2. Handle and store materials according to manufacturer's instructions.
3. Deliver elements to the project site in undamaged protective packaging labeled with specific contents.
4. Protect materials from damage on construction site and store in a safe, dry location.
5. Any material that becomes damaged during manufacture, shipping or while being stored shall be replaced at no additional cost to the Engineer.

Project Conditions: Contractor is responsible for verifying field measurements prior to the preparation of shop drawings and fabrication to ensure proper sign layout. Contractor is responsible for contacting and locating utilities to determine any potential conflicts with sign placement.

Warranty: Warranties on finished Sign products shall be as follows.

1. The Sign Manufacturer shall warranty manufactured sign products provided under this Section for five (5) years from the date of Substantial Completion, to be held by the city of East Moline.
2. Contractor shall provide a construction warranty on works under this section for one (1) year from the date of Substantial Completion. This construction warranty shall cover labor, equipment, and material costs associated with replacement of defective finished products.
3. Paint finishes are to be warranted by the Sign Manufacturer against fading, discoloration, cracking and peeling for a minimum of five (5) years from the date of Substantial Completion, to be held by the city of East Moline.
4. Products with a manufacturer's warranty exceeding one year shall be warranted for the manufacturer's specified length of time from the date of Substantial Completion.
5. Contractor shall provide copies of written statements of warranty to the Engineer prior to Final Acceptance.

Material Requirements: Materials used for signage shall comply with the following.

1. General Material Requirements:
    a. Materials shall be new stock, free from defects impairing strength, durability and/or appearance. No fabrication or installation materials or procedures shall be used that will in any way change the usual quality or in any manner have an adverse effect on existing materials and surfaces.
    b. It is the responsibility of the Contractor to ensure that materials are handled and installed according to manufacturer's instructions.
    c. Substitute materials may be submitted, with the approval of the Engineer. No material substitution shall be made without written approval by the Engineer.
    d. All finished sign elements including, but not limited to three dimensional letters, numbers, panels, and non-structural framing, shall be Aluminum, unless otherwise noted.

2. Aluminum Metal Components:

    a. Reference Standards: ASTM B209-07 and ASTM B221.
    b. Plates and Sheets: Alloy 6061-T6 meeting ASTM B209.
    c. Extrusions: Alloy 6063-T6 meeting ASTM B221.
    d. Finish: Satin.

3. Acrylic Components

    a. Reference Standards: ASTM D4802-02
    b. Panels and Sheets: Cast Acrylic
    c. Finish: Frosted / Milky White Semi-Translucent & backlight reactive

4. Acrylic Polyurethane Paint Finish: ultraviolet inhibited aliphatic, acrylic polyurethane system engineered for extreme color and gloss retention. Lead and heavy metal free. Slick, hard surface resists dirt, pollutants, and abrasion. Withstands chipping, color-fade, gloss-loss and graffiti on interior and exterior surfaces.

    a. Exterior aluminum sign panels, exposed framing, and support surfaces are to be colored as indicated on drawings.
        i. The Designer will provide PMS color codes for design intent; it is the Sign Contractors responsibility to provide a paint color to match the design intent color codes.
        ii. The Sign Contractor will supply paint samples as specified in this Section.
        iii. Compile and maintain a list of all colors with factory batch numbers and formulation codes for all paints and coatings. At substantial completion the list will be provided to the Engineer for future maintenance.
    b. Characteristics: Satin Gloss Finish.
    c. Paint refers to those materials that require a finished surface as recommended by the approved manufacturers. Paint includes substrate preparation, priming and sealing, and intermediate and finish coats as recommended by manufacturer.

5. Opaque Applied Vinyl on Painted & Metal Substrates: Engineer grade cast vinyl film, with a clear, permanent, pressure sensitive adhesive with air release channels suitable for exterior markings such as signs and graphic displays and complies with ASTM D4956 Type I.

    a. Opaque exterior and identification markings on sign panels are to be colored as indicated on drawings.
        i. The Designer will provide PMS color codes for design intent; it is the Sign Contractors responsibility to provide a vinyl film to match the design intent color codes.
        ii. The Sign Contractor will supply vinyl film samples as specified in this Section.
        iii. Compile and maintain a list of all colors with factory batch numbers and formulation codes for all vinyl films. At substantial completion the list will be provided to the Engineer for future maintenance.
    b. Characteristics:
        i. Thickness: 3.0 mils minimum with adhesive.
        ii. Finish: Matte or Semi-Gloss.

iii. Properties: Capable of electronically generated cuts. Inks, paints, dyes, and other materials used in the process will be compatible and guaranteed against discolorations, deterioration or delamination.
iv. Adhesion: Clear, pressure sensitive adhesive with Kraft paper liner.

c. Substrates:
i. Contractor to ensure product is compatible and designed for use with the indicated and properly prepared substrates.

6. Reflective Applied Vinyl on Painted and Metal Substrates: Enclosed lense, engineer grade, retroreflective film with similar daytime and nighttime appearance that retains reflectivity when wet, a clear, permanent, pressure sensitive adhesive with air release channels suitable for exterior markings such as signs and graphic displays, and complies with ASTM D4956 Type I.

a. Reflective exterior wayfinding and identification markings on sign panels are to be colored as indicated on drawings.
i. The Designer will provide PMS color codes for design intent; it is the Sign Contractors responsibility to provide a vinyl film to match the design intent color codes.
ii. The Sign Contractor will supply vinyl film samples as specified in this Section.
iii. Compile and maintain a list of all colors with factory batch numbers and formulation codes for all vinyl films. At substantial completion the list will be provided to the Engineer for future maintenance.

b. Characteristics:
i. Thickness: 3.0 mils minimum with adhesive.
ii. Finish: Matte or Semi-Gloss.
iii. Properties: Capable of electronically generated cuts. Inks, paints, dyes, and other materials used in the process will be compatible and guaranteed against discolorations, deterioration or delamination.
iv. Adhesion: Clear, pressure sensitive, with synthetic liner.

c. Substrates:
i. Contractor to ensure product is compatible and designed for use with the indicated and properly prepared substrates.

7. Fasteners:

a. Mechanical fasteners shall be concealed unless noted otherwise as part of the thematic design look.
b. Fasteners shall be corrosion-resistant and chemically compatible with adjacent materials.
c. Any screw, bolt head or other mechanical fastener that cannot be concealed shall be countersunk whenever possible and colored to match the surrounding area.
d. Exposed fasteners shall be tamper-resistant.

8. Anchors and Inserts: Provide non-ferrous or hot-dip galvanized anchors and inserts for exterior installations and elsewhere required for corrosion resistance. Provide hot-dipped galvanized anchors and inserts.
9. Concrete: Installed as indicated on drawings and completed in accordance with applicable portions of Section 734 of the Standard Specifications and as directed by the Engineer.

Construction Requirements: Fabrication and installation of signage shall comply with the following.

1. Fabrication: Components shall be shop-fabricated and shop-assembled to extent possible. Responsibility for methods and techniques used to construct the work lies solely with the Contractor. Construction methods shall be employed that ensure that the installed product is structurally sound, and for exterior signs and graphics, weather-resistant.
2. Metal Assembly:
    a. Fabricate and shop-assemble in largest sections practical for delivery to site.
    b. Prepare and reinforce fabrications as necessary to receive applied items.
    c. Grind exposed edges. Give corners a radius of 1/8 inch. This includes edges created by routing or water jet cutting processes.
    d. Provide gasketing, insulation or other method necessary to prevent galvanic action between dissimilar materials.
    e. Joints: Joints are to fit tightly and securely. Joints to be ground to a clean, tight corner. Make exposed joints tight, flush and hairline.
3. Welding:
    a. Make welds clean, continuous and ground clean.
    b. Welding shall be accomplished so that permanent distortions of flat surfaces are minimized.
    c. Remove welding flux and oxides by grinding or pickling so that these areas match the finish of adjacent surfaces.
    d. Any damage caused by fabrication shall be repaired by grinding, polishing or buffing.
4. Water Protection:
    a. Cap open ends to keep out water and provide adequate drainage for water that does penetrate.
    b. Weep holes to be placed in channel letters, sign cabinets and frames to allow proper drainage.
5. Applied Vinyl:
    a. Clean and prepare substrates in accordance with manufacturer's recommendations for proper adhesion.
    b. Install according to manufacturer's instructions. Provide uniform adhesion free of distortion, bubbles or subsurface particles.
    c. Where seams are required within an image locate seam(s) to be inconspicuous. Allow for exact alignment of the image along seams.

6. Painting and Finishing:

    a. General:
        ii. Apply coatings to surfaces that are clean and properly prepared in accordance with Manufacturer's instructions to assure optimal coating, adhesion and intended finish appearance.
        iii. Use applicators and techniques best suited to the substrate and the type of material being applied.
        iv. Apply additional coats when undercoats, stains or other conditions show through the finish coat of paint, until the paint film is of uniform finish, color and appearance.
        v. Pigmented (Opaque) Finishes: Completely cover to provide an opaque, smooth surface of uniform finish, appearance and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness or other surface imperfections shall not be acceptable.
        vi. Transparent (Clear) Finishes: Multiple coats shall be used to produce smooth-surfaced finishes of even luster. Finishes shall be free of laps, cloudiness, runs, brush marks, orange peel, nail holes, or other surface imperfections.
        vii. Edges, corners, crevices, welds, exposed fasteners and other "irregular" surfaces shall receive a dry film thickness equivalent to that of "flat" surfaces.
        viii. It is the responsibility of the Contractor to insure that the application of coatings are only under environmental conditions recommended by the coating Manufacturer. Ensure proper adhesion to avoid delamination.
        ix. Apply appropriate prime-coat to aluminum backing.
        x. Apply coatings according to the drawings. Surfaces are to be coated, unless specifically noted.
        xi. Sand gloss coats before applying subsequent coatings.

    b. Touch-Up:
        i. Protect work against damage until coating is fully cured.
        ii. Shortly before substantial completion of the project, examine surfaces for damage to coatings and restore coatings to new, undamaged condition.
        iii. Touch-up of minor damage will be acceptable where the result is not visible from surrounding surfaces. Where result is different, as determined by the Engineer, either in color, sheen or texture, recoat entire surface.

    c. Metal Assemblies:
        i. Clean and prepare according to coating Manufacturer's recommendation for maximum adhesion.
        ii. Match color specifications set forth by the Designer and approved submitted samples for metal finishes.

7. Installation:

    i. General:
        i. (a) Locate sign where indicated in plans, using mounting methods of the type described and in compliance with the material manufacturers' instructions or as specified here in.
        ii. (b) Install graphics level and plumb, with sign surfaces free from distortion or other defects in appearance unless indicated otherwise by the Architect/Designer. Install signs at the heights indicated.
        iii. (c) Install items in correct location, plumb and level, without rack or warp.
        iv. (d) Fasteners: Use concealed fasteners fabricated from metals that are neither corrosive to the sign material nor to the mounting surface. Fasteners shall be concealed unless noted in the Exhibits and Graphics Package. If fasteners must be visible the Engineer shall be consulted before a decision regarding fastening is made.
        v. (e) Any exposed screw ends are to be capped with stainless steel acorn nuts.

    ii. Excavation and Subgrade Preparation:
        i. (a) Provide excavation work as required to install signage and footings as indicated.
        ii. (b) Contractor is responsible for contacting and locating utilities.
        iii. (c) Excavation and subgrade preparation shall conform to the requirements set forth in Section 202 of the Standard Specifications and as directed by the Engineer.

    iii. Concrete Construction: Installed as indicated on drawings and completed in accordance with applicable portions of Section 734 of the Standard Specifications and as directed by the Engineer.

Protection: Test each element to ensure that it is securely mounted. Protect installed elements during construction period. Remove temporary protection when the work is ready to be turned over to the Engineer.

Clean-up: Clean-up work area and remove debris resulting from work of this Section.

Basis of Payment: This work will be paid for furnishing and installing at the contract unit price per Each **SIGN AND POST** shall include all excavation, materials, equipment, tools, labor, engineering, and work incidental thereto, and shall be considered to be completely covered by the contract.

Basis of Payment: This work will be paid for furnishing and installing at the contract unit price per Each **SMALL ENTRANCE SIGN** shall include all excavation, materials, equipment, tools, labor, engineering, and work incidental thereto, and shall be considered to be completely covered by the contract.

Basis of Payment: This work will be paid for furnishing and installing at the contract unit price per Each **INFORMATION KIOSK COMPLETE** shall include all excavation, materials, equipment, tools, labor, engineering, and work incidental thereto, and shall be considered to be completely covered by the contract.

BENCHES

Description: This work shall include:

1. Furnishing, assembling and installing decorative metal benches (“benches”) at the positions and grades designated on the construction drawings.
2. Furnishing and installing the appurtenant materials required for the installation of the benches as shown on the construction drawings.

General Requirements: The contractor shall comply with manufacturer’s recommendations for transportation, installation and approved submittals. All benches shall be installed level and true and in proper relation to adjacent surfaces.

Submittal Requirements: Submit following for review and approval.

1. Product Data: Manufacturer’s standard product literature.
2. Shop Drawings: Indicating size, connections, materials, etc.
3. Installation Instructions
4. Maintenance Instructions
5. Warranty Information

Material Requirements: Materials used for bench construction shall comply with the following.

1. Decorative Metal Site Bench: Meeting the following specifications:
    a. Basis of Design Product: Flight Bench by Forms and Surfaces
    b. Manufacturer Contact: Jackie Dietz, jackie.dietz@forms-surfaces.com, 800.451.0410
    c. Dimension: 72” Length x 20” D x 30” Height
    d. Configuration: Backed
    e. Slat Material: 100% FSC Tropical Hardwood
    f. Frame Material: Aluminum
    g. Frame Finish: Polyester Powdercoat, Charcoal Gray. Provide Manufacturer standard color options for selection.
    h. Armrest: None provided.
    i. Mounting: Anchored to concrete slab, using Manufacturer recommended paver mount brackets.
    j. Manufacturer’s Warranty: Three (3) years from date of invoice against defects in materials and workmanship, to be held by the city of East Moline.
2. The contractor shall submit manufacturer’s product literature, including color charts and installation details for approval.
3. Benches must be supplied by a single manufacturer having the resources to provide consistent quality in appearance and physical properties.
4. Benches are to be packaged and shipped and as per manufacturer’s recommendations.
5. All products are to be free from cracks, chips, defects and surface blemishes.

Construction Requirements: Installation of benches shall comply with the following:

1. Benches are to be installed as per manufacturer's instructions.
2. Benches are to be surface mounted to concrete slabs where indicated in a manner which does not compromise the integrity of, crack, chip or discolor the slab.
3. Benches to be anchored to concrete slab using Manufacturer recommended hardware.

This work will be paid for at the contract unit price per Each for **BENCHES**, which price shall include all labor, materials, surface mount brackets, and equipment necessary to complete the work specified herein.

BICYCLE RACKS

Description: This work shall include:

1. Furnishing, assembling and installing decorative metal bicycle racks the positions and grades designated on the construction drawings.
2. Furnishing and installing the appurtenant materials required for the installation of the bicycle racks s as shown on the construction drawings.

General Requirements: The contractor shall comply with manufacturer's recommendations for transportation, installation and approved submittals. All bicycle racks shall be installed level and true and in proper relation to adjacent surfaces.

Submittal Requirements: Submit following for review and approval.

1. Product Data: Manufacturer's standard product literature.
2. Shop Drawings: Indicating size, connections, materials, etc.
3. Installation Instructions
4. Maintenance Instructions
5. Warranty Information

Material Requirements: Materials used for bicycle racks construction shall comply with the following.

1. Decorative Metal Site Bench: Meeting the following specifications:
    a. Basis of Design Product: Capitol Bike Rack by Forms and Surfaces
    b. Manufacturer Contact: Jackie Dietz, jackie.dietz@forms-surfaces.com, 800.451.0410
    c. Dimension: 5" Length x 4" D x 34" Height
    d. Frame Material: Cast Aluminum
    e. Frame Finish: Polyester Powdercoat, Dark Grey Metallic Texture. Provide Manufacturer standard color options for selection.
    f. Mounting: Surface Mount
    g. Manufacturer's Warranty: Three (3) years from date of invoice against defects in materials and workmanship, to be held by the city of East Moline.
2. The contractor shall submit manufacturer's product literature, including color charts and installation details for approval.

3. Bicycle racks must be supplied by a single manufacturer having the resources to provide consistent quality in appearance and physical properties.
4. Bicycle racks are to be packaged and shipped and as per manufacturer's recommendations.
5. All products are to be free from cracks, chips, defects and surface blemishes.

Construction Requirements: Installation of bicycle racks shall comply with the following:

1. Bicycle racks are to be installed as per manufacturer's instructions.
2. Bicycle racks are to be surface mounted to concrete slabs where indicated in a manner which does not compromise the integrity of, crack, chip or discolor the slab.
3. Bicycle racks to be anchored to concrete slab using Manufacturer recommended hardware.

This work will be paid for at the contract unit price per Each for **BICYCLE RACKS**, which price shall include all labor, materials, surface mount brackets, and equipment necessary to complete the work specified herein.

PEDESTRIAN BENCHES, FURNISH & INSTALL

Description: This work shall include:

1. Furnishing, assembling and installing decorative wood and metal benches ("PEDESTRIAN BENCHES, FURNISH & INSTALL") at the positions and grades designated on the construction drawings.
2. Furnishing and installing the appurtenant materials required for the installation of the benches as shown on the construction drawings.

General Requirements: The contractor shall comply with manufacturer's recommendations for transportation, installation and approved submittals. All benches shall be installed level and true and in proper relation to adjacent surfaces.

Submittal Requirements: Submit following for review and approval.

1. Product Data: Manufacturer's standard product literature.
2. Shop Drawings: Indicating size, connections, materials, etc.
3. Installation Instructions
4. Maintenance Instructions
5. Warranty Information
6. Build America, Buy America (BABA) Approved Waivers, as required.

Material Requirements: Materials used for bench construction shall comply with the following.

1. Decorative Metal Site Bench: Meeting the following specifications:
    a. Basis of Design Product: Drifter Structure
    b. Manufacturer Contact: Jeronimo Mejia, jmejia@streetlife.com, 1.484.496.8280
    c. Dimension: 196" Length x 60" D x 32" Height

d. Model/Configuration: BD-STR-H2-500-160
e. Beam Material: FSC 100% Basralocus hardwood
f. Frame Material: Hot Dip Galvanized Steel
g. Frame Finish: Polyester Powdercoat, Charcoal Gray. Provide Manufacturer standard color options for selection.
h. Armrest: None provided.
i. Mounting: Surface Mount
j. Manufacturer's Warranty: Five (5) years from date of invoice against defects in materials and workmanship, to be held by the city of East Moline.

2. The contractor shall submit manufacturer's product literature, including color charts and installation details for approval.
3. Benches must be supplied by a single manufacturer having the resources to provide consistent quality in appearance and physical properties.
4. Benches are to be packaged and shipped and as per manufacturer's recommendations.
5. All products are to be free from cracks, chips, defects and surface blemishes.

Construction Requirements: Installation of benches shall comply with the following:

1. Benches are to be installed as per manufacturer's instructions.
2. Benches are to be surface mounted to concrete slabs where indicated in a manner which does not compromise the integrity of, crack, chip or discolor the slab.
3. Benches to be anchored to concrete slab using Manufacturer recommended hardware.

This work will be paid for at the contract unit price per Each for **PEDESTRIAN BENCHES FURNISH AND INSTALL**, which price shall include all labor, materials, paver mount brackets, and equipment necessary to complete the work specified herein.

TRASH RECEPTACLES

Description: This work shall include:

1. Furnishing, assembling and installing decorative litter receptacles ("Trash Receptacles") at the positions and grades designated on the construction drawings.
2. Furnishing and installing the appurtenant materials required for the installation of the trash receptacles as shown on the construction drawings.

General Requirements: The contractor shall comply with manufacturer's recommendations for transportation, installation and approved submittals. All trash receptacles shall be installed level and true and in proper relation to adjacent surfaces.

Submittal Requirements: Submit following for review and approval.

1. Product Data: Manufacturer's standard product literature.
2. Shop Drawings: Indicating size, connections, materials, etc.
3. Installation Instructions

4. Maintenance Instructions
5. Warranty Information

Material Requirements: Materials used for trash receptacle construction shall comply with the following.

1. Decorative Metal and Wood Trash Receptacle: Meeting the following specifications:
    a. Dimension: Rectangular, Approximately 23” Width x 15” Depth x 42” Height
    b. Structure Type: Steel Structure with Vertical Wood Slats
    c. Metal Finish: Protective Zinc Coating with Color Powdercoat Finish
    d. Supporting Frame Material: Welded bent and laser cut steel.
    e. Door: Vertical 100% FSC Tropical Hardwood slat on steel structure suspended on hinges.
    f. Rear Wall: Vertical 100% FSC Tropical Hardwood slat on steel structure fastened to support frame.
    g. Metal Color & Finish: Polyester Powdercoat, Charcoal Gray. Provide Manufacturer standard color options for selection.
    h. Inner Bin: Manufacturer provided inner bin with min. 30 Gal capacity.
    i. Mounted: Anchored to concrete slab per manufacturer recommendations.
2. The contractor shall submit manufacturer’s product literature, including color charts and installation details for approval.
3. Trash receptacles must be supplied by a single manufacturer having the resources to provide consistent quality in appearance and physical properties.
4. Trash receptacles are to be packaged and shipped and as per manufacturer’s recommendations.
5. All products are to be free from cracks, chips, defects and surface blemishes.
6. Concrete Slab: Install trash receptacles on concrete slab as indicated on drawings and completed in accordance with applicable portions of Section 420 of the Standard Specifications and as directed by the Engineer

Construction Requirements: Installation of receptacles shall comply with the following:

1. Trash receptacles are to be installed as per manufacturer’s instructions.
2. Trash receptacles are to be surface mounted to concrete slabs where indicated in a manner which does not compromise the integrity of, crack, chip or discolor the slab.

This work will be paid for at the contract unit price per Each for **TRASH RECEPTACLES**, which price shall include all labor, materials, excavation, subgrade preparation, concrete slab installation, anchors, and equipment necessary to complete the work specified herein.

PEDESTRIAN RAILING

Description: This work shall include the design, fabrication, and installation of pedestrian handrailing indicated on plans. Metal Railing work shall be provided in accordance with Section 509 of IDOT Standards Specifications as indicated below.

Quality Assurance: The following shall be provided for review and approval prior to commencement of fabrication and installation of signage.

1. Contractor's Qualifications:

    a. The Contractor or its Fabrication Subcontractor, must be experienced in producing and installing pedestrian handrailing similar to those indicated for this Project, with a record of successful in-service performance of not less than five (5) years, and sufficient production capacity to produce the railing units required without causing delays in the work schedule.
    b. If the installer is a different company than the Contractor, notify the Engineer in advance providing the installer's name, address, telephone number, and contact person.
    c. The Contractor shall be responsible for providing structural design drawings produced and sealed by a qualified Engineer who is licensed to practice in the jurisdiction of the project.
    d. It shall be the responsibility of the Contractor to design, furnish, and install the elements, the required structural support systems, connections, and accessories required to provide a complete installation.
    e. Any structural members indicated on the Handrailing Details Sheets are intended for aesthetic or design intent only. Such indication on the drawings shall not negate the requirement for structural design and review.
    f. Design of supports, anchors, and footings (if required) shall be coordinated with locations of adjacent features.
    g. The structural integrity, installation methods, workmanship, finishes, appearance and durability of each element in the project shall meet or exceed the highest established industry quality standard. Execution of any testing procedures required for this quality assurance shall be the responsibility of the Contractor directly in charge of those elements. Test results shall be documents with actual material and/or production samples.

2. Code Compliance: All work and material shall be in accordance with all applicable codes and standards and shall be acceptable to all authorities having jurisdiction.

Performance Requirements: Handrailing shall be engineered to withstand stresses induced by wind loads, live loads, dead loads, temperature, shrinkage, fabrication, handling and erection in accordance with applicable codes. Furnish engineer's certificate stating that handrailing design meets or exceeds requirements of Contract Documents.

Submittals: The typical detail drawings in this package are for design intent only. The Contractor is responsible for the proper engineering layout and installation of handrailing. The support structure, dimensions, and specifications for all items shall be indicated in the shop drawings. Designer will not provide electronic files of design intent drawings – it is intended that the Contractor/Fabricator produce original, CADD-generated shop drawings. Submittals shall include:

1. Shop drawings for all items including:

    a. Complete fabrication and installation drawings for each railing, indicate dimensions, materials, finishes, fastening, anchorage, expansion joints and adjacent related site conditions.

   b. Note applicable standards, such as ASTM and AASTHO other on drawings.
   c. Each railing required per the Contract Documents.

2. Engineer's signed and sealed shop drawings and calculations.
3. Product data for materials used.
   a. Submit only manufacturer’s standard drawings and catalog sheets, brochures, diagrams, schedules, charts, illustrations, test results, and other standard descriptive data pages. Mark-up each copy to clearly identify pertinent materials and products. Delete all non-applicable data.
4. Submit samples for verification showing a complete range of color, pattern, texture, and finishes for each material selected and compliance with requirements indicated.
5. Cleaning and Maintenance Data: Include procedures for operation and maintenance including stain/graffiti removal.
6. Warranties: Submit warranties from manufacturers, fabricators and installers.

Delivery, Storage, and Handling:

1. Inspect material upon receipt from the manufacturer. Reject any defective or damaged materials and replace with new.
2. Handle and store materials according to manufacturer's instructions.
3. Deliver elements to the project site in undamaged protective packaging labeled with specific contents.
4. Protect materials from damage on construction site and store in a safe, dry location.
5. Any material that becomes damaged during manufacture, shipping or while being stored shall be replaced at no additional cost to the Engineer.

Project Conditions: Contractor is responsible for verifying field measurements prior to the preparation of shop drawings and fabrication to ensure proper handrailing layout. Contractor is responsible for contacting and locating utilities to determine any potential conflicts with handrailing placement.

Material Requirements: Materials used for handrailing shall comply with the following.

1. General Material Requirements:
   a. Materials shall be new stock, free from defects impairing strength, durability and/or appearance. No fabrication or installation materials or procedures shall be used that will in any way change the usual quality or in any manner have an adverse effect on existing materials and surfaces.
   b. It is the responsibility of the Contractor to ensure that materials are handled and installed according to manufacturer's instructions.
   c. Substitute materials may be submitted, with the approval of the Engineer. No material substitution shall be made without written approval by the Engineer.

2. Metal Railing Components:

    a. Plates and Sheets: In accordance with 1006.34(c) of IDOT Standard Specifications.
    b. Tubular Steel Railing: In accordance with 1006.34(b) of IDOT Standard Specifications.

3. High Performance Coating: High performance powder coating recommended by railing manufacturer that is suitable for exterior commercial conditions. Lead and heavy metal free. Produces a slick, hard surface that resists dirt, pollutants, and abrasion. Withstands chipping, color-fade, gloss-loss and graffiti on exterior surfaces. Coating shall be resistant to negative effects from ultraviolet rays and salt exposure. Coating shall have the following characteristics:

    a. Color: Black
    b. Characteristics: Smooth Gloss Finish.
    c. Compatibility: Coating compatible with galvanized steel substrate.

4. Fasteners:

    e. Mechanical fasteners shall be concealed unless noted otherwise as part of the design look.
    f. Fasteners shall be corrosion-resistant and chemically compatible with adjacent materials.
    g. Any screw, bolt head or other mechanical fastener that cannot be concealed shall be countersunk whenever possible and colored to match the surrounding area.
    h. Exposed fasteners shall be tamper-resistant.

5. Anchors and Inserts: Provide non-ferrous or black oxide anchors and inserts for exterior installations and elsewhere required for corrosion resistance. Provide black oxide anchors and inserts. Exposed anchors shall be coated to match color and finish of adjacent railing material.

6. Manufacturer's Warranty: Five (5) years from date of substantial completion against defects in materials and workmanship, to be held by the City of East Moline.

Construction Requirements: Fabrication and installation of signage shall comply with the following.

1. Fabrication: Components shall be shop-fabricated and shop-assembled to extent possible. Responsibility for methods and techniques used to construct the work lies solely with the Contractor. Construction methods shall be employed that ensure that the installed product is structurally sound and weather-resistant.

2. Metal Assembly:

    a. Fabricate and shop-assemble in largest sections practical for delivery to site.
    b. Prepare and reinforce fabrications as necessary to receive applied items.
    c. Grind exposed edges. Give corners a radius of 1/8 inch. This includes edges created by routing or water jet cutting processes.
    d. Provide gasketing, insulation or other method necessary to prevent galvanic action between dissimilar materials if required.
    e. Joints: Joints are to fit tightly and securely. Joints to be ground to a clean, tight corner. Make exposed joints tight, flush and hairline.

3. Welding:
    a. Make welds clean, continuous and ground clean.
    b. Welding shall be accomplished so that permanent distortions of flat surfaces are minimized.
    c. Remove welding flux and oxides by grinding or pickling so that these areas match the finish of adjacent surfaces.
    d. Any damage caused by fabrication shall be repaired by grinding, polishing or buffing.
4. Water Protection:
    a. Cap open ends where required to keep out water and provide adequate drainage for water that does penetrate.
    b. Weep holes to be placed in tubular railing components to allow proper drainage.
5. Coatings and Finishing:
    a. General:
        i. Apply coatings to surfaces that are clean and properly prepared in accordance with Manufacturer's instructions to assure optimal coating, adhesion and intended finish appearance.
        ii. Use applicators and techniques best suited to the substrate and the type of material being applied.
        iii. Edges, corners, crevices, welds, exposed fasteners and other "irregular" surfaces shall receive a dry film thickness equivalent to that of "flat" surfaces.
        iv. It is the responsibility of the Contractor to ensure that the application of coatings are only under environmental conditions recommended by the coating Manufacturer. Ensure proper adhesion to avoid delamination.
        v. Apply coatings according to the drawings. Surfaces are to be coated, unless specifically noted.

    b. Touch-Up:
        i. Protect work against damage until coating is fully cured.
        ii. Shortly before substantial completion of the project, examine surfaces for damage to coatings and restore coatings to new, undamaged condition.
        iii. Touch-up of minor damage will be acceptable where the result is not visible from surrounding surfaces. Where result is different, as determined by the Engineer, either in color, sheen or texture, recoat entire surface.

    c. Metal Assemblies:
        i. Clean and prepare according to coating Manufacturer's recommendation for maximum adhesion.
        ii. Match color specifications set forth by the Designer and approved submitted samples for metal finishes.

6. Installation:

    a. General:
        i. Locate railings where indicated in plans, using anchoring methods of the type described and in compliance with the material manufacturers' instructions or as specified here in.
        ii. Install railing in correct location, plumb and level, without rack or warp, and at typical dimensions indicated on plans.
        iii. Fasteners: Use concealed fasteners fabricated from metals that are neither corrosive to the railing material nor to the mounting surface. Fasteners shall be concealed unless otherwise noted. If fasteners must be visible the Engineer shall be consulted before a decision regarding fastening is made. Exposed fasteners if required shall be coated to match color and finish of adjacent railing material.
    b. Protection: Test each element to ensure that it is securely mounted. Protect installed elements during construction period. Remove temporary protection when the work is ready to be turned over to the Engineer.

    c. Clean-up: Clean-up work area and remove debris resulting from work of this item.

Basis of Payment: This work will be paid for designing, fabricating, and installing at the contract unit price per Foot **PEDESTRIAN RAILING** shall include all materials, equipment, tools, labor, engineering, and work incidental thereto, and shall be considered to be completely covered by the contract.

DRINKING FOUNTAIN

Description: This work consists of providing all the labor, materials, and equipment necessary to furnish and install a freeze-resistant, outdoor drinking water fountain as specified per the plan details. Drinking fountain shall include a pet fountain, ADA compliant and standard height bubblers, and hands-free bottle filler.

All components as shown within the design plans, including by not limited to the new service line, drain lines, valves, connections, thrust blocks and fountain shall be included in the cost of the Drinking Fountain.

Submittals:

The Contractor shall provide shop drawings of the drinking fountain to the Engineer for review and approval.

<u>Material Requirements:</u>

Fountain

1. Outdoor drinking fountain shall have black colored powder coat finish.
2. Supply line and drain tube shall comply with the details in the plans.
3. All materials that come into contact with potable water shall comply with the requirements of NSF 61 and NSF 372.

Service Tap

1. A stainless steel tapping saddle shall be used for service connections to PVC watermains.
2. Corporation stop shall be brass, ball valve type manufactured in accordance with AWWA Standard C800. The main shall be tapped at an angle of 45 degrees with the vertical. The stop must be turned so that the t-handle will be on top.
3. Service saddle and corporation stop shall be the same size as the service line.
4. Miscellaneous service line fittings such as couplings, adapters, saddles, bends, plugs, service line electrical insulators, etc. shall conform to AWWA Standard C800.
5. Copper pipe shall be Type K, meeting the requirements of ASTM Standard B88.

Installation:

1. The Contractor shall verify the general location for fountain installation, valve box, water service tap connection and drain piping to dry well prior to fixture installation.
2. The Contractor shall verify the concrete pad and mounting requirements per Manufacturer requirements prior to installing concrete. Any adjustments necessary to meet these requirements shall not be paid for separately but shall be included in the cost of work under this provision.
3. Adjustments shall be made to the fixture flow regulators for proper flow and stream height.
4. After installation, the unit shall be inspected and cleaned to remove all spots, dirt and debris.
5. Protective covering shall be provided for installed fixture per manufacturer's recommendations.

Basis of Payment: This work shall be paid for at the contract unit price per Each for DRINKING FOUNTAIN.

STORM SEWERS, TYPE 2, WATER MAIN QUALITY PIPE, 12" TO 24"

Description: This work consists of constructing storm sewer to meet water main standards, as required by the IEPA or when otherwise specified. The work shall be performed in accordance with applicable parts of Section 550 of the Standard Specifications, applicable sections of the current edition of the IEPA Regulations (Title 35 of the Illinois Administrative Code, Subtitle F, Chapter II, Section 653.119), the applicable sections of the current edition of the "Standard Specifications for Water and Sewer Main Construction in Illinois", and as herein specified.

This provision shall govern the installation of all storm sewers which do not meet IEPA criteria for separation distance between storm sewers and water mains. Separation criteria for storm sewers placed adjacent to water mains and water service lines are as follows:

(1) Water mains and water service lines shall be located at least 10 feet (3.05 meters) horizontally from any existing or proposed drain, storm sewer, sanitary sewer, or sewer service connections.

(2) Water mains and water service lines may be located closer than 10 feet (3.05 meters) to a sewer line when:

(a) Local conditions prevent a lateral separation of 10 feet (3.05 meters); and

(b) The water main or water service invert is 18 inches (460 mm) above the crown of the sewer; and

(c) The water main or water service is either in a separate trench or in the same trench on an undisturbed earth shelf located to one side of the sewer.

(3) A water main or water service shall be separated from a sewer so that its invert is a minimum of 18 inches (460 mm) above the crown of the drain or sewer whenever water mains or services cross storm sewers, sanitary sewers or sewer service connections. The vertical separation shall be maintained for that portion of the water main or water services located within 10 feet (3.05 meters) horizontally of any sewer or drain crossed.

When it is impossible to meet (1), (2) or (3) above, the storm sewer shall be constructed of concrete pressure pipe, slip-on or mechanical joints ductile iron pipe, or PVC pipe equivalent to water main standards of construction. Construction shall extend on each side of the crossing until the perpendicular distance from the water main or water service to the sewer or drain line is at least 10 feet (3.05 meters). Storm sewer meeting water main requirements shall be constructed of the following pipe materials:

Concrete Pressure Pipe

Concrete pressure pipe shall conform to the latest ANSI/AWWA C300, C301, or C303.

Joints shall conform to Article 41-2.07B of the "Standard Specifications for Water and Sewer Main Construction in Illinois."

Ductile Iron Pipe

Ductile Iron pipe shall conform to ANSI A 21.51 (AWWA C151), class or thickness designed per ANSI A 2150 (AWWA C150), tar (seal) coated and/or cement lined per ANSI A 21.4 (AWWA C104), with a mechanical or rubber ring (slip seal or push on) joints.

Joints for ductile iron pipe shall be in accordance with the following applicable specifications.

1. Mechanical Joints - AWWA C111 and C600
2. Push-On Joints - AWWA C111 and C600

Plastic Pipe

Plastic pipe shall be marked with the manufacturer’s name (or trademark); ASTM or AWWA specification; Schedule Number, Dimension Ratio (DR) Number or Standard Dimension Ratio (SDR) Number; and Cell Class. The pipe and fittings shall also meet NSF Standard 14 and bear the NSF seal of approval. Fittings shall be compatible with the type of pipe used. The plastic pipe options shall be in accordance with the following:

1. Polyvinyl Chloride (PVC) conforming to ASTM Standard D 1785. Schedule 80 is the minimum required for all pipe sizes, except when the pipe is to be threaded, and then it shall be Schedule 120. It shall be made from PVC compound meeting ASTM D 1784, Class 12454C.

2. Polyvinyl Chloride (PVC) conforming to ASTM D 2241. A minimum wall thickness of SDR 26 is required for all pipe sizes (Note: The lower the SDR number, the higher the wall thickness and pressure rating). It shall be made from PVC compound meeting ASTM D 1784, Class 12454B.

3. Chlorinated Polyvinyl Chloride (CPVC) conforming to ASTM F 441. A minimum of Schedule 80 is required for all pipe sizes. Threaded joints are not allowed. It shall be made from CPVC compound meeting ASTM D 1784, Class 23447B.

4. Chlorinated Polyvinyl Chloride (CPVC) conforming to ASTM F 442M/F422M. A minimum wall thickness of SDR 26 is required for all pipe sizes (Note: The lower the SDR number, the higher the wall thickness and pressure rating). It shall be made from CPVC compound meeting ASTM D 1784.

5. Polyvinyl Chloride (PVC) conforming to ANSI/AWWA C900. A minimum of wall thickness of DR 25 is required for all pipe sizes (Note: The lower the DR number, the higher the wall thickness and pressure rating). It shall be made from PVC compound meeting ASTM D 1784, Class 12454.

6. Polyvinyl Chloride (PVC) conforming to ANSI/AWWA C905. A minimum of wall thickness of DR 26 is required for all pipe sizes (Note: The lower the DR number, the higher the wall thickness and pressure rating). It shall be made from PVC compound meeting ASTM D 1784, Class 12454.

Joining of plastic pipe shall be by push-on joint, solvent welded joint, heat welded joint, flanged joint, or threaded joint, butt fused or electro fused, in accordance with the pipe manufacturer's instructions and industry standards. Special precautions shall be taken to insure clean, dry contact surfaces when making solvent or heat welded joints. Adequate setting time shall be allowed for maximum strength.

Elastometric seals (gaskets) used for push-on joints shall comply with ASTM F477.

Solvent cement shall be specific for the plastic pipe material and shall comply with ASTM D 2564 (PVC) or ASTM F 493 (CPVC) and be approved by NSF.

Basis of Payment: This work will be measured and paid for at the contract unit price per Foot for STORM SEWER, TYPE 2, WATER MAIN QUALITY PIPE of the diameter and type specified.

Illinois Department of Transportation

Storm Water Pollution Prevention Plan

Route	Marked Route	Section Number
FAU 5757	15th Avenue	22-00159-01-PV
Project Number	**County**	**Contract Number**
A-92-003-23	Rock Island	85774

This plan has been prepared to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit No. ILR10 (Permit ILR10), issued by the Illinois Environmental Protection Agency (IEPA) for storm water discharges from construction site activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Permittee Signature & Date

Tim Kammler Digitally signed by Tim Kammler
Date: 2025.02.28 09:32:22 -06'00'

SWPPP Notes

Preparing BDE 2342 (Storm Water Pollution Prevent Plan)

Guidance on preparing each section of BDE 2342 (Storm Water Pollution Prevention Plan) is found in Chapter 41 of the IDOT Bureau of Design and Environment (BDE) Manual, please consult this chapter during SWPPP preparation Please note that the Illinois Environmental Protection Agency (IEPA) has 30 days to review the Notice of Intent (NOI) prior to project approval and any deficiencies can result in construction delays.

The Notice of Intent contains the following documents:

- BDE 2342 (Storm Water Pollution Prevention Plan)
- BDE 2342 A (Contractor Certification Statement)
- Erosion and Sediment Control Plan (See Section 63-4.09 of the BDE Manual)

Non-applicable information
If any section of the SWPPP is not applicable put “N/A” in box rather than leaving blank.

National Pollutant Discharge Elimination System (NPDES) Compliance

Description of Work: This work shall consist of those efforts necessary for compliance with the requirements of the Clean Water Act, Section 402 (NPDES), and the Illinois Environment Protection Act. This provision also provides the background information needed to comply with ILR10 and ILR40 permits for this project.

NPDES COMPLIANCE REQUIREMENTS

Part I: Site Description

1. Describe the project location; include latitude and longitude, section, town, and range.

The project location is along 15th Avenue in East Moline, Illinois from 6th Street to 13th Street.
Section 25, Township 18N, Range 1W, 4th Principal Meridian
Latitude = 41.51579 Longitude = -90.44502

2. Describe the nature of the construction activity or demolition work.

The proposed improvements consist of reconstruction with new pavement including underdrains, curb and gutters, and storm drainage. It was also include new parking spaces using permeable pavers. Improvements also include landscaped areas for infiltration and ADA compliant parking spaces and crosswalks.

3. Describe the intended sequence of major activities which disturb soils for major portions of the site (e.g. clearing, grubbing, excavation, grading, on-site or off-site stockpiling of soils, on-site or off-site storage of materials).

The project will be staged for construction one city block at a time to minimize disturbance to non-impacted blocks. Soil disturbing activities will include the removal and replacement of pavement, curb and gutter, sidewalk, and storm sewers. Proposed landscaping areas will also be constructed. Pavement slopes are relatively flat, longitudinally not exceeding 1.5% with sidewalk/landscape cross slopes in general at 6.0% or less. Areas to be re-vegetated with sodding are flat with slopes of 2% or less.

4. The total area of the construction site is estimated to be 7.8 acres.

5. The total area of the site estimated to be disturbed by excavation, grading or other activities is 7.6 acres.

6. Determine an estimate of the runoff coefficient of the site after construction activities are completed.

After construction = 0.82

7. Provide the existing information describing the potential erosivity of the soil at discharge locations at the project site.

No bare soils are present within the project and minimal existing vegetative areas. Construction activity will expose soils, but existing slopes within the project area flat and not susceptible to erosion.

8. Erosion and Sediment Control Plan (Graphic Plan) is included in the contract. ☒ Yes ☐ No

9. List all soils found within project boundaries; include map until name, slope information, and erosivity.

Orthents, loamy, undulating (802B) - slope of 1 to 7 percent - uneroded (100% of the project area)

10. List of all MS4 permittees in the area of this project

City of East Moline

Note: For sites discharging to an MS4, a separate map identifying the location of the construction site and the location where the MS4 discharges to surface water must be included.

Part II: Waters of the US

1. List the nearest named receiving water(s) and ultimate receiving waters.

Runoff from the 15th Avenue project area drains to East Moline's storm sewer system and will ultimately flow to the Mississippi River. The Mississippi River is not listed as Biologically Significant Stream by IDNR.

2. Are wetlands present in the project area? ☐ Yes ☒ No

If yes, describe the areal extent of the wetland acreage at the site.

N/A

3. Natural buffers:

For any storm water discharges from construction activities within 50 feet of a Waters of the United States, except for activities for water-dependent structures authorized by a Section 404 permit, the following shall apply:

(i) A 50-foot undisturbed natural buffer between the construction activity and the Waters of the United States has been provided

☐ Yes ☐ No; and/or

(ii) Additional erosion and sediment controls within that area has been provided

☐ Yes ☐ No; and Describe: N/A

Part III. Water Quality

1. Water Quality Standards

As determined by the Illinois Pollution Control Board, Illinois waters have defined numeric limits of pollutants under the umbrella term "Water Quality Standards." In the following table are commonly used chemicals/practices used on a construction site. These chemicals if spilled into a waterway, could potentially contribute to a violation of a Water Quality Standard. If other chemicals that could contribute a violation of a Water Quality Standard, add as needed.

☒ Fertilizer (check as appropriate)
- ☒ Nitrogen
- ☒ Phosphorus, and/or
- ☒ Potassium

☐ Herbicide

☒ Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids)

☒ Waste water for concrete washout station

☐ Coal tar Pitch Emulsion

☐ Other (Specify) _____

☐ Other (Specify) _____

Table 1: Common chemicals/potential pollutants used during construction

If no boxes are checked in Table 1 above, check the following box:

☐ There are no chemicals on site that will exceed a Water Quality Standards if spilled.

If any boxes are checked in Table 1 above, check the following box:

☒ There are chemicals on site that if spilled could potentially cause an exceedance of a Water Quality Standard. The Department shall implement Pollution Prevention/Good Housekeeping Practices as described in the Department's ILR40 Discharge for Small Municipal Separate Storm Sewer Systems (MS4) reiterated below and Part VIII. Unexpected Regulated Substances/Chemical Spill Procedures:

Pollution Prevention:

The Department will design, and the contractor shall, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants from construction activities. At a minimum, such measures must be designed, installed, implemented and maintained to:

(a) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge.

(b) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, chemical storage tanks, deicing material storage facilities and temporary stockpiles, detergents, sanitary waste, and other materials present on the site exposed to precipitation and to storm water.

(c) Minimize the discharge of pollutants from spills, leaks and vehicle and equipment maintenance and repair activities and implement chemical spill and leak prevention and response procedures;

(d) Minimize the exposure of fuel, oil, hydraulic fluids, other petroleum products, and other chemicals by storing in covered areas or containment areas. Any chemical container with a storage of 55 gallons or more must be stored a minimum of 50 feet from receiving waters, constructed or natural site drainage features, and storm drain inlets. If infeasible due to site constraints, store containers as far away as the site permits and document in your SWPPP the specific reasons why the 50-foot setback is infeasible and how the containers will be stored.

(e) The contractor is to provide regular inspection of their construction activities and Best Management Practices (BMPs). Based on inspection findings, the contractor shall determine if repair, replacement, or maintenance measures are necessary in order to ensure the structural integrity, proper function, and treatment effectiveness of structural storm water BMPs. Necessary maintenance shall be completed as soon as conditions allow to prevent or reduce the discharge of pollutants to storm water or as ordered by the Engineer. The Engineer shall conduct inspections required in Section XI Inspections, and report to the contractor deficiencies noted. These Department conducted inspections do not relieve the contractor from their responsibility to inspect their operations and perform timely maintenance; and

(f) In addition, all IDOT projects are screened for Regulated Substances as described in Section 27-3 of the BDE Manual and implemented via Section 669: Removal and Disposal of Regulated substances in the Standard Specifications for Road and Bridge Construction.

Approved alterations to the Department's provided SWPPP, including those necessary to protect Contractor Borrow, Use and Waste areas, shall be designed, installed, implemented and maintained by the Contractor in accordance with IDOT Standard Specifications Section 280.

2. 303(d) Impaired Waterways

Does the project area have any 303(d) impaired waterways with the following impairments?

- suspended solids
- turbidity, and or
- siltation

☐ Yes ☒ No

If yes, list the name(s) of the listed water body and the impairment(s)

303(d) waterbody	Impairments(s)
N/A	

In addition, It is paramount that the project does not increase the level of the impairment(s) described above. Discuss which BMPs will be implemented to reduce the risk of impairment increase

N/A

3. Total Maximum Daily Load (TMDL)

Does the project include any receiving waters with a TMDL for sediment, total suspended solids, turbidity or siltation? ☐ Yes ☒ No

If yes, List TMDL waterbodies below and describe associated TMDL

TMDL waterbody	TMDL

TMDL waterbody	TMDL
N/A	

Provide a description of the erosion and sediment control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL

N/A

If a specific numeric waste load allocation has been established that would apply to the project's discharges, provide a description of the necessary steps to meet that allocation

N/A

Part IV. Temporary Erosion and Sediment Controls

Stabilization efforts must be initiated within 1 working day of cessation of construction activity and completed within 14 days. Areas must be stabilized if they will not be disturbed for at least 14 calendar days. Exceptions to this time frame include:

(i) Where the initiation of stabilization measures is precluded by snow cover, stabilization measures must be initiated as soon as practicable,

(ii) On areas where construction activities have temporarily ceased and will resume after 14 days, a temporary stabilization method can be used (temporary stabilization techniques must be described), and

(iii) Stabilization is not required for exit points at linear utility construction site that are used only episodically and for very short durations over the life of the project, provided other exit point controls are implemented to minimize sediment track-out.

Additionally, a record must be kept with the SWPPP throughout construction of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated.

At a minimum, controls must be coordinated, installed and maintained to:

1. Minimize the amount of soil exposed during construction activity.
2. Minimize the disturbance of steep slopes.
3. Maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible.
4. Minimize soil compaction and, unless infeasible, preserve topsoil.

Note: For practices below, consult relevant design criteria in Chapter 41 of the BDE Manual and maintenance criteria in Erosion and Sediment Control Field Guide for Construction.

1. Erosion Control:

The following are erosion control practices which may be used on a project (place a check by each practice that will be utilized on the project, add additional practices as needed):

- ☐ Mulch
- ☐ Erosion Control Blanket
- ☐ Turf Reinforcement Mat
- ☒ Sodding
- ☒ Geotextile fabric
- ☐ Preservation of existing vegetation
- ☐ Temporary Turf Cover Mixture (Class 7)
- ☐ Permanent seeding (Class 1-6)
- ☒ Other (Specify) Landscaped Areas with Mulching
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____

2. Sediment Control:

The following sediment control devices will be implemented on this project:

- ☐ Ditch Checks
- ☒ Inlet and Pipe protection
- ☐ Hay or Straw bales
- ☐ Perimeter Erosion Barrier
- ☐ Rolled Excelsior
- ☐ Silt Filter Fence

- ☐ Above grade inlet filters (fitted)
- ☐ Above grade inlet filters (non-fitted)
- ☐ Inlet filters
- ☐ Urethane foam/geotextiles
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____

3. Structural Practices:

Provide below is a description of structural practices that will be implemented:

- ☐ Aggregate Ditch
- ☐ Articulated Block Revetment Mat
- ☐ Barrier (Permanent)
- ☐ Concrete Revetment Mats
- ☐ Dewatering Filtering
- ☐ Gabions
- ☐ In-Stream or Wetland Work
- ☐ Level Spreaders
- ☐ Paved Ditch
- ☐ Permanent Check Dams
- ☐ Precast Block Revetment Mat
- ☐ Rock Outlet Protection
- ☐ Stabilized Construction Exits
- ☐ Stabilized Trench Flow
- ☐ Sediment Basin
- ☐ Retaining Walls
- ☐ Riprap
- ☒ Strom Drain Inlet Protection
- ☐ Slope Walls
- ☐ Sediment Trap
- ☒ Other (Specify) Underdrains
- ☒ Other (Specify) Permeable Pavement
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____

4. Polymer Flocculants

Design guidance for polymer flocculants is available in Chapter 41 of the BDE Manual. In addition, Polymer Flocculants may only be used by district Special Provision.

If polymer flocculants are used for this project, the following must be adhered to and described below:

- Identify the use of all polymer flocculants at the site.
- Dosage of treatment chemicals shall be identified along with any information from any Material Safety Data Sheet.
- Describe the location of all storage areas for chemicals.
- Include any information from the manufacturer's specifications.
- Treatment chemicals must be stored in areas where they will not be exposed to precipitation.
- The SWPPP must describe procedures for use of treatment chemicals and staff responsible for use/application of treatment chemicals must be trained on the established procedures.

N/A

Part V. Other Conditions

1. Dewatering

Will dewatering be required for this project? ☐ Yes ☒ No

If yes, the following applies:

- Dewatering discharges shall be routed through a sediment control (e.g., sediment trap or basin, pumped water filter bag) designed to minimize discharges with visual turbidity;
- The discharge shall not include visible floating solids or foam;
- The discharge must not cause the formation of a visible sheen on the water surface, or visible oily deposits on the bottom or shoreline of the receiving water. An oil-water separator or suitable filtration device shall be used to treat oil, grease, or other similar products if dewatering water is found to or expected to contain these materials;
- To the extent feasible, use well-vegetated (e.g., grassy or wooded), upland areas of the site to Infiltrate dewatering water before discharge;
- You are prohibited from using receiving waters as part of the treatment area;
- To minimize dewatering-related erosion and related sediment discharges. use stable. erosion-resistant surfaces (e.g., well-vegetated grassy areas, clean filler stone, geotextile underlayment) to discharge from dewatering controls. Do not place dewatering controls, such as pumped water filter bags, on steep slopes (15% or greater in grade);
- Backwash water (water used to backwash/clean any filters used as part of storm water treatment) must be properly treated or hauled off- site for disposal;
- Dewatering treatment devices shall be properly maintained; and
- See Part XI (Inspections) for inspection requirement.

Part VI. Permanent (i.e., Post-Construction) Storm Water Management Controls

Provided below is a description of measures that may be installed during the construction process to control volume and therefore the amount pollutants in storm water runoff that can occur after construction operations have been completed.

Practices may include but are not limited to the following:

- Aggregate ditch checks;
- bioswales,
- detention pond(s),
- infiltration trench;
- retention pond(s),
- open vegetated swales and natural depressions,
- treatment train (sequential system which combine several practices).
- Velocity dissipation devices (See Structural Practices above)

Describe these practices below

The proposed permeable concrete pavers are designed to reduce runoff that drains to the existing sewer system. Perforated underdrains in aggregate trenches are an integrated part of the new storm sewer system along 15th Avenue and will promote infiltration to reduce runoff volumes and velocities. Vegetated areas with trees, plantings and sodding will reduce runoff velocities. Some of the landscaped areas are designed for bioretention and infiltration of street and sidewalk stormwater runoff.

Part VII. Additional Practices Incorporated From Local Ordinance(s)

In some instances, an additional practice from a local ordinance may be included in the project. If so, describe below (Note: the Department is not subject to local ordinances)

N/A

Part VIII. Unexpected Regulated Substances/Chemical Spill Procedures

When Unexpected Regulated Substances or chemical spills occur, Article 107.19 of the Standard Specifications for Road and Bridge Construction shall apply. In addition, it is the contractor's responsibility to notify the Engineer in the event of a chemical spill into a ditch or waterway, the Engineer will then notify appropriate IEPA and IEMA personnel for the appropriate cleanup procedures.

Part IX. Contractor Required Submittals

Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342A.

1. The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:

- Approximate duration of the project, including each stage of the project
- Rainy season, dry season, and winter shutdown dates
- Temporary stabilization measures to be employed by contract phases
- Mobilization time-frame
- Mass clearing and grubbing/roadside clearing dates
- Deployment of Erosion Control Practices
- Deployment of Sediment Control Practices (including stabilized construction entrances and exits to be used and how they will be maintained)
- Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
- Paving, saw-cutting, and any other pavement related operations
- Major planned stockpiling operation
- Time frame for other significant long-term operations or activities that may plan non-storm water discharges as dewatering, grinding, etc.
- Permanent stabilization activities for each area of the project

2. During the pre-construction meeting, the Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:

- Temporary Ditch Checks - Identify what type and the source of Temporary Ditch Checks that will be installed as part of the project. The installation details will then be included with the SWPPP.
- Vehicle Entrances and Exits - Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
- Material Delivery, Storage and Use- Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project. Specifically, any chemical stored in a 55 gallon drum provided by the contractor.
- Stockpile Management - Identify the location of both on-site and off-site stockpiles. Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
- Waste Disposal - Discuss methods of waste disposal that will be used for this project.
- Spill Prevention and Control - Discuss steps that will be taken in the event of a material spill.
- Concrete Residuals and Washout Wastes - Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
- Litter Management - Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
- Vehicle and Equipment Fueling - Identify equipment fueling locations for this project and what BMPs will be used to ensure

containment and spill prevention.

- Vehicle and Equipment Cleaning and Maintenance - Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
- Dewatering Activities - Identify the controls which will be used during dewatering operations to ensure sediments will not leave the construction site.

Additional measures indicated in the plan

Concrete truck washouts and BMPs shall be provided and maintained by the Contractor. No concrete truck washout will be allowed to occur into any storm water conveyances.

Part X. Maintenance

It will be the Contractor's responsibility to attain maintenance guidelines for any manufactured BMPs which are to be installed and maintained per manufacture's specifications. However, when requested by the Contractor, the Resident Engineer will provide general maintenance guides (e.g., IDOT Erosion and Sediment Control Field Guide) to the Contractor for the practices associated with this project. Any damage or undermining shall be repaired immediately.

For Inlet Protection: Where there is evidence of sediment accumulation adjacent to the inlet protection measure, the deposited sediment must be removed by the following business day.

Below, describe procedures to maintain in good and effective operating conditions

Inlet and Pipe Protection: the frequency of inlet filter/barrier inspections shall be as described above. Inlet filters/ barriers shall be cleaned in accordance with the manufacturer specifications to remove and dispose of collected sediments and debris. If protective measures cannot be cleaned to the satisfaction of the Engineer or are damaged, they shall be replaced by the Contractor.

Part XI. Inspections

Qualified personnel shall inspect disturbed areas of the construction site that have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site at least once every seven calendar days and within 24 hours of the end of a storm or by the end of the following business or workday that is 0.50 inches or greater or equivalent snowmelt (except as allowed for Frozen Conditions).

In addition, all areas where storm water typically flows within the site should be inspected periodically to check for evidence of pollutants entering the drainage system, as well as all locations where stabilization measures have been implemented to ensure they are operating correctly.

Inspections shall be documented on the form BC 2259 (Storm Water Pollution Prevention Plan Erosion Control Inspection Report).

The Erosion and Sediment Control Field Guide for Construction Inspection shall be consulted as needed.

Dewatering

For site(s) discharging dewatering water, an inspection during the discharge shall be done once per day on which the discharge occurs and record the following in a report within 24 hours of completing the Inspection:

- The inspection date;
- Names and titles of personnel performing the inspection;
- Approximate times that the dewatering discharge began and ended on the day of inspection;
- Estimates of the rate (in gallons per day) of discharge on the day of inspection;
- Whether or not any of the following indications of pollutant discharge were observed at the point of discharge: a sediment plume, suspended solids. unusual color, presence of odor, decreased clarity, or presence of foam; and/or a visible sheen on the water surface or visible oily deposits on the bottom or shoreline of the receiving water.

Frozen Conditions

Inspections may be reduced to once per month when all construction activities have ceased due to frozen conditions. Weekly inspections will recommence when construction activities resume, either temporarily or continuously, or if there is 0.5” or greater rain event, or a

discharge due to snowmelt occurs.

Flooding or unsafe conditions

Areas that are inaccessible during required inspections due to flooding or other unsafe conditions must be inspected within 72 hours of becoming accessible.

Part XII. Incidence of Noncompliance (ION)

The Department shall notify the appropriate Agency Field Operations Section office by email as described on the IEPA ION form, within 24 hours of any incidence of noncompliance for any violation of the storm water pollution prevention plan observed during any inspection conducted, or for violations of any condition of this permit.

The Department shall complete and submit within 5 days an "Incidence of Noncompliance" (ION) report for any violation of the storm water pollution prevention plan observed during any Inspection conducted, or for violations of any condition of this permit. Submission shall be on forms provided by the IEPA and include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. Corrective actions must be undertaken immediately to address the identified non-compliance issue(s}.

Illinois EPA
2520 W. Iles Ave./P.O. Box 19276
Springfield, IL 62794-9276

Please note that if these are delivered via FedEx or UPS, these carriers cannot deliver to our P.O. Box and this number must be excluded from the mailing address.

Part XIII. Corrective Actions

Corrective actions must be taken when:

- A storm water control needs repair or replacement;
- A storm water control necessary to comply with the requirements of this permit was never installed, or was installed incorrectly;
- Discharges are causing an exceedance of applicable water quality standards; or
- A prohibited discharge has occurred.

Corrective Actions must be completed as soon as possible and documented within 7 days in an Inspection Report or report of noncompliance. If it is infeasible to complete the installation or repair within 7 calendar days, it must be documented in the records why it is infeasible to complete the installation or repair within the 7 day time-frame and document the schedule for installing the storm water control(s) and making it operational as soon as feasible after the 7-day time-frame.. In the event that maintenance is required for the same storm water control at the same location three or more times, the control must be repaired in a manner that prevents continued failure to the extent feasible, and it must be documented the condition and how it was repaired in the records. Alternatively, it must be documented why the specific re-occurrence of this same issue must continue to be addressed as a routine maintenance fix.

Part XIV. Retention of Records

The Department must retain copies of the SWPPP and all reports and notices required by this permit, records of all data used to complete the NOI to be covered by this permit, and the Agency Notice of Permit Coverage letter for at least three years from the date that the permit coverage expires or is terminated. the permittee must retain a copy of the SWPPP and any revisions to the SWPPP required by this permit at the construction site from the date of project initiation to the date of final stabilization. Any manuals or other documents referenced in the SWPPP must also be retained at the construction site.

Part XV. Failure to Comply

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of a National Pollutant Discharge Elimination System/Erosion and Sediment Control Deficiency Deduction against the Contractor and/or penalties under the Permit ILR10 which could be passed on to the contractor (See Article 105.03 Conformity with Contract)

Part XVI. Keeping the SWPPP ("plan") Current

IDOT shall amend the plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to Waters of the United States and which has not otherwise been addressed in the plan or if the plan proves to be ineffective in eliminating or significantly minimizing sediment and/or pollutants identified under paragraph Part II. Water Quality or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with construction site activity.

In addition, the plan shall be amended to identify any new contractor and/or subcontractor that will implement a measure of the plan. Amendments to the plan may be reviewed by the IEPA the same manner as the SWPPP and Erosion and Sediment Control Plan (ESCP) submitted as part of the Notice of Intent (NOI). The SWPPP and site map must be modified within 7 days for any changes to construction plans, storm water controls or other activities at the site that are no longer accurately reflected in the SWPPP.

In addition, the NOI shall be modified using the CDX system for any substantial modifications to the project such as:

- address changes
- new contractors
- area coverage
- additional discharges to Waters of the United States, or
- other substantial modifications (e.g. addition of dewatering activities.

The notice of intent shall be modified within 30 days of the modification to the project.

Part XVII: Notifications

In addition to the NOI submitted to IEPA, all MS4 permittees identified in Part I. Site Description shall receive a copy of the NOI.

Part XVIII. Notice of Termination

Where a site has completed final stabilization and all storm water discharges from construction activities that are authorized by this permit are eliminated, the permittee must submit a completed Notice of Termination (NOT) that is signed in accordance with ILR10 permit.

Method of Measurement: NPDES Compliance shall not be measured for payment separately. Measurement for payment for Temporary Erosion and Sediment Control shall be in accordance with Section 280 or as otherwise provided in the contract. Permanent BMPs necessary to comply with this provision shall be measured for payment in accordance with their respective provisions in the contract.

Basis of Payment: NPDES Compliance shall not be paid for separately. Payment for Temporary Erosion and Sediment Control shall be in accordance with Section 280 or as otherwise provided in the contract. Permanent BMPs necessary to comply with this provision shall be paid for in accordance with their respective payment provisions in the contract.

Illinois Department of Transportation

Contractor Certification Statement

Print Form | Reset Form

Prior to conducting any professional services at the site covered by this contract, the Contractor and every subcontractor must complete and return to the Resident Engineer the following certification. A separate certification must be submitted by each firm. Attach to this certification all items required by Part IX. Contractor Required Submittals of the Storm Water Pollution Prevention Plan (SWPPP) which will be handled by the Contractor/subcontractor completing this form.

Route	Marked Route	Section Number
FAU 5757	15th Avenue	22-00159-01-PV
Project Number	**County**	**Contract Number**
A-92-003-23	Rock Island	85774

This certification statement is a part of SWPPP for the project described above, in accordance with the General NPDES Permit No. ILR10 issued by the Illinois Environmental Protection Agency.

I certify under penalty of law that I understand the terms of the Permit No. ILR 10 that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

Additionally, I have read and understand all of the information and requirements stated in SWPPP for the above mentioned project; I have received copies of all appropriate maintenance procedures; and, I have provided all documentation required to be in compliance with the Permit ILR10 and SWPPP and will provide timely updates to these documents as necessary.

☐ Contractor
☐ Sub-Contractor

Signature	Date

Print Name	Title

Name of Firm	Phone

Street Address	City	State	Zip Code

Items which this Contractor/subcontractor will be responsible for as required in Section II.G. of SWPPP

State of Illinois
Department of Transportation
Bureau of Local Roads and Streets

SPECIAL PROVISION FOR INSURANCE

Effective: February 1, 2007
Revised: August 1, 2007

All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

The Contractor shall name the following entities as additional insured under the Contractor's general liability insurance policy in accordance with Article 107.27:

City of East Moline

The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.

State of Illinois
Department of Transportation
Bureau of Local Roads and Streets

SPECIAL PROVISION FOR CONSTRUCTION AND MAINTENANCE SIGNS

Effective: January 1, 2004
Revised: June 1, 2007

All references to Sections or Articles in this specification shall be construed to mean a specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

701.14. Signs. Add the following paragraph to Article 701.14:

All warning signs shall have minimum dimensions of 1200 mm x 1200 mm (48" x 48") and have a black legend on a fluorescent orange reflectorized background, meeting, as a minimum, Type AP reflectivity requirements of Table 1091-2 in Article 1091.02.

SPECIAL PROVISIONS FOR PROTECTION OF BNSF RAILWAY COMPANY INTEREST

To Report an Emergency on the railroad call: (800) 832-5452
15th Avenue and 7th Street Intersection Improvements of BNSF Barstow-Rock Island Subdivision at Crossing 605937E

1.0 Authority of Railroad Engineer and City of East Moline's Representative.

1.1 The authorized representative of BNSF Railway Company, herein called "Railroad Engineer", shall have final authority in all matters affecting the safe maintenance and operation of railroad traffic including the adequacy of the foundations and structures supporting the railroad tracks.

1.2 The authorized representative of the City East Moline, herein called "Engineer", shall have authority over all other matters as prescribed herein and in the project specifications.

1.3 The Contractor must adhere to all other BNSF Railway policies and procedures not specifically mentioned in these special provisions. These can be found at http://www.bnsf.com/in-the-community/public-projects/index.page.

2.0 Contractor's indemnity Obligations to the Railroad.

2.1 The term "contractor" as used in this special provision includes any and all subcontractors. The contractor shall indemnify, defend and hold harmless the Railroad from and against any and all loss, damage, claims, demands, causes of action, costs and expenses of whatsoever nature arising out of injury to or death of persons whomsoever, or out of damage to or destruction of property whatsoever, including, without limitation, damage to fiber optic, communication and other cable lines and systems, where such injury, death, damage or destruction results from any cause arising out of work performed by the contractor pursuant to the agreement between Railroad and the City for the project, and shall also release the Railroad from and shall waive any claims for injury or damage to equipment or other property, which may result from the construction, maintenance and operation of railroad tracks, wire lines, fiber optic cable, pipe lines and other facilities on said right of way of the Railroad by the contractor. **THE LIABILITY ASSUMED BY THE CONTRACTOR WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE DAMAGE, DESTRUCTION, INJURY, DEATH, CAUSE OF ACTION OR CLAIM WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF THE RAILROAD, THE RAILROAD'S AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROVEN BY ANY CLAIMANT TO HAVE BEEN PROXIMATELY CAUSED BY THE INTENTIONAL MISCONDUCT OR SOLE OR GROSS NEGLIGENCE OF THE RAILROAD.** The contractor's indemnity shall include loss of profits or revenue arising from damage or destruction to fiber optic, communication and other cable lines and systems.

2.2 In addition to the indemnity obligations contained in the preceding paragraph, the contractor shall indemnify, defend and hold harmless the Railroad from any claims, expenses, costs, actions, demands, losses, fines, penalties, and fees, of whatsoever nature arising from, related to or connected, in whole or in part, with the following:

(a) The removal of the contractor's agents, servants, employees or invitees from the Railroad's property for safety reasons.

(b) Contractor's compliance or failure to comply with the provision of applicable law in connection with the performance of contractor's work.

3.0 Notice of Starting Work.

3.1 The contractor shall not commence any work on Railroad's right of way until the contractor has complied with the following conditions:

(a) At least 30 days in advance of the date the contractor proposes to begin work on Railroad's right of way, the contractor shall give the Railroad written notice to the address below with copy to the Engineer who has been designated to be in charge of the work.

Mr. Jake Rzewnicki
Manager of Public Projects
BNSF Railway
4515 Kansas Ave. Building 4B, 3rd Floor
Kansas City, KS 66106
913-551-4257
Jacob.Rzewnicki@BNSF.com

(b) Obtain written or electronic authorization from the Railroad to begin work on the Railroad's right of way, such authorization to include an outline of specific conditions with which contractor shall comply.

(c) Obtain the insurance coverage required in Section 14.0 of this job special provision. Contractor shall submit written evidence of such coverage to Railroad prior to commencing any work.

(d) Prior to performing any work on Railroad's property, right –of way or in an area that may impact Railroad's operations, the contractor's employees, representatives or agents who are regularly assigned to perform work on the project shall complete the safety orientation training available on the internet at www.contractororientation.com, hereinafter called, "Internet Safety Orientation". If the contractor's employee, representative or agent is not regularly assigned to perform work on the project, hereinafter called "Flexible Worker(s)", the contractor shall ensure that any Flexible Worker receives appropriate safety training prior to performing any work on the Railroad's property, right –of way or in an area that may impact the Railroad's operations. The content of safety training for Flexible Workers shall include the information covered in the Internet Safety Orientation. The approximate cost of the Internet Safety Orientation is $11 per person, subject to annual escalation.

3.2 The Railroad's written authorization to proceed with the work, with a copy to the Engineer, will include the names, addresses and telephone numbers of the Railroad's representatives who are to be notified as hereinafter required. Where more than one representative is designated, the area of responsibility of each representative shall be specified.

4.0 Submittals and Actions Required During Construction Phase:

4.1 The Engineer shall be the main contact for BNSF throughout the project. Engineer shall be included on all correspondence relating to BNSF. **BNSF will NOT accept submittals directly from the Agency's Contractor.**

4.2 BNSF will hire a consultant team to perform the duties of an Inspector/Coordinator, (I/C) on behalf of BNSF for the duration of the field construction of the project. The cost of the I/C will be reimbursable to BNSF by the Contractor.

BNSF requires the I/C team be involved in the project throughout the construction phase to represent BNSF.

The I/C has authority to remove a contractor's employee from BNSF property if that employee fails to comply with the BNSF safety policy, does not have proper PPE or otherwise ignores instructions regarding work on BNSF right-of-way. The I/C has authority to shut down work on BNSF right-of-way if the contractor works in a manner that is in violation of BNSF's safety policy or FRA regulations. Anytime instructions to the contractor by BNSF or the I/C are not complied with, the project may be shut down. All equipment and personnel will be removed from BNSF property until issues causing the shutdown are resolved to BNSF's satisfaction.

4.3 Engineer must hold a pre-construction meeting with contractor and BNSF prior to work beginning on BNSF property.

The Pre-Construction meeting shall not be held until 30 days after I/C has been selected – this allows time for the I/C to become familiar with the project.

Recommend scheduling two weeks prior to construction commencing to allow for adjustment to work plans, if needed.

4.4 Required Construction Submittals: (Allow for 4 weeks for BNSF to review submittals)

All submittals should flow from the Contractor to the Agency, to the I/C Consultant, to the BNSF Project Engineer, (PE), and to BNSF Structures with responses back through the same communication chain. **BNSF will not accept submittals directly from the Contractor.**

Any changes to the work governed by a submittal requires that the submittal be re-accepted by BNSF before the work commences.

Examples of construction submittals required include but are not limited to:
Contractors Safety Action Plan, Fire Prevention Plan, Proposed Project Schedule, Demolition, Shoring, Falsework and Lifting of Materials.

The following submittals will require a Professional Engineer, (PE) stamp: Critical Pick Plan (75% of capacity of crane, or multi-crane pick)
Lifted Material Plan (Placement or Removal) – When lift is within temporary construction clearances and when lift is within 25’ of the centerline of the nearest track
Demolition Plan Temporary Shoring Plan
Bracing Design Plan (non-standard only per DOT)

For overpasses, Agency shall submit as-built plans of the structure, including final clearance dimensions to the I/C. Vertical clearance must be measured from the Top of Rail, horizontal clearance must be measured from the nearest track centerline.

OPERATIONALLY CRITICAL WORK AND SUBMITTALS: (4 to 6 weeks review timeline) All OC work requires a submittal and acceptance by BNSF.

Operationally Critical (OC) submittals are those that have the potential to affect the safe operation of trains and will need to be reviewed carefully. Work must be monitored to ensure it conforms to the submitted/accepted plan.

In-person safety review meetings will be required with BNSF representative, I/C, Contractor and Agency representative for all OC work and must be documented. The purpose of the meeting is to ensure all parties understand BNSF requirements and are following the applicable submittals. When a track work window is required the meeting shall occur at least 48 hours in advance of work starting.
Submittals must meet the requirements of the UP Railroad - BNSF Railway Guidelines for Railroad Grade Separation Projects. Submittals must also follow the requirements outlined in BNSF Review Comment Sheets, Use of Cranes & Lifting of Materials Submittal Schedule, BNSF Guidelines for Preparation of Bridge Demolition & Removal Plan and the BNSF-UPRR Guidelines for Temporary Shoring. Some submittals are required to be sealed by a licensed professional engineer.

a. See Table 3-1 for Overhead Structures in UP Railroad - BNSF Railway Guidelines for Railroad Grade Separation Projects
b. See Table 3-2 for Underpass Structures UP Railroad - BNSF Railway Guidelines for Railroad Grade Separation Projects

c. Examples of OC submittals included in the above are:
    i. Shoring (Follow BNSF-UPRR Guidelines for Temporary Shoring)
    ii. Falsework
    iii. Demolition (Need plans for substructure and superstructure. Follow BNSF Guidelines for Preparation of Bridge Demolition & Removal Plan)
    iv. Erection (overhead and underpass structures)
    v. Construction Phasing Plans
d. Additional OC submittals required, but not included in the Guidelines are:
    i. All work plans that remove tracks from service (track outage windows require a detailed Gantt chart when greater than 2 hours)
    ii. Contingency plans
    iii. Additional OC submittals may be required on a project by project basis.

4.5 Prior to any work commencing on BNSF right of way:

Contractors C/C-1 or Right of Entry must be fully executed and their insurance must be approved before they can perform work on BNSF property. Proof of Contractors insurance approval must be produced to the BNSF PE and the I/C.

4.6 Contractor must adhere to all other BNSF policies and procedures not specifically mentioned in this agreement.

5.0 Interference with Railroad Operations.

5.1 The contractor shall arrange and conduct all work so that there shall be no interference with the Railroad's operations, including train, signal, telephone and telegraphic services; or damage to the Railroad's property; poles, wires and other facilities of tenants, licensees, easement grantees and invitees on the Railroad's right of way. Whenever work may affect the operations or safety of trains, the method of doing such work shall first be submitted to the Railroad Engineer for approval, but such approval shall not relieve the contractor from liability. Any work to be performed by the contractor that requires flagging service or inspection service shall be deferred by the contractor until the flagging service required by the Railroad is available at the job site.

5.2 Whenever work within the Railroad's right of way is of such a nature that impediment to the Railroad's operations is unavoidable, such as use of runaround tracks or necessity for reduced speed, the contractor shall schedule and conduct these operations so that such impediment is reduced to the absolute minimum.

5.3 Should conditions arising from, or in connection with the work require that immediate and unusual provisions be made to protect the Railroad's operations and property, the contractor shall make such provisions. If in the judgment of the Railroad Engineer, or the Engineer if the Railroad Engineer is absent, such provision is insufficient, the Railroad Engineer or Engineer may require or provide such provisions as deem necessary. In any event, such provisions shall be at the contractor's expense and without cost to the Railroad or the City of East Moline.

5.4 The contractor shall be responsible for any damage to the Railroad as a result of work on the project, which shall include but not be limited to interference with the normal movement of trains caused exclusively by the work performed by the contractor. The contractor shall be responsible for damages for the Railroad's train delays that are caused exclusively by the contractor. The Railroad agrees not to perform any act to unnecessarily cause any train delay. The damages for train delays per freight hour will be billed at an average rate per hour as determined from the Railroad's records. These records shall be provided by the Railroad, upon request, to the City of East Moline or the City of West Plain's contractor.

6.0 Track Clearances.

6.1 The minimum track clearances to be maintained by the contractor during construction are shown on the

project plans. However, before undertaking any work within Railroad's right of way, or before placing any obstruction over any track, the contractor shall:

(a) Notify the Railroad Engineer at least 72 hours in advance of the work.

(b) Receive assurance from the Railroad Engineer that arrangements have been made for flagging service as may be necessary.

(c) Receive permission from the Railroad Engineer to proceed with the work.

(d) Ascertain that the Engineer has received copies of notice to the Railroad and of the Railroad's response.

6.2 The contractor shall fully comply with any horizontal and vertical clearance requirements imposed by Illinois state statutes and regulations and Federal statutes and regulations regarding the placement of structures or equipment near or over railroad tracks.

7.0 Construction Procedures.

7.1 General. Construction work on the Railroad's property shall be:

(a) Subject to the inspection and review of the Railroad.
(b) In accordance with the Railroad's written outline of specific conditions.
(c) In accordance with this special provision.

7.2 Excavation. The subgrade of an operated track shall be maintained with the berm edge at least 12 feet from centerline of track and not more than 26 inches below top of the rail. The contractor will not be required to make existing section meet this specification if substandard, in which case the existing section will be maintained. The contractor shall cease all work and notify the Railroad immediately before continuing excavation in the work area if obstructions are encountered which do not appear on the drawings. If the obstruction is a utility and the owner of the utility can be identified, then the contractor shall also notify the owner immediately. If there is any doubt about the location of underground cables or lines of any kind, no work shall be performed until the exact location has been determined. There will be no exceptions to these instructions. Additionally, all excavations shall be conducted in compliance with applicable Occupational Safety and Health Act regulations and, regardless of depth, shall be shored where there is any danger to tracks, structures or personnel. Any excavations, holes or trenches on the Railroad's property shall be covered, guarded and/or protected when not being worked on. When leaving work site areas at night and over weekends, the areas shall be secured and left in a condition that will ensure that Railroad's employees and other personnel who may be working or passing through the area are protected from all hazards. All excavations shall be back filled as soon as possible.

7.3 Excavation for Structure. The contractor shall be required to take special precaution and care in connection with excavating, shoring pits and in driving piles for footings adjacent to tracks to provide adequate lateral support for the tracks and the loads which the tracks carry, without disturbance of track alignment and surface, and to avoid obstructing track clearances with working equipment, tools or other material. The procedure for doing such work, including need of and plans for shoring, shall be approved by the Railroad Engineer before work is performed, but such approval shall not relieve the contractor from liability. Before submission of plans to the Railroad Engineer for approval, the Engineer will first review such plans in accordance with the Illinois Standard Specifications for Highway Construction, hereinafter called "Standard Specifications". The responsibility for the design and construction of the sheeting rests solely with the contractor. The temporary shoring along the railroad tracks shall be designed for the Cooper E80 loading. The design shall insure that the shoring is braced or substantially securely to prevent movement. The contractor shall submit plans for the temporary shoring that shall be signed, sealed, and stamped in accordance with the laws relating to Architects and Professional Engineers, Chapter 327, RSMo. and then submitted for review by the Engineer.

7.4 Demolition of Existing Structures. The contractor shall be required to take special precaution and care in connection with demolition of existing structures. The procedure for doing such work, including need of and plans for temporary falsework, shall first be approved by Railroad Engineer before work is performed, but such approval shall not relieve the contractor from liability. Before submission of plans to the Railroad Engineer for approval, the Engineer will first review such plans.

7.5 Falsework. The contractor shall be required to take special precaution and care to prevent any material from falling on the Railroad's right of way. The procedure for preventing material from falling, including need of and plans for temporary falsework, shall first be approved by the Railroad Engineer, but such approval shall not relieve the contractor from liability. Before submission of plans to the Railroad Engineer for approval, the Engineer will first review such plans.

7.6 Blasting.

7.6.1 The contractor shall obtain advance approval of the Railroad Engineer and the Engineer for use of explosives on or adjacent to the Railroad's property. If permission for use of explosives is granted, the contractor shall be required to comply with the following:

(a) Blasting shall be done with light charges under the direct supervision of a responsible officer or employee of the contractor.

(b) Electric detonating fuses shall not be used because of the possibility of premature explosions resulting from operation of two-way train radios.

(c) No blasting shall be done without the presence of the Railroad Engineer. At least 72 hours advance notice to the person designated in the Railroad's notice of authorization to proceed as mentioned in Section 3.2 of this job special provision, the contactor shall be required to arrange for the presence of the Railroad Engineer and such flagging as the Railroad may require.

(d) The contractor shall have at the job site adequate equipment, labor and materials and allow sufficient time to clean up debris resulting from the blasting without delay to trains, as well as correcting, at contractor's expense, any track misalignment or other damage to the Railroad's property resulting from the blasting as directed by the Railroad Engineer. If contractor's actions result in delay of trains, the contractor shall bear the entire cost thereof.

7.6.2 The Railroad Engineer will:

(a) Determine the approximate location of trains and advise the contractor the approximate amount of time available for the blasting operation and clean-up.

(b) Have the authority to order discontinuance of blasting if blasting is too hazardous or is not in accordance with this special provision.

7.7 Maintenance of Railroad Facilities. The contractor shall be required to maintain all ditches and drainage structures free of silt or other obstructions which may result from contractor's operations. The contractor shall promptly repair eroded areas within Railroad's right of way and repair any other damage to the Railroad's property, tenants, licensees, easement grantees and invitees. All such maintenance and repair of damages due to the contractor's operations shall be done at the contractor's expense.

7.8 Storage of Materials and Equipment.

7.8.1 The contractor shall not store or stockpile construction materials or equipment closer than 25 feet to the centerline of the nearest railroad track or on the Railroad's property not covered by construction easement, contractor's permit, lease or agreement. Additionally, the contractor shall not store or leave

materials or equipment within 250 feet of the edge of any highway/rail at-grade crossings. Further, both sides of a main track shall remain unobstructed for a distance of 10 feet from the exterior edge of the track at all times to allow for stopped train inspection.

7.8.2 Machines or vehicles shall not be left unattended with the engine running. Parked machines or equipment shall be in gear with brakes set and with blade, pan or bucket lowered to the ground if so equipped. All grading or construction machinery that is left parked near the track unattended shall be effectively immobilized so that unauthorized persons cannot move such equipment.

7.9 Cleanup. Upon completion of the work, the contractor shall remove from within the limits of the Railroad's right of way, all machinery, equipment, surplus materials, falsework, rubbish or temporary buildings of the contractor, and leave said right of way in a neat condition satisfactory to the Railroad Engineer.

7.10 Buried Cable and Other Buried Facilities.

7.10.1 The contractor is placed on notice that fiber optic, communication and other cable lines and systems, collectively the “Lines”, owned by various telecommunications companies may be buried on Railroad’s property or right of way. The locations of the buried Lines, pipelines or utility facilities have been included on the plans based on information from the telecommunications companies, pipeline operators, or utilities, as the case may be. The contractor shall be responsible for contacting the Railroad Engineer, the Railroad's 24-hour information number (1-800-533-2891), the telecommunications companies, pipeline operators and utilities and notifying them of any work that may damage the buried Lines, pipelines, utility facilities and/or interfere with their service. The contractor shall verify the location of all buried Lines, pipelines and utility facilities shown on the plans or marked in the field in order to establish their exact locations prior to or while doing work on the Railroad's property or right of way. The contractor shall also use all reasonable methods when working on the Railroad’s property or right of way to determine if any other buried Lines, pipelines or utility facilities exist on the Railroad's property or right of way.

7.10.2 Failure to mark or identify the buried Lines, pipelines or utility facilities will be sufficient cause for the Railroad Engineer to stop construction at no cost to the City of East Moline or Railroad until these items are completed. The contractor shall be responsible for the rearrangement of any buried facilities, Lines, pipelines or utility facilities determined to interfere with the construction. The contractor shall cooperate fully with any telecommunications companies, pipeline operators and utility facility owners in performing such rearrangements.

8.0 Damages. The Railroad will not assume liability for any damages to the contractor, contractor's work, employees, servants, equipment and materials caused by railroad traffic. Any cost incurred by the Railroad for repairing damages to Railroad’s property or to property of the Railroad’s tenants, licensees, easement grantees and invitees caused by or resulting from the contractor’s operations shall be paid directly to the Railroad by contractor.

9.0 Flagging Services.

9.1 When Required. Under the terms of the agreement between the City of East Moline and the Railroad, the Railroad has sole authority to determine the need for flagging required to protect the Railroad’s operations. In general, the requirements of such services will be whenever the contractor's personnel or equipment are, or are likely to be, working on the Railroad's right of way within 25 feet of the centerline of any track, or across, over, adjacent to, or under a track, or when such work has disturbed or is likely to disturb a railroad structure or the railroad roadbed or surface and alignment of any track to such extent that the movement of trains must be controlled by flagging, or reasonable probability of accidental hazard to Railroad's operations or personnel. Normally, the Railroad will assign one flagger to a project; but in some cases, more than one may be necessary, such as yard limits where 3 flaggers may be required. However, if the contractor works within distances that violate instructions given by the Railroad Engineer or performs work that has not been scheduled with the Railroad Engineer, flaggers may be required full time until the

project has been completed.

9.2 Scheduling and Notification.

9.2.1 Not later than the time that approval is initially requested to begin work on the Railroad's right of way (30 days), contractor shall furnish to the Railroad and the City of East Moline a schedule for all work required to complete the portion of the project within Railroad's right of way and arrange for a job site meeting between the contractor, the Engineer, and the Railroad Engineer. Flaggers may not be provided until the job site meeting has been conducted and the contractor's work scheduled.

9.2.2 The contractor shall be required to give the Railroad Engineer at least 30 days of advance written notice of intent to begin work within Railroad's right of way in accordance with this special provision. Once begun, if such work is then suspended at any time, or for any reason, the contractor shall be required to give the Railroad Engineer at least 5 working days of advance notice before resuming work on Railroad's right of way. Such notices shall include sufficient details of the proposed work to enable the Railroad Engineer to determine if flagging will be required. If such notice is in writing, the contractor shall furnish the Engineer a copy; if notice is given verbally, the notice shall be confirmed in writing with copy to the Engineer. If flagging is required, no work shall be undertaken until the flagger or flaggers are present at the job site. Obtaining a flagger or flaggers may take up to 30 days to obtain initially from the Railroad. When flagging begins, the flagger is usually assigned by the Railroad to work at the project site on a continual basis until no longer needed and cannot be called for on a spot basis. If flagging becomes unnecessary and is suspended, obtaining a flagger or flaggers may take up to 30 days to again obtain from the Railroad. Due to Railroad labor agreements, 10 working days notice may be necessary before flagging services may be discontinued and responsibility for payment stopped. Notification for flagging should be addressed to:

Johnathan Arnett, Jr.
BNSF Railway
Johnathan.arnettjr@bnsf.com

9.2.3 If, after the flagger is assigned to the project site, emergencies arise which require the flagger's presence elsewhere, then the contractor shall delay work on the Railroad's right of way until such time as the flagger is again available. Any additional costs resulting from such delay shall be borne by the contractor and not the Railroad.

9.2.4 The contractor shall provide a temporary structure to provide shelter from weather conditions for the person(s) providing flagging protection service on behalf of the Railroad as described herein. The structure shall be provided in an area immediately accessible to the Railroad's main track and the construction site, and be equipped with telephone service, lighting and desk.

9.3 Payment.

9.3.1 The Contractor will pay the Railroad directly for the cost of flagging services associated with the project.

9.3.2 The Railroad shall submit progress invoice to the Contractor during the time flagging services are required. A final invoice shall be submitted to the Contractor within 180 days of completion of the project.

9.3.3 Should a dispute between the Railroad, the City of East Moline and the contractor develop concerning the cost of flagging service or should the contractor fail to promptly pay the Railroad for flagging services, the full amount of the Railroad's invoice will be deducted from the contractor's payment request. The City of East Moline will make a corrected payment once a settlement is reached between the Railroad, the City of East Moline and the contractor.

9.3.4 The contractor shall be responsible for arranging needed flagging services as required by the Railroad to accomplish the highway improvement.

9.3.5 The cost of flagging service is approximately $1500 per day based on an 8-hour work day and a 40-hour work week. This cost includes the base pay for the flagger, overhead, and per diem charge for travel expenses, meals and lodging. The charge to the contractor by the Railroad will be the actual cost based on the rate of pay for the Railroad's employees who are available for flagging service at the time the service is required. Work by a flagger in excess of 8 hours per day or 40 hours per week but not more than 12 hours a day will result in overtime pay at 1 ½ times the appropriate rate. Work by a flagger in excess of 12 hours per day will result in overtime pay at 2 times the appropriate rate. If work is performed on a holiday, the flagging rate is 2 ½ times the normal rate. Railroad expenses incurred preparing and handling invoices will also be charged to the contractor. Charges to the contractor by the Railroad shall be in accordance with applicable provisions of Volume 1, Chapter 4, §3 and Volume 6, Chapter 6, §2, Subsection 1 of the Federal-Aid Highway Program Manual issued by the Federal Highway Administration, including all current amendments. Flagging costs are subject to change. The above estimates of flagging cost are provided for information only and are not binding in any way. Each time a flagger is called, the minimum period for billing will be the 8 hour basic day unless the flagger can be assigned to other Railroad work during the work day.

9.3.6 A maximum of one hour travel time each way per day per flagger will be required for travel to and from the project.

9.4 Verification.

9.4.1 Any complaints concerning a flagger shall be resolved in a timely manner. If need for a flagger is questioned, please contact the Railroad Engineer and Mr. Jake Rzewnicki, Manager of Public Projects at (913) 551-4275. All verbal complaints shall be confirmed in writing by the contractor within 5 working days with copy to the Railroad Engineer and Engineer. All written correspondence shall be addressed to Ms. Brockamp as shown in Section 3.1 of this job special provision.

9.4.2 The Railroad flagger assigned to the project will be responsible for notifying the Engineer upon arrival at the job site on the first day, or as soon thereafter as possible, that flagging services begin and on the last day that flagger performs such services for each separate period that services are provided. The Engineer will document such notification in the project records.

10.0 Haul Across Railroads.

10.1 Where the plans show or imply that materials of any nature must be hauled across the Railroad's tracks, unless the plans clearly show that the City of East Moline has included arrangements for such haul in the agreement with the Railroad, the contractor shall be required to make all necessary arrangements with the Railroad regarding means of transporting such materials across the Railroad's tracks. The contractor shall be required to bear all costs incidental to such crossings, including flagging, whether services are performed by contractor's own forces or by Railroad's personnel.

10.2 No crossing may be established for use of the contractor for transporting materials or equipment across the tracks of the Railroad unless specific authority for the installation, maintenance, necessary watching and flagging thereof and removal, all at the expense of the contractor, is first obtained from the Railroad Engineer.

11.0 Work for the Benefit of the Contractor. All temporary or permanent changes in wire lines or other facilities which are considered necessary to the project are shown on the plans and are included in the agreement between the City of East Moline and the Railroad or will be covered by appropriate revisions to same which will be initiated and approved by the City of East Moline and/or the Railroad. Should the contractor desire any changes in addition to the above, then contractor shall make separate arrangements with the Railroad for same to be accomplished at the contractor's expense.

12.0 Cooperation and Delays. The contractor shall arrange a schedule with the Railroad for accomplishing staged construction involving work by the Railroad or tenants, licensees, easement grantees

and invitees of the Railroad. In arranging a schedule, the contractor shall ascertain, from the Railroad, the lead time required for assembling crews, materials and make due allowance. No charge of claims of the contractor against the Railroad will be allowed for hindrance or delay on account of railway traffic for any work done by the Railroad, other delay incident to or necessary for safe maintenance of railway traffic, or for any delays due to compliance with this special provision.

13.0 Trainman's Walkways. Along the outer side of each exterior track of multiple operated track and on each side of single operated track, an unobstructed continuous space suitable for trainman's use in walking along trains shall be maintained extending to a line not less than 12 feet from centerline of track. Any temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while Railroad's protective service is provided shall be removed before the close of each work day. Any excavation near the walkway, the contractor shall install a handrail with a 12 feet minimum clearance from centerline of track.

14.0 Insurance. The amount of work to be performed upon, over or under Railroad's right of way is estimated to be one percent of the contractor's total bid for the project.

14.1 In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, Contractor must, at its sole cost and expense, procure and maintain during the life of this Agreement the following insurance coverage:

Commercial General Liability insurance. This insurance shall contain broad form contractual liability with a combined single limit of a minimum of $5,000,000 each occurrence and an aggregate limit of at least $10,000,000 but in no event less than the amount otherwise carried by the contractor. Coverage must be purchased on a post 2004 ISO occurrence form or equivalent and include coverage for, but not limit to the following:

Bodily Injury and Property Damage
Personal Injury and Advertising Injury
Fire legal liability
Products and completed operations

This policy must also contain the following endorsements, which must be indicated on the certificate of insurance:

The definition of insured contract must be amended to remove any exclusion or other limitation for any work being done within 50 feet of railroad property. Waiver of subrogation in favor of and acceptable to Railroad. Additional insured endorsement in favor of and acceptable to Railroad. Separation of insureds. The policy shall be primary and non-contributing with respect to any insurance carried by Railroad.

It is agreed that the workers' compensation and employers' liability related exclusions in the Commercial General Liability insurance policy(s) required herein are intended to apply to employees of the policy holder and shall not apply to Railroad employees.

No other endorsements limiting coverage as respects obligations under this Agreement may be included on the policy with regard to the work being performed under this agreement.

Business Automobile Insurance. This insurance must contain a combined single limit of at least $1,000,000 per occurrence, and include coverage for, but not limited to the following:

Bodily injury and property damage
Any and all vehicles owned, used or hired

The policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

Waiver of subrogation in favor of and acceptable to Railroad.
Additional insured endorsement in favor of and acceptable to Railroad.
Separation of insureds.
The policy shall be primary and non-contributing with respect to any insurance carried by Railroad.

Workers Compensation and Employers Liability insurance including coverage for, but not limited to:

Contractor's statutory liability under the worker's compensation laws of the state(s) in which the work is to be performed. If optional under State law, the insurance must cover all employees anyway.
Employers' Liability (Part B) with limits of at least $500,000 each accident, $500,000 by disease policy limit, $500,000 by disease each employee.

This policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

Waiver of subrogation in favor of and acceptable to Railroad.

Railroad Protective Liability insurance naming only the Railroad as the Insured with coverage of at least $5,000,000 per occurrence and $10,000,000 in the aggregate. The policy Must be issued on a standard ISO form CG 00 35 10 93 and include the following:

Endorsed to include the Pollution Exclusion Amendment (ISO form CG 28 31 10 93)
Endorsed to include the Limited Seepage and Pollution Endorsement.
Endorsed to include Evacuation Expense Coverage Endorsement.
Endorsed to remove any exclusion for punitive damages.
No other endorsements restricting coverage may be added.
The original policy must be provided to the Railroad prior to performing any work or services under this Agreement

In lieu of providing a Railroad Protective Liability Policy, Licensee may participate in Licensor's Blanket Railroad Protective Liability Insurance Policy available to contractor.

14.2 Other Requirements:

14.2.1 All policies (applying to coverage listed above) must not contain an exclusion for punitive damages and certificates of insurance must reflect that no exclusion exists.

14.2.2 Contractor agrees to waive its right of recovery against Railroad for all claims and suits against Railroad. In addition, its insurers, through the terms of the policy or policy endorsement, waive their right of subrogation against Railroad for all claims and suits. The certificate of insurance must reflect the waiver of subrogation endorsement. Contractor further waives its right of recovery, and its insurers also waive their right of subrogation against Railroad for loss of its owned or leased property or property under contractor's care, custody or control.

14.2.3 Contractor is not allowed to self-insure without the prior written consent of Railroad. If granted by Railroad, any deductible, self-insured retention or other financial responsibility for claims must be covered directly by contractor in lieu of insurance. Any and all Railroad liabilities that would otherwise, in accordance with the provisions of this Agreement, be covered by contractor's insurance will be covered as if contractor elected not to include a deductible, self-insured retention or other financial responsibility for claims.

14.2.4 Prior to commencing the Work, contractor must furnish to Railroad an acceptable certificate(s) of insurance including an original signature of the authorized representative evidencing the required coverage, endorsements, and amendments and referencing the contract audit/folder number if available. Contractor shall notify Railroad in writing at least 30 days prior to any cancellation, non-renewal, substitution or material

alteration. Upon request from Railroad, a certified duplicate original of any required policy must be furnished. Contractor should send the certificate(s) to the following address:

Railroad:
BNSF Railway Company
P.O. Box 140528
Kansas City, MO 64114
Toll Free: 877-576-2378
Fax number: 817-840-7487
Email:BNSF@certfocus.com
www.certfocus.com

City of East Moline:
Mr. Tim Kammler
Director of Engineering
City of East Moline
1200 -13th Avenue
East Moline, IL 61244

14.2.5 Any insurance policy must be written by a reputable insurance company acceptable to Railroad or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provide.

14.2.6 Contractor represents that this Agreement has been thoroughly reviewed by contractor's insurance agent(s)/broker(s), who have been instructed by contractor to procure the insurance coverage required by this Agreement. Allocated Loss Expense must be in addition to all policy limits for coverages referenced above. Not more frequently than once every five years, Railroad may reasonably modify the required insurance coverage to reflect then-current risk management practices in the railroad industry and underwriting practices in the insurance industry.

14.2.7 If any portion of the operation is to be subcontracted by contractor, contractor must require that the subcontractor provide and maintain the insurance coverages set forth herein, naming Railroad as an additional insured, and requiring that the subcontractor release, defend and indemnify Railroad to the same extent and under the same terms and conditions as contractor is required to release, defend and indemnify Railroad herein.

14.2.8 Failure to provide evidence as required by this section will entitle, but not require, Railroad to terminate this Agreement immediately. Acceptance of a certificate that does not comply with this section will not operate as a waiver of contractor's obligations hereunder.

14.2.9 The fact that insurance (including, without limitation, self-insurance) is obtained by contractor will not be deemed to release or diminish the liability of contractor including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railroad will not be limited by the amount of the required insurance coverage.

14.2.10 For purposes of this section, Railroad means "Burlington Northern Santa Fe LLC", "BNSF RAILWAY COMPANY" and the subsidiaries, successors, assigns and affiliates of each.

14.2.11 Railroad will not accept binders as evidence of insurance, the original policy shall be provided. The named insured, description of the work and designation of the job site to be shown on the Policy are as follows:

(a) Named Insured: BNSF Railway Company
(b) Description and Designation:
7th Street, US DOT #605937E of the Barstow-Rock Island Sub in East Moline, IL; Reconstruction of

the 15th Ave/7th Street Signalized Intersection

14.2.12 The contractor must notify BNSF Manager of Public Projects at Jacob.Rzewnicki@BNSF.com, when applying for railroad insurance coverage.

14.3 If any part of the work is sublet, similar insurance and evidence thereof in the same amounts as required of the prime contractor, shall be provided by or in behalf of the subcontractor to cover the subcontractor's operations. Endorsements to the prime contractor's policies specifically naming subcontractors and describing their operations will be acceptable for this purpose.

14.4 All Insurance hereinbefore specified shall be carried until all work required to be performed under the terms of the contract has been satisfactorily completed within the limits of the Railroad's right of way as evidenced by the formal acceptance by the City of East Moline. Insurance Companies may cancel insurance by permission of the City of East Moline and Railroad or on 30 days written notice to the Railroad and City of East Moline.

15.0 Hazardous Materials Compliance and Reporting. Contractor shall be responsible for complying with all applicable federal, state and local governmental laws and regulations, including, but not limited to environmental laws and regulations (including but not limited to the Resource Conservation and Recovery Act, as amended; the Clean Water Act, as amended; the Oil Pollution Act, as amended; the Hazardous Materials Transportation Act, as amended; and the Comprehensive Environmental Response, Compensation and Liability Act, as amended), and health and safety laws and regulations. In addition to the liability provisions contained elsewhere in this job special provision, the contractor hereby indemnifies, defends and holds harmless the Railroad for, from and against all fines or penalties imposed or assessed by federal, state and local governmental agencies against the Railroad which arise out of contractor's work under this special provision. Notwithstanding the preceding sentence, the contractor will not be liable for pre-existing hazardous materials or hazardous substances discovered on Railroad's property or right of way so long as such hazardous materials or hazardous substances were not caused by (in whole or in part) contractor's work, acts or omissions. If contractor discovers any hazardous waste, hazardous substance, petroleum or other deleterious material, including but not limited to any non-containerized commodity or material, on or adjacent to Railroad's property, in or near any surface water, swamp, wetlands or waterways, while performing any work under this special provision, the contractor shall immediately:

(a) Notify the Railroad's Resource Operations Center at (800) 832-5452, of such discovery.
(b) Take safeguards necessary to protect employees, subcontractors, agents and/or third parties.
(c) Exercise due care with respect to the release, including the taking of any appropriate measure to minimize the impact of such release

16.0 Personal Injury Reporting. The Railroad is required to report certain injuries as a part of compliance with Federal Railroad Administration ("FRA") reporting requirements. Any personal injury sustained by any employee of the contractor, subcontractor or contractor's invitees while on the Railroad's property shall be reported immediately, by phone or mail if unable to contact in person, to the Railroad's representative in charge of the project. The Non-Employee Personal Injury Data Collection Form is to be completed and sent by Fax to the Railroad at (817) 352-7595 and to the Railroad's Project Representative no later than the close of shift on the date of the injury.

17.0 Failure to Comply. In the event the contractor violates or fails to comply with any of the requirements of this special provision, the below orders will be applied. Any such orders shall remain in effect until the contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.

(a) The Railroad Engineer may require that the contractor to vacate the Railroad's property.

(b) The Engineer may withhold all monies due to the contractor until contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.

18.0 Payment for Cost of Compliance. No separate payment will be made for any extra cost incurred on account of compliance with this special provision. All such cost shall be included in the contract unit price for other items included in the contract. Railroad will not be responsible for paying the contractor for any work performed under this special provision.

18.1 If applicable to the project, the contractor must submit a plan for demolition, falsework, lifting plans over the Railroad property, shoring plans and any other applicable plans the Railroad may require as well as means and methods to the Railroad for review and approval. All plans submitted to the Railroad must be signed and sealed by Professional Engineer licensed in the State of Illinois. These plans can be submitted along with the Right of Entry application; however, the Right of Entry will not be approved until all required plan submittals are approved by the Railroad. The Railroad may also require an onsite inspector to assure the work is carried out in accordance with the Railroad approved plans.

18.1.1 Payment for plan submittal, Railroad plan review and Railroad inspection fees.

The contractor shall be responsible for all costs associated with the generation and submittal of Railroad plans required for the right of entry agreement including Railroad review fees associated with these plan submittals and any onsite inspection and management fees. This work will be paid for at the contract unit price per Each for **RAILROAD RIGHT-OF-ENTRY PERMIT**, which price shall include all labor, equipment, materials, fees, and other costs necessary to complete the work specified herein.

18.1.1 Payment for Railroad Flagging

Railroad Flagging shall be paid for according to Articles 107.12 and 109.05 of IDOT's Standard Specifications.

WORK ON RAILROAD RIGHT-OF-WAY Iowa Interstate Railroad, LLC.
For Highway work

Definitions

AGENCY City of East Moline and its agents

AGENCY STANDARD SPECIFICATIONS Shall refer to IDOT's Standard Specifications for Road and Bridge Construction, adopted January 1, 2022, Supplemental Specifications and Recurring Special Provisions, and the project-specific special provisions.

STATE STATE shall refer to the State in which the work is performed.

CONTRACTOR Company or Companies performing work for the AGENCY for which this document is included with the contracts pertaining to such work.

RAILROAD Any references to RAILROAD in this specification refers to Iowa Interstate Railroad, LLC., its successors, and assigns, and agents.

RAILROADS' Representative In this specification, references to the RAILROAD's Representative is intended to mean the following: Railroad's Asst. Chief Engineer- Greg Mitchell (319) – 298-5424 or authorized representative

A. PERMITS.

CONTRACTOR shall, before entering upon RAILROAD's property for performance of work secure permission from RAILROAD's Representative for occupancy and use of RAILROAD's property and shall confer with RAILROAD relative to requirements for railroad clearances, operation, and general safety regulations. The RAILROAD's Permit number shall be 25-23-BI-175.340.

CONTRACTOR shall provide AGENCY and RAILROAD with proposed construction schedule outlining the timing of activities that will need track protection services.

CONTRACTOR shall conduct work in a manner satisfactory to RAILROAD's Representative and shall not damage RAILROAD property or interfere with their operations.

RAILROAD's Representative will at all times have jurisdiction over the safety of RAILROAD operations, and the decision of RAILROAD's Representative as to procedures which may affect safety of RAILROAD operations shall be final, and CONTRACTOR shall be governed by such decision.

Should damage occur to RAILROAD property as a result of CONTRACTOR's operations, and RAILROAD deems it necessary to repair such damage or to perform work for protection of its property, the required materials, labor, and equipment shall be furnished by RAILROAD, and CONTRACTOR shall reimburse RAILROAD for costs so incurred as defined in Section E. Railroad Reimbursements.

B. TEMPORARY GRADE CROSSINGS.

If CONTRACTOR requires construction of a temporary grade crossing across RAILROAD's track(s) for use during performance of the contract, CONTRACTOR shall make necessary arrangements with RAILROAD for construction, protection, and later removal of such temporary grade crossing. Costs of such temporary grade crossing construction, protection, maintenance, and later removal shall be reimbursed to RAILROAD on the basis of RAILROAD's bills, to be rendered monthly.

CONTRACTOR shall not cross RAILROAD's property or track(s) with vehicles or equipment of any kind or character except at such temporary grade crossing as may be constructed as outlined herein, or at an existing and open public grade crossing. Equipment and vehicles crossing at an existing and open public grade crossing must be registered for use on public roadways. Vehicles not registered for use on public roadways shall obtain track protection as outlined in Section D. Railroad Track Protection Services.

C. CONTRACTOR SAFETY ORIENTATION

No employee of the CONTRACTOR, its subcontractors, agents or invitees that is working on the project may enter RAILROAD property without first having successfully passed an annual RAILROAD approved safety course. Proof of passing said course shall be in the employee's possession at all times when on RAILROAD property. Cost for the required training will be borne by CONTRACTOR.

Information on approved safety courses can be obtained from RAILROAD's authorized representative.

D. RAILROAD TRACK PROTECTION SERVICES.

Track protection services required by RAILROAD will be provided by the RAILROAD and the cost shall be reimbursed to RAILROAD on the basis of RAILROAD's bills, to be rendered monthly. Requirements of the RAILROAD are as follows:

Track protection services will be required during: excavation, placing, and removal of cofferdams or sheeting; driving of foundation piling and placing of the concrete footings for piers adjacent to track(s); construction and removal of falsework, bracing, or forms over or adjacent to track(s); construction or equipment across the track; setting or placing of beams or girders in span(s) over any track(s); any construction operations involving direct interference with RAILROAD's track(s) or traffic, fouling of RAILROAD operating clearances or reasonable probability of accidental hazard to railroad traffic; or whenever workers or equipment will be working within 25 feet of the centerline of any live track. If an existing bridge or other structure is to be removed, services of at least one and possibly two watchmen or flagmen will be required during removal of that portion of existing structure immediately over or adjacent to any track. Track protection services will also be furnished whenever, in the opinion of the RAILROAD, such protection is needed.

In order that the RAILROAD may be prepared to furnish protective services, CONTRACTOR shall notify RAILROAD at least 10 business days in advance of when protective services will be needed. Services are subject to availability of RAILROAD personnel.

Any time track protection services are not being provided, CONTRACTOR must provide and maintain an effective physical barrier at a distance of 25 feet from track centerline to prevent unauthorized trespassing. Physical barrier must be posted with a sign stating "CAUTION, LIVE TRACK, TRACK PROTECTION NEEDED BEYOND THIS POINT". Typical barriers included concrete "J" barriers or safety fencing. Other barriers may be used to accommodate varying construction sites with approval of RAILROAD.

RAILROAD will notify the AGENCY and CONTRACTOR when non-compliance is reported by RAILROAD train crews or other RAILROAD employees. CONTRACTOR work performed without proper track protection services, when such protection is required, will be subject to a $5,000.00 per day price adjustment to CONTRACTOR, and may result in the removal of CONTRACTOR by RAILROAD or AGENCY from the project.

E. RAILROAD REIMBURSEMENT.

Rates of pay for RAILROAD employees will be the prevailing RAILROAD hourly wage for an 8 hour day for the class of employee(s) involved during the regularly assigned hours, overtime in accordance with any Labor Agreements and Schedules and RAILROAD's standard additives, all as in effect at the time the work is performed.

Wage rates are subject to change, at any time, by law or by agreement between RAILROAD and employees, and may be retroactive as a result of negotiations or a ruling of an authorized Governmental Agency. If wage rates are changed, CONTRACTOR shall pay on the basis of the new rates.

CONTRACTOR shall reimburse, monthly, the RAILROAD for costs of all services performed by RAILROAD for the CONTRACTOR, and furnish the AGENCY written evidence that RAILROAD has acknowledged receipt of same before final payment will be made for the project.

F. SAFETY OF OPERATIONS.
During construction of footings or structures adjacent to any track of the RAILROAD, CONTRACTOR shall make adequate provision against sliding, shifting, sinking, or in any way disturbing railroad embankment and track(s) adjacent to said structures due to said construction operations, by driving temporary sheeting in a manner satisfactory to both the AGENCY and RAILROAD.

After review by the AGENCY, two sets of prints of proposed sheeting and bracing details bearing the seal of a registered structural or professional engineer, registered in the STATE together with the supporting documents, shall be forwarded to the RAILROAD's Representative for review and approval.

CONTRACTOR shall notify the RAILROAD's Representative in writing no less than ten working days in advance of the proposed time of the beginning of the construction of the structures adjacent to the track(s).

G. TEMPORARY CLEARANCES.
CONTRACTOR shall not store any materials, supplies or equipment closer than 25.0 feet from centerline of any RAILROAD track, measured at right angles thereto.

H. FINAL CLEANUP.
CONTRACTOR shall, upon completion of the work, remove from within the limits of the property of the RAILROAD, all machinery, equipment, surplus materials, falsework, rubbish, or temporary buildings of said CONTRACTOR; remove the approaches to any temporary grade crossing(s) constructed for CONTRACTOR's use, restoring same as nearly as practicable to conform to adjoining terrain; remove any accumulated silt in RAILROAD's side ditches, restoring proper flow thereto, employ erosion control measures as appropriate to prevent further siltation until ground cover is reestablished; and in all other respects leave said property in a neat condition satisfactory to RAILROAD's Representative.

RAILROAD reserves the right to perform site restoration. Cost for restoration work performed by the RAILROAD will be by force account and reimbursed as defined in Section E Railroad Reimbursements. Estimate for said work will be provided to CONTRACTOR and AGENCY for review and concurrence before work is performed.

I. RESPONSIBILITY OF SUPERVISION.
Nothing in this specification shall be construed to place any responsibility on RAILROAD for quality or conduct of the work performed by the CONTRACTOR hereunder. Any approval given or supervision exercised by RAILROAD hereunder, or failure of RAILROAD to object to any work done, material used, or method of operation shall not be construed to relieve CONTRACTOR of any obligations pursuant hereto or under the agreement this specification is appended to.

J. LIABILTY AND PROPERTY DAMAGE INSURANCE FOR WORK WHOLLY OR PARTLY WITHIN RAILROAD RIGHT-OF-WAY.
In addition to the standard insurance requirements of the AGENCY STANDARD SPECIFICATIONS, the CONTRACTOR shall carry insurance of the following kinds and amounts.

1. Insurance Required of Contractor.

a. Statutory Workers Compensation and Employer's Liability Insurance.

b. Automobile Liability in an amount not less than $1,000,000 combined single limit.

c. Comprehensive General Liability Occurrence Form in an amount not less than $2,000,000 per occurrence. In the event the policy is Claims Made Policy, coverage shall include an aggregate of

$4,000,000. The Policy shall name RAILROAD as additional insured and shall not contain any exclusions related to:

i. Doing business on, near, or adjacent to railroad facilities.

ii. Loss or damage resulting from surface, subsurface pollution contamination or seepage, or handling, treatment, disposal, or dumping of waste materials or substances.

The above policies shall contain a waiver of the right of subrogation

d. An Occurrence Form Railroad Protective Policy with limits of not less than $4,000,000 per occurrence for Bodily Injury Liability. Property Damage Liability and Physical Damage to Property, with $8,000,000 aggregate for the term of the policy with respect of Bodily Injury, Liability, Property Damage Liability and Physical Damage to Property. The policy shall name: RAILROAD.

Before commencing work, Contractor shall submit to the RAILROAD and AGENCY a certificate of insurance evidencing the foregoing coverage and a certified, true, and complete copy of the policy or policies. The policies shall provide for no less than 30 calendar days prior written notice to the RAILROAD and AGENCY of cancellation of or any material change in, the policies.

It is understood and agreed that the foregoing insurance coverage is not intended to, and shall not relieve the CONTRATOR from or serve to limit CONTRACTOR's liability or indemnity obligations under the provisions herein.

It is further understood and agreed that, so long as the Contract remains in force, the AGENCY may from time to time revise the amount or form of insurance coverage provided as circumstances or changing economic conditions may require. The AGENCY will give the CONTRACTOR written notice of any such requested change at least 30 calendar days prior to the date of expiration of the then existing policy or policies, and the CONTRACTOR agrees to, and shall, thereupon provide the AGENCY with such revised policy or policies therefore.

2. Insurance required of Subcontractor
If the CONTRACTOR chooses to hire a different company for performance of the work, before commencing work, the CONTRACTOR shall provide proof to the AGENCY and RAILROAD that all companies performing work under CONTACTOR's supervision have provided insurance as required above or are covered under CONTRACTOR's Insurance.

K. INDEMNITY

Contractor shall indemnify, defend, and hold harmless the RAILROAD from any and all claims, demands, lawsuits, or liability for all losses, fines, damages, injuries, and deaths to persons or property (real or personal property) and all expenses and costs, including attorney fees, costs of litigation, and all other defense costs, resulting from or arising from the activities of the contractor(s) or any agents in the performance of the construction, repair, or maintenance work on said highway bridge. Notwithstanding the foregoing, nothing herein contained is to be deemed or construed as indemnification against the negligence of the RAILROAD and their officers, employees, or agents

L. MECHANICS' LIENS.

The CONTRACTOR shall not permit or suffer any mechanic's or material supplier's liens of any kind or nature to be enforced against any property of RAILROAD for any work performed. The CONTRACTOR shall indemnify and hold harmless RAILROAD from and against any liens, claims, demands, costs, or expenses of whatsoever nature in any way connected with or growing out of such work done, labor performed, or materials furnished.

M. METHOD OF MEASUREMENT AND BASIS OF PAYMENT.

Railroad Insurance Provisions required by this specification beyond those required by the AGENCY STANDARD SPECIFICATIONS will be measured as a lump sum. The cost of insurance provisions above that required by the AGENCY STANDARD SPECIFICATIONS shall be included in the lump sum bid price for Railroad Insurance Provisions.

PROJECT LABOR AGREEMENT (PLA) *(PENDING APPROVAL)*

Description. The Illinois Project Labor Agreements Act, 30 ILCS 571, states that the State of Illinois has a compelling interest in awarding public works contracts so as to ensure the highest standards of quality and efficiency at the lowest responsible cost. A project labor agreement (PLA) is a form of pre-hire collective bargaining agreement covering all terms and conditions of employment on a specific project that is intended to support this compelling interest. It has been determined by the City of East Moline that a PLA is appropriate for the project that is the subject of this contract. The PLA document, provided below, only applies to the construction site for this contract. It is the policy of the Illinois Department of Transportation (IDOT) on this contract, and all construction projects, to allow all contractors and subcontractors to compete for contracts and subcontracts without regard to whether they are otherwise parties to collective bargaining agreements.

This project will be bid and constructed in abidance with the terms and conditions of the Illowa Construction Labor and Management Council's IMPACT Memorandum of Understanding. All contractors will submit bids based upon these terms and shall require all subcontractors to adhere to the same. A copy of the IMPACT Agreement applicable to this project is available from the Illowa Construction Labor and Management Council, 2112 53rd Street, Moline, Illinois, 61265, (563-940-6094) and is also included herein as part of this special provision.

Execution of Letter of Assent. As a condition of the award of the contract, the successful bidder and each of its subcontractors shall execute a "Contractor Letter of Assent", in the form attached to the PLA as Exhibit A. The successful bidder shall submit a Subcontractor's Contractor Letter of Assent to the City prior to the subcontractor's performance of work on the project. Upon request, copies of the applicable collective bargaining agreements will be provided by the appropriate signatory labor organization at the pre-job conference.

Quarterly Reporting. Section 37 of the Illinois Project Labor Agreements Act requires the Department (IDOT) to submit quarterly reports regarding the number of minorities and females employed under PLAs. To assist in this reporting effort, the Contractor shall provide a quarterly workforce participation report for all minority and female employees working under the PLA of this contract. The data shall be reported on Construction Form BC 820, Project Labor Agreement (PLA) Workforce Participation Quarterly Reporting Form available on the Department's website http://www.idot.illinois.gov/Assets/uploads/files/IDOT-Forms/BC/BC%20820.docx.

The report shall be submitted no later than the 15th of the month following the end of each quarter (i.e., April 15 for the January – March reporting period). The form shall be emailed to DOT.PLA.Reporting@illinois.gov or faxed to (217) 524-4922.

Any costs associated with complying with this provision shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed.

ILLOWA CONSTRUCTION
LABOR AND MANAGEMENT COUNCIL

IMPACT ™

MEMORANDUM OF UNDERSTANDING

For construction of facilities located within the nine (9) county areas of Illinois and Iowa and represented by the Illowa Construction Labor and Management Council. These counties are Rock Island, Henry, Mercer, Knox, Warren and Henderson in Illinois and Muscatine, Scott and Clinton in Iowa.

This Memorandum of Understanding is between the signatory parties as listed on the signature page herein and has been developed in a mutually satisfactory manner to better service the needs of the construction consumer and to give the consumer the best overall value for their construction dollar.

In an effort to assure any client of our signatory employers that there is a sincere effort to efficiently address the construction needs of a project, **the signatories to this document will provide the following:**

1. Increased productivity through the employment of craftsmen who have either completed an accredited apprenticeship program or are currently registered in such a program and are under the direct supervision of a certified trained craftsman.

2. Work stoppages, job disruptions or strikes will not occur for any reason on any project site covered by this **IMPACT** Agreement. Any economic disputes will be handled in accordance with the provisions of Article XIV.

3. All parties shall follow all recognized ethical standards and procedures in soliciting bids and performing all work.

4. A pre-construction meeting as outlined in Article V, shall be scheduled for each **IMPACT** project.

5. The unions and contractors agree to abide by all Federal, State and Local safety regulations as they apply to the construction process.

ARTICLE I

RECOGNITION

It is agreed between the Unions and the Illowa Construction Labor and Management Council or any other signatory employer that this Memorandum of Understanding is applicable to any construction project within the geographical jurisdiction of the Illowa Construction Labor and Management Council, when said project is assigned and signed for by the owner as an **IMPACT** Project.

1. The owner recognizes the unions herein as duly constituted for the purpose of bargaining collectively and administering this memorandum for the members affiliated with the various international unions.

2. All Contractors and/or Contractors acting as Construction Managers shall be signatory and bound by the applicable local collective bargaining agreement(s) with the appropriate Tri-City Building and Construction Trades Council local union affiliated with the AFL-CIO. Any conflict between the terms of this Agreement and any local collective bargaining agreements, this Agreement shall govern.

3. When public funding is provided for a project, the owner will follow its normal bidding procedures and will include as a condition of the bid, that any bidder must be willing to sign a project specific agreement with the respective craft or be a craft user.

ARTICLE II

NON-DISCRIMINATION

The unions and the employer agree to abide by all executive orders and subsequent amendments thereto, regarding the Civil Rights Act of 1964, pertaining to non-discrimination in employment, in every respect.

ARTICLE III

SCOPE OF WORK

1. This memorandum covers all work assigned by the owner and/or Construction Manager to the contractor and performed by the employees of the contractors covered by this memorandum.

2. The unions and the contractor understand that the owner may choose to perform or directly subcontract or purchase any part or parts of work necessary on the project with due consideration given to achieving the highest standards and harmonious working conditions herein. All subcontracting of work covered by this memorandum shall be limited to contractors signatory to this memorandum.

This Memorandum of Understanding shall apply only to those projects set forth herein:

OWNER: **City of East Moline**

PROJECT: **Greater Downtown Revitalization – 15th Avenue section**

LOCATION: **15th Avenue from 6th Street to 13th Street**

BID DATE: **April 25, 2025**

ARTICLE IV

PRE-CONSTRUCTION MEETING

In order to assure that all parties have a clear understanding of the construction project, IMPACT Agreement, and to promote labor and management cooperation, a pre-construction meeting shall be held with all signatory parties and the general contractor or construction manager prior to the start of the project. The general contractor or construction manager will discuss the scope of work, schedule, and specifications of the construction project.

MANDATORY pre-construction meeting outline:

A. The Tri-City Building and Construction Trades Council and the Illowa Construction Labor & Management Council shall schedule a pre-construction meeting with the general contractor or construction manager. A notice stating the date, time and location of this conference will be sent to all crafts having jurisdiction on the project.

B. Representatives of the general contractor or construction manager and Tri-City Building Trades Council will meet to discuss all aspects of construction, including the scope of work, schedules, jurisdiction, and all subcontractors participating in the construction project. All work assignments will adhere to prevailing trade agreements and local practices in the best interest of the project owner.

ARTICLE V

UNION REPRESENTATIVE

Local union business representatives shall be granted reasonable access to projects, subject to contractor and owner regulations.

ARTICLE VI

WAGES & BENEFITS

Wage rates and payment of same shall be as set forth in the current labor agreement of the affiliated local union performing the work.

ARTICLE VII

HOLIDAYS

For the purpose of uniformity, the following holidays shall be observed and, if worked, shall be paid at the rate of double time: New Year's Day, Memorial Day (as provided by federal law), July 4th, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day and Christmas Day. When New Years Day, July 4th, or Christmas Day fall on a Saturday or Sunday the holiday will be observed on Friday or Monday as recognized by the federal government.

ARTICLE VIII

SUPERVISION

The designation, appointment and determination of the number of foremen/women and/or general foremen/women is the sole responsibility of the contractor.

ARTICLE XV

WORK HOURS PER DAY

Eight (8) hours per day shall constitute a day's work and forty (40) hours per week, Monday through Friday, inclusive, shall constitute a week's work. The regular starting time shall be seven (7) o'clock a.m. and the regular quitting time shall be Three-thirty (3:30) o'clock p.m.; lunch time shall be twelve (12) o'clock noon to twelve-thirty (12:30) o'clock p.m.

By mutual consent of the company and the union, the starting and quitting times of any shift, including day work, may be changed for all or any portion of a particular job. For the purpose of this article, the standard work day of eight (8) hours for the job or portion thereof to which any such change of starting time applies shall begin with such agreed starting time.

When so required, multiple shifts of eight (8) hours may be worked. Any shift premiums will be paid based on each respective crafts collective bargaining agreement. A thirty (30) minute lunch period shall be mutually agreed upon by the job superintendent and the union representative and shall not be considered as time worked. Local labor agreement provisions regarding minimum number of days to establish shifts or shift starts are waived for work under this memorandum.

All time worked before and after the established work day of eight (8) hours, Monday through Friday, shall be paid at the rate of time-and-one-half. All work commencing with the beginning of the established work day on Saturday shall be paid at the rate of time-and-one-half. All work commencing with the beginning of the established work day on Sundays and/or holidays shall be paid at the rate of double time.

ARTICLE X

SAFETY

The employees covered by the terms of this memorandum shall at all times, while in the employ of the company, be bound by the safety rules and regulations as established by the owner, company, applicable local or area collective bargaining agreement or applicable safety laws.

ARTICLE XI

APPRENTICES

Apprentice ratios shall be as provided in each respective craft’s local labor agreement.

The unions agree that there may be times when the apprentice ratios may need to be adjusted to meet the needs of the owner, and agree that when such a need does arise, the unions and the contractor will negotiate such ratios on an as needed basis.

ARTICLE XII

HIRING AND TRANSFER OF EMPLOYEES

The contractor agrees to hire employees within the local union's geographic jurisdiction where work is being performed or is to be performed in accordance with the hiring procedure existing in the territory where the work is being performed. In addition, the contractor shall have the right to move foremen/women between jobs and/or local union jurisdictions. If a local union is unable to fill the request of the contractor for employees within a forty-eight (48) hour period after such request for employees (Saturdays, Sundays, and holidays excepted), the contractor may employ employees from any source.

ARTICLE XIII

LOCKOUT OR WORK STOPPAGE

During the term of this Memorandum of Understanding, there shall be no lockout by the company and no work stoppages by the unions. Any employer signatory to this Memorandum of Understanding, shall work through any economic dispute and shall, upon completion of the negotiations, comply with any changes in the new agreement.

ARTICLE XIV

MANAGEMENT CLAUSE

In the exercise of its functions of management, the contractor shall have the right to:

1. Plan, direct and control the operation of all his/her work.
2. Hire employees and supervision.
3. Direct the workforce; assign employees and supervision to their jobs.
4. Discharge, suspend or discipline employees and supervisors for just cause.
5. Transfer, promote or demote employees and supervision.
6. Lay off employees and supervision because of lack of work or for other legitimate reasons.
7. Require employees and supervision to observe the contractor’s rules and regulations not inconsistent with this memorandum.
8. Regulate the use of all equipment and other property of the contractor; decide the amount of equipment to be used, and the number of employees needed.
9. Shall be free to contract work anywhere and shall decide the methods of work and the source from which material and equipment is obtained.

The contractor will not use these rights for the purpose of discrimination against any employee.

ARTICLE XV

ADMINISTRATIVE PROCEDURES

Extensions of the Memorandum of Understanding shall be on a location-to-location basis and shall be sought for each location. Owners and Contractors awarding work to a sub-contractor must be sure that the sub-contractor has and will comply with this Memorandum of Understanding and be in possession of it with permission to utilize it at the start of the project.

In the event that the bidding contractors, after contacting suggested specialty contractors, are unable to receive at least two competitive bids, the bidding contractors, after notifying the respective trade representative, will be allowed to use the service of any bidder that is willing to sign a project specific agreement with the respective craft.

In the event that a particular project has any unique or specialty work operations not normally performed by contractors or sub-contractors in the Illowa Construction Labor and Management Council's geographic area then the requirement of a responsible sub-contractor to make application for this Memorandum of Understanding and be in possession of same may be waived by mutual consent of all parties involved in the particular work operation.

ARTICLE XVI

ENFORCEMENT

Owners and Contractors grant and authorize the Illowa Construction Labor and Management Council to take the necessary measures to enforce the terms of this Agreement.

ARTICLE XVII

DURATION OF AGREEMENT

This Memorandum of Understanding becomes effective on _____ and shall continue in effect until the particular project has been completed. Changes may be made at any time by mutual written consent.

ARTICLE XVIII

GENERAL SAVINGS CLAUSE

Any provisions in this memorandum which are in contravention of any federal, state, local or county regulations or laws affecting all or part of the limits covered by this memorandum shall be suspended in operation within the limits to which such laws or regulations are in effect.

Such suspension shall not affect the operation of any such provisions covered by this memorandum, to which the law or regulation is not applicable. Nor shall it affect the operations of the remainder of the provisions of the memorandum within the limits to which such law or regulation is applicable.

ILLOWA CONSTRUCTION LABOR

AND MANAGEMENT COUNCIL

OWNER

_____

Co-Chairman -- Labor

_____

Name/Title

_____

Co-Chairman -- Management

GENERAL CONTRACTOR

_____

Name/Title

DATE: _____

PLA Exhibit A - Contractor Letter of Assent

(Date)

To All Parties:

In accordance with the terms and conditions of the contract for Construction Work on Contract No. 85774, this Letter of Assent hereby confirms that the undersigned Prime Contractor or Subcontractor agrees to be bound by the terms and conditions of the Project Labor Agreement (IMPACT Memorandum of Understanding) established and entered into by the City of East Moline in connection with said Project.

It is the understanding and intent of the undersigned party that this Project Labor Agreement shall pertain only to the identified Project. In the event it is necessary for the undersigned party to become signatory to a collective bargaining agreement to which it is not otherwise a party in order that it may lawfully make certain required contributions to applicable fringe benefit funds, the undersigned party hereby expressly conditions its acceptance of and limits its participation in such collective bargaining agreement to its work on the Project.

(Authorized Company Officer)

(Company)

IDOT TRAINING PROGRAM GRADUATE ON-THE-JOB TRAINING SPECIAL PROVISION
Effective: August 1, 2012 Revised: February 2, 2017

In addition to the Contractor's equal employment opportunity (EEO) affirmative action efforts undertaken as required by this Contract, the Contractor is encouraged to participate in the incentive program described below to provide additional on-the-job training to certified graduates of the IDOT pre-apprenticeship training program, as outlined in this Special Provision.

IDOT funds, and various Illinois community colleges operate, pre-apprenticeship training programs throughout the State to provide training and skill-improvement opportunities to promote the increased employment of minority groups, disadvantaged persons and women in all aspects of the highway construction industry. The intent of this IDOT Pre-Apprenticeship Training Program Graduate (TPG) special provision (Special Provision) is to place these certified program graduates on the project site for this Contract in order to provide the graduates with meaningful on-the-job training. Pursuant to this Special Provision, the Contractor must make every reasonable effort to recruit and employ certified TPG trainees to the extent such individuals are available within a practicable distance of the project site.

Specifically, participation of the Contractor or its subcontractor in the Program entitles the participant to reimbursement for graduates' hourly wages at $15.00 per hour per utilized TPG trainee, subject to the terms of this Special Provision. Reimbursement payment will be made even though the Contractor or subcontractor may also receive additional training program funds from other non-IDOT sources for other non-TPG trainees on the Contract, provided such other source does not specifically prohibit the Contractor or subcontractor from receiving reimbursement from another entity through another program, such as IDOT through the TPG program. With regard to any IDOT funded construction training program other than TPG, however, additional reimbursement for other IDOT programs will not be made beyond the TPG Program described in this Special Provision when the TPG Program is utilized.

No payment will be made to the Contractor if the Contractor or subcontractor fails to provide the required on-site training to TPG trainees, as solely determined by IDOT. A TPG trainee must begin training on the project as soon as the start of work that utilizes the relevant trade skill and the TPG trainee must remain on the project site through completion of the Contract, so long as training opportunities continue to exist in the relevant work classification. Should a TPG trainee's employment end in advance of the completion of the Contract, the Contractor must promptly notify the IDOT District EEO Officer for the Contract that the TPG's involvement in the Contract has ended. The Contractor must supply a written report for the reason the TPG trainee involvement terminated, the hours completed by the TPG trainee on the Contract, and the number of hours for which the incentive payment provided under this Special Provision will be, or has been claimed for the separated TPG trainee.

Finally, the Contractor must maintain all records it creates as a result of participation in the Program on the Contract, and furnish periodic written reports to the IDOT District EEO Officer that document its contractual performance under and compliance with this Special Provision. Finally, through participation in the Program and reimbursement of wages, the Contractor is not relieved of, and IDOT has not waived, the requirements of any federal or state labor or employment law applicable to TPG workers, including compliance with the Illinois Prevailing Wage Act.

METHOD OF MEASUREMENT: The unit of measurement is in hours.

BASIS OF PAYMENT: This work will be paid for at the contract unit price of $15.00 per hour for each utilized certified TPG Program trainee (TRAINEES TRAINING PROGRAM GRADUATE). The estimated total number of hours, unit price, and total price must be included in the schedule of prices for the Contract submitted by Contractor prior to beginning work. The initial number of TPG trainees for which the incentive is available for this contract is **4**.

The Department has contracted with several educational institutions to provide screening, tutoring and pre-training to individuals interested in working as a TPG trainee in various areas of common construction trade work. Only individuals who have successfully completed a Pre-Apprenticeship Training Program at these IDOT approved institutions are eligible to be TPG trainees. To obtain a list of institutions that can connect the Contractor with eligible TPG trainees, the Contractor may contact: HCCTP TPG Program Coordinator, Office of Business and Workforce Diversity (IDOT OBWD), Room 319, Illinois Department of Transportation, 2300 S. Dirksen Parkway, Springfield, Illinois 62764. Prior to commencing construction with the utilization of a TPG trainee, the Contractor must submit documentation to the IDOT District EEO Officer for the Contract that provides the names and contact information of the TPG trainee(s) to be trained in each selected work classification, proof that that the TPG trainee(s) has successfully completed a Pre-Apprenticeship Training Program, proof that the TPG is in an Apprenticeship Training Program approved by the U.S. Department of Labor Bureau of Apprenticeship Training, and the start date for training in each of the applicable work classifications.

To receive payment, the Contractor must provide training opportunities aimed at developing a full journeyworker in the type of trade or job classification involved. During the course of performance of the Contract, the Contractor may seek approval from the IDOT District EEO Officer to employ additional eligible TPG trainees. In the event the Contractor subcontracts a portion of the contracted work, it must determine how many, if any, of the TPGs will be trained by the subcontractor. Though a subcontractor may conduct training, the Contractor retains the responsibility for meeting all requirements imposed by this Special Provision. The Contractor must also include this Special Provision in any subcontract where payment for contracted work performed by a TPG trainee will be passed on to a subcontractor.

Training through the Program is intended to move TPGs toward journeyman status, which is the primary objective of this Special Provision. Accordingly, the Contractor must make every effort to enroll TPG trainees by recruitment through the Program participant educational institutions to the extent eligible TPGs are available within a reasonable geographic area of the project. The Contractor is responsible for demonstrating, through documentation, the recruitment efforts it has undertaken prior to the determination by IDOT whether the Contractor is in compliance with this Special Provision, and therefore, entitled to the Training Program Graduate reimbursement of $15.00 per hour.

Notwithstanding the on-the-job training requirement of this TPG Special Provision, some minimal off-site training is permissible as long as the offsite training is an integral part of the work of the contract, and does not compromise or conflict with the required on-site training that is central to the purpose of the Program. No individual may be employed as a TPG trainee in any work classification in which he/she has previously successfully completed a training program leading to journeyman status in any trade, or in which he/she has worked at a journeyman level or higher.

ACCESSIBLE PEDESTRIAN SIGNALS (APS) (BDE)

Effective: April 1, 2003
Revised: January 1, 2022

Description. This work shall consist of furnishing and installing accessible pedestrian signals (APS). Each APS shall consist of an interactive vibrotactile pedestrian pushbutton with speaker, an informational sign, a light emitting diode (LED) indicator light, a solid-state electronic control board, a power supply, wiring, and mounting hardware. The APS shall meet the requirements of the MUTCD and Sections 801 and 888 of the Standard Specifications, except as modified herein.

Electrical Requirements. The APS shall operate with systems providing 95 to 130 VAC, 60 Hz and throughout an ambient air temperature range of -29 to +160 °F (-34 to +70 °C).

The APS shall contain a power protection circuit consisting of both fuse and transient protection.

Audible Indications. A pushbutton locator tone shall sound at each pushbutton and shall be deactivated during the associated walk indication and when associated traffic signals are in flashing mode. Pushbutton locator tones shall have a duration of 0.15 seconds or less and shall repeat at 1-second intervals. Each actuation of the pushbutton shall be accompanied by the speech message "Wait".

If two accessible pedestrian pushbuttons are placed less than 10 ft (3 m) apart or placed on the same pole, the audible walk indication shall be a speech walk message. This message shall sound throughout the WALK interval only. The verbal message shall be modeled after: "'Street Name.' Walk Sign is on to cross "Street Name'." For signalized intersections utilizing exclusive pedestrian phasing, the verbal message shall be "Walk sign is on for all crossings". In addition, a speech pushbutton information message shall be provided by actuating the APS pushbutton when the WALK interval is not timing. This verbal message shall be modeled after: "Wait. Wait to cross 'Street Name' at 'Street Name'".

Where two accessible pedestrian pushbuttons are separated by at least 10 ft (3 m), the walk indication shall be an audible percussive tone. It shall repeat at 8 to 10 ticks per second with a dominant frequency of 880 Hz.

Automatic volume adjustments in response to ambient traffic sound level shall be provided up to a maximum volume of 100 dBA. Locator tone and verbal messages shall be no more than 5 dB louder than ambient sound.

At locations with railroad interconnection, an additional speech message stating "Walk time shortened when train approaches" shall be used after the speech walk message. At locations with emergency vehicle preemption, an additional speech message "Walk time shortened when emergency vehicle approaches" shall be used after the speech walk message.

Pedestrian Pushbutton. Pedestrian pushbuttons shall be at least 2 in. (50 mm) in diameter or width. The force required to activate the pushbutton shall be no greater than 3.5 lb (15.5 N).

A red LED shall be located on or near the pushbutton which, when activated, acknowledges the pedestrians request to cross the street.

Signage. A sign shall be located immediately above the pedestrian pushbutton and parallel to the crosswalk controlled by the pushbutton. The sign shall conform to one of the following standard MUTCD designs: R10-3, R10-3a, R10-3e, R10-3i, R10-4, and R10-4a.

Tactile Arrow. A tactile arrow, pointing in the direction of travel controlled by a pushbutton, shall be provided on the pushbutton.

Vibrotactile Feature. The pushbutton shall pulse when depressed and shall vibrate continuously throughout the WALK interval.

Method of Measurement. This work will be measured for payment as each, per pushbutton.

Basis of Payment. This work will be paid for at the contract unit price per each for ACCESSIBLE PEDESTRIAN SIGNALS.

80099

AGGREGATE SUBGRADE IMPROVEMENT (BDE)

Effective: April 1, 2012
Revised: April 1, 2022

Add the following Section to the Standard Specifications:

"**SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT**

303.01 Description. This work shall consist of constructing an aggregate subgrade improvement (ASI).

303.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate	1004.07
(b) Reclaimed Asphalt Pavement (RAP)	1031.09

303.03 Equipment. The vibratory roller shall be according to Article 1101.01, or as approved by the Engineer. Vibratory machines, such as tampers, shall be used in areas where rollers do not fit.

303.04 Soil Preparation. The minimum immediate bearing value (IBV) of the soil below the improved subgrade shall be according to the Department's "Subgrade Stability Manual" for the aggregate thickness specified.

303.05 Placing and Compacting. The maximum nominal lift thickness of aggregate gradations CA 2, CA 6, and CA 10 when compacted shall be 9 in. (225 mm). The maximum nominal lift thickness of aggregate gradations CS 1, CS 2, and RR 1 when compacted shall be 24 in. (600 mm).

The top surface of the aggregate subgrade improvement shall consist of a layer of capping aggregate gradations CA 6 or CA 10 that is 3 in. (75 mm) thick after compaction. Capping aggregate will not be required when aggregate subgrade improvement is used as a cubic yard pay item for undercut applications.

Each lift of aggregate shall be compacted to the satisfaction of the Engineer. If the moisture content of the material is such that compaction cannot be obtained, sufficient water shall be added so that satisfactory compaction can be obtained.

303.06 Finishing and Maintenance. The aggregate subgrade improvement shall be finished to the lines, grades, and cross sections shown on the plans, or as directed by the Engineer. The aggregate subgrade improvement shall be maintained in a smooth and compacted condition.

303.07 Method of Measurement. This work will be measured for payment according to Article 311.08.

303.08 Basis of Payment. This work will be paid for at the contract unit price per cubic yard (cubic meter) or ton (metric ton) for AGGREGATE SUBGRADE IMPROVEMENT or at the contract unit price per square yard (square meter) for AGGREGATE SUBGRADE IMPROVEMENT, of the thickness specified."

Add the following to Section 1004 of the Standard Specifications:

"**1004.07 Coarse Aggregate for Aggregate Subgrade Improvement (ASI).** The aggregate shall be according to Article 1004.01 and the following.

(a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete. In applications where greater than 24 in. (600 mm) of ASI material is required, gravel may be used below the top 12 in (300 mm) of ASI.

(b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials.

(c) Gradation.

(1) The coarse aggregate gradation for total ASI thickness less than or equal to 12 in. (300 mm) shall be CA 2, CA 6, CA 10, or CS 1.

The coarse aggregate gradation for total ASI thickness greater than 12 in. (300 mm) shall be CS 1 or CS 2 as shown below or RR 1 according to Article 1005.01(c).

	COARSE AGGREGATE SUBGRADE GRADATIONS				
Grad No.	Sieve Size and Percent Passing				
	8"	6"	4"	2"	#4
CS 1	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20
CS 2		100	80 ± 10	25 ± 15	

	COARSE AGGREGATE SUBGRADE GRADATIONS (Metric)				
Grad No.	Sieve Size and Percent Passing				
	200 mm	150 mm	100 mm	50 mm	4.75 mm
CS 1	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20
CS 2		100	80 ± 10	25 ± 15	

(2) Capping aggregate shall be gradation CA 6 or CA 10."

Add the following to Article 1031.09 of the Standard Specifications:

"(b) RAP in Aggregate Subgrade Improvement (ASI). RAP in ASI shall be according to Articles 1031.01(a), 1031.02(a), 1031.06(a)(1), and 1031.06(a)(2), and the following.

(1) The testing requirements of Article 1031.03 shall not apply.

(2) Crushed RAP used for the lower lift may be mechanically blended with aggregate gradations CS 1, CS 2, and RR 1 but it shall be no greater than 40 percent of the total product volume. RAP agglomerations shall be no greater than 4 in. (100 mm).

(3) For capping aggregate, well graded RAP having 100 percent passing the 1 1/2 in. (38 mm) sieve may be used when aggregate gradations CS 1, CS 2, CA 2, or RR 1 are used in the lower lift. FRAP will not be permitted as capping material.

Blending shall be through calibrated interlocked feeders or a calibrated blending plant such that the prescribed blending percentage is maintained throughout the blending process. The calibration shall have an accuracy of ± 2.0 percent of the actual quantity of material delivered."

80274

CEMENT, FINELY DIVIDED MINERALS, ADMIXTURES; CONCRETE, AND MORTAR (BDE)

Effective: January 1, 2025

Revise the first paragraph of Article 285.05 of the Standard Specifications to read:

"**285.05 Fabric Formed Concrete Revetment Mat.** The grout shall consist of a mixture of cement, fine aggregate, and water so proportioned and mixed as to provide a pumpable slurry. Fly ash or ground granulated blast furnace (GGBF) slag, and concrete admixtures may be used at the option of the Contractor. The grout shall have an air content of not less than 6.0 percent nor more than 9.0 percent of the volume of the grout. The mix shall obtain a compressive strength of 2500 psi (17,000 kPa) at 28 days according to Article 1020.09."

Revise Article 302.02 of the Standard Specifications to read:

"**302.02 Materials.** Materials shall be according to the following.

	Item	Article/Section
(a)	Cement	1001
(b)	Water	1002
(c)	Hydrated Lime	1012.01
(d)	By-Product, Hydrated Lime	1012.02
(e)	By-Product, Non-Hydrated Lime	1012.03
(f)	Lime Slurry	1012.04
(g)	Fly Ash	1010
(h)	Soil for Soil Modification (Note 1)	1009.01
(i)	Bituminous Materials (Note 2)	1032

Note 1. This soil requirement only applies when modifying with lime (slurry or dry).

Note 2. The bituminous materials used for curing shall be emulsified asphalt RS-2, CRS-2, HFE 90, or HFE 150; rapid curing liquid asphalt RC-70; or medium curing liquid asphalt MC-70 or MC-250."

Revise Article 312.07(c) of the Standard Specifications to read:

"(c) Cement ..... 1001"

Add Article 312.07(i) of the Standard Specifications to read:

"(i) Ground Granulated Blast Furnace (GGBF) Slag ..... 1010"

Revise the first paragraph of Article 312.09 of the Standard Specifications to read:

"**312.09 Proportioning and Mix Design.** At least 60 days prior to start of placing CAM II, the Contractor shall submit samples of materials to be used in the work for proportioning and testing.

The mixture shall contain a minimum of 200 lb (120 kg) of cement per cubic yard (cubic meter). Cement may be replaced with fly ash or ground granulated blast furnace (GGBF) slag according to Article 1020.05(c)(1) or 1020.05(c)(2), respectively, however the minimum cement content in the mixture shall be 170 lbs/cu yd (101 kg/cu m). Blends of coarse and fine aggregates will be permitted, provided the volume of fine aggregate does not exceed the volume of coarse aggregate. The Engineer will determine the proportions of materials for the mixture according to the "Portland Cement Concrete Level III Technician Course" manual. However, the Contractor may substitute their own mix design. Article 1020.05(a) shall apply, and a Level III PCC Technician shall develop the mix design."

Revise Article 352.02 of the Standard Specifications to read:

"**352.02 Materials.** Materials shall be according to the following.

Item	Article/Section
(a) Cement (Note 1)	1001
(b) Soil for Soil-Cement Base Course	1009.03
(c) Water	1002
(d) Bituminous Materials (Note 2)	1032

Note 1. Bulk cement may be used for the traveling mixing plant method if the equipment for handling, weighing, and spreading the cement is approved by the Engineer.

Note 2. The bituminous materials used for curing shall be emulsified asphalt RS-2, CRS-2, HFE 90, or HFE 150; rapid curing liquid asphalt RC-70; or medium curing liquid asphalt MC-70 or MC-250."

Revise Article 404.02 of the Standard Specifications to read:

"**404.02 Materials.** Materials shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Fine Aggregate	1003.08
(d) Bituminous Material (Tack Coat)	1032.06
(e) Emulsified Asphalts (Note 1) (Note 2)	1032.06
(f) Fiber Modified Joint Sealer	1050.05
(g) Additives (Note 3)	

Note 1. When used for slurry seal, the emulsified asphalt shall be CQS-1h according to Article 1032.06(b).

Note 2. When used for micro-surfacing, the emulsified asphalt shall be CQS-1hP according to Article 1032.06(e).

Note 3. Additives may be added to the emulsion mix or any of the component materials to provide the control of the quick-traffic properties. They shall be included as part of the mix design and be compatible with the other components of the mix.

Revise the last sentence of the fourth paragraph of Article 404.08 of the Standard Specifications to read:

"When approved by the Engineer, the sealant may be dusted with fine sand, cement, or mineral filler to prevent tracking."

Revise Note 2 of Article 516.02 of the Standard Specifications to read:

"Note 2. The sand-cement grout mix shall be according to Section 1020 and shall be a 1:1 blend of sand and cement comprised of a Type I, IL, or II cement at 185 lb/cu yd (110 kg/cu m). The maximum water cement ratio shall be sufficient to provide a flowable mixture with a typical slump of 10 in. (250 mm)."

Revise Note 2 of Article 543.02 of the Standard Specifications to read:

"Note 2. The grout mixture shall be 6.50 hundredweight/cu yd (385 kg/cu m) of cement plus fine aggregate and water. Fly ash or ground granulated blast furnace (GGBF) slag may replace a maximum of 5.25 hundredweight/cu yd (310 kg/cu m) of the cement. The water/cement ratio, according to Article 1020.06, shall not exceed 0.60. An air-entraining admixture shall be used to produce an air content, according to Article 1020.08, of not less than 6.0 percent nor more than 9.0 percent of the volume of the grout. The Contractor shall have the option to use a water-reducing or high range water-reducing admixture."

Revise Article 583.01 of the Standard Specifications to read:

"**583.01 Description.** This work shall consist of placing cement mortar along precast, prestressed concrete bridge deck beams as required for fairing out any unevenness between adjacent deck beams prior to placing of waterproofing membrane and surfacing."

Revise Article 583.02(a) of the Standard Specifications to read:

"(a) Cement .....1001"

Revise the first paragraph of Article 583.03 of the Standard Specifications to read:

"**583.03 General.** This work shall only be performed when the air temperature is 45 °F (7 °C) and rising. The mixture for cement mortar shall consist of three parts sand to one part cement by volume. The amount of water shall be no more than that necessary to produce a workable, plastic mortar."

Revise Note 2/ in Article 1003.01(b) of the Standard Specifications to read:

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"2/ Applies only to sand. Sand exceeding the colorimetric test standard of 11 (Illinois Modified AASHTO T 21) will be checked for mortar making properties according to Illinois Modified ASTM C 87 and shall develop a compressive strength at the age of 14 days when using Type I, IL, or II cement of not less than 95 percent of the comparable standard.

Revise the second sentence of Article 1003.02(e)(1) of the Standard Specifications to read:

"The test will be performed with Type I, IL, or II portland cement having a total equivalent alkali content ($Na_2O + 0.658K_2O$) of 0.90 percent or greater."

Revise the first sentence of the second paragraph of Article 1003.02(e)(3) of the Standard Specifications to read:

"The ASTM C 1293 test shall be performed with Type I, IL, or II portland cement having a total equivalent alkali content ($Na_2O + 0.658K_2O$) of 0.80 percent or greater."

Revise the second sentence of Article 1004.02(g)(1) of the Standard Specifications to read:

"The test will be performed with Type I, IL, or II portland cement having a total equivalent alkali content ($Na_2O + 0.658K_2O$) of 0.90 percent or greater."

Revise Article 1017.01 of the Standard Specifications to read:

"**1017.01 Requirements.** The mortar shall be high-strength according to ASTM C 387 and shall have a minimum 80.0 percent relative dynamic modulus of elasticity when tested by the Department according to Illinois Modified AASHTO T 161 or AASHTO T 161 when tested by an independent lab. The high-strength mortar shall have a water-soluble chloride ion content of less than 0.40 lb/cu yd (0.24 kg/cu m). The test shall be performed according to ASTM C 1218, and the high-strength mortar shall have an age of 28 to 42 days at the time of test. The ASTM C 1218 test shall be performed by an independent lab a minimum of once every five years, and the test results shall be provided to the Department. Mixing of the high-strength mortar shall be according to the manufacturer's specifications. The Department will maintain a qualified product list."

Revise the fourth sentence of Article 1018.01 of the Standard Specifications to read:

"The ASTM C 1218 test shall be performed by an independent lab a minimum of once every five years, and the test results shall be provided to the Department."

Revise Article 1019.02 of the Standard Specifications to read:

"**1019.02 Materials.** Materials shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Water	1002

(c) Fine Aggregate for Controlled Low-Strength Material (CLSM) 1003.06
(d) Fly Ash 1010
(e) Ground Granulated Blast Furnace (GGBF) Slag 1010
(f) Admixtures (Note 1)

Note 1. The air-entraining admixture may be in powder or liquid form. Prior to approval, a CLSM air-entraining admixture will be evaluated by the Department. The admixture shall be able to meet the air content requirements of Mix 2. The Department will maintain a qualified product list."

Revise Article 1019.05 of the Standard Specifications to read:

"**1019.05 Department Mix Design.** The Department mix design shall be Mix 1, 2, or 3 and shall be proportioned to yield approximately one cubic yard (cubic meter).

Mix 1	
Cement	50 lb (30 kg)
Fly Ash – Class C or F, and/or GGBF Slag	125 lb (74 kg)
Fine Aggregate – Saturated Surface Dry	2900 lb (1720 kg)
Water	50-65 gal (248-322 L)
Air Content	No air is entrained

Mix 2	
Cement	125 lb (74 kg)
Fine Aggregate – Saturated Surface Dry	2500 lb (1483 kg)
Water	35-50 gal (173-248 L)
Air Content	15-25 %

Mix 3	
Cement	40 lb (24 kg)
Fly Ash – Class C or F, and/or GGBF Slag	125 lb (74 kg)
Fine Aggregate – Saturated Surface Dry	2500 lb (1483 kg)
Water	35-50 gal (179-248 L)
Air Content	15-25 %"

Revise Article 1020.04, Table 1, Note (8) of the Standard Specifications to read:

"(8) In addition to the Type III portland cement, 100 lb/cu yd of ground granulated blast-furnace slag and 50 lb/cu yd of microsilica (silica fume) shall be used. For an air temperature greater than 85 ºF, the Type III portland cement may be replaced with Type I, IL, or II portland cement."

Revise Article 1020.04, Table 1 (Metric), Note (8) of the Standard Specifications to read:

"(8) In addition to the Type III portland cement, 60 kg/cu m of ground granulated blast-furnace slag and 30 kg/cu m of microsilica (silica fume) shall be used. For an air temperature greater than 30 ºC, the Type III portland cement may be replaced with Type I, IL, or II portland cement."

Revise the second paragraph of Article 1020.05(a) of the Standard Specifications to read:

"For a mix design using a portland-pozzolan cement, portland blast-furnace slag cement, portland-limestone cement, or replacing portland cement with finely divided minerals per Articles 1020.05(c) and 1020.05(d), the Contractor may submit a mix design with a minimum portland cement content less than 400 lbs/cu yd (237 kg/cu m), but not less than 375 lbs/cu yd (222 kg/cu m), if the mix design is shown to have a minimum relative dynamic modulus of elasticity of 80 percent determined according to AASHTO T 161. Testing shall be performed by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete."

Revise the first sentence of the first paragraph of Article 1020.05(b) of the Standard Specifications to read:

"Corrosion inhibitors and concrete admixtures shall be according to the qualified product lists."

Delete the fourth and fifth sentences of the second paragraph of Article 1020.05(b) of the Standard Specifications.

Revise the third sentence of the second paragraph of Article 1020.05(b)(5) of the Standard Specifications to read:

"The qualified product lists of concrete admixtures shall not apply."

Revise second paragraph of Article 1020.05(b)(10) of the Standard Specifications to read:

"When calcium nitrite is used, it shall be added at the rate of 4 gal/cu yd (20 L/cu m) and shall be added to the mix immediately after all compatible admixtures have been introduced to the batch. Other corrosion inhibitors shall be added per the manufacturer's specifications."

Delete the third paragraph of Article 1020.05(b)(10) of the Standard Specifications.

Revise Article 1020.15(b)(1)c. of the Standard Specifications to read:

"c. The minimum portland cement content in the mixture shall be 375 lbs/cu yd (222 kg/cu m). When the total of organic processing additions, inorganic processing additions, and limestone addition exceed 5.0 percent in the cement, the minimum portland cement content in the mixture shall be 400 lbs/cu yd (237 kg/cu m). For a drilled shaft, foundation, footing, or substructure, the

minimum portland cement may be reduced to as low as 330 lbs/cu yd (196 kg/cu m) if the concrete has adequate freeze/thaw durability. The Contractor shall provide freeze/thaw test results according to AASHTO T 161, and the relative dynamic modulus of elasticity of the mix design shall be a minimum of 80 percent. Testing shall be performed by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete. Freeze/thaw testing will not be required for concrete that will not be exposed to freezing and thawing conditions as determined by the Engineer."

Revise Article 1021.01 of the Standard Specifications to read:

"**1021.01 General.** Admixtures shall be furnished in liquid or powder form ready for use. The admixtures shall be delivered in the manufacturer's original containers, bulk tank trucks or such containers or tanks as are acceptable to the Engineer. Delivery shall be accompanied by a ticket which clearly identifies the manufacturer, the date of manufacture, and trade name of the material. Containers shall be readily identifiable as to manufacturer, the date of manufacture, and trade name of the material they contain.

Concrete admixtures shall be on one of the Department's qualified product lists. Unless otherwise noted, admixtures shall have successfully completed and remain current with the AASHTO Product Eval and Audit Concrete Admixture (CADD) testing program. For admixture submittals to the Department; the product brand name, manufacturer name, admixture type or types, an electronic link to the product's technical data sheet, and the NTPEP testing number which contains an electronic link to all test data shall be provided. In addition, a letter shall be submitted certifying that no changes have been made in the formulation of the material since the most current round of tests conducted by AASHTO Product Eval and Audit. After 28 days of testing by AASHTO Product Eval and Audit, air-entraining admixtures may be provisionally approved and used on Departmental projects. For all other admixtures, unless otherwise noted, the time period after which provisionally approved status may be earned is 6 months.

The manufacturer shall include the following in the submittal to the AASHTO Product Eval and Audit CADD testing program: the manufacturing range for specific gravity, the midpoint and manufacturing range for residue by oven drying, and manufacturing range of pH. The submittal shall also include an infrared spectrophotometer trace no more than five years old.

For air-entraining admixtures according to Article 1021.02, the specific gravity allowable manufacturing range established by the manufacturer shall be according to AASHTO M 194. For residue by oven drying and pH, the allowable manufacturing range and test methods shall be according to AASHTO M 194.

For admixtures according to Articles 1021.03, 1021.04, 1021.05, 1021.06, 1021.07, and 1021.08, the pH allowable manufacturing range established by the manufacturer shall be according to ASTM E 70. For specific gravity and residue by oven drying, the allowable manufacturing range and test methods shall be according to AASHTO M 194.

All admixtures, except chloride-based accelerators, shall contain a maximum of 0.3 percent chloride by weight (mass) as determined by an appropriate test method. To verify the test result, the Department will use Illinois Modified AASHTO T 260, Procedure A, Method 1.

Prior to final approval of an admixture, the Engineer reserves the right to request a sample for testing. The test and reference concrete mixtures tested by the Engineer will contain a cement content of 5.65 cwt/cu yd (335 kg/cu m). For freeze-thaw testing, the Department will perform the test according to Illinois Modified AASHTO T 161. The flexural strength test will be performed according to AASHTO T 177. If the Engineer decides to test the admixture, the manufacturer shall submit AASHTO T 197 water content and set time test results on the standard cement used by the Department. The manufacturer may select their lab or an independent lab to perform this testing. The laboratory is not required to be accredited by AASHTO.

Random field samples may be taken by the Department to verify an admixture meets specification. A split sample will be provided to the manufacturer if requested. Admixtures that do not meet specification requirements or an allowable manufacturing range established by the manufacturer shall be replaced with new material."

Revise Article 1021.03 of the Standard Specifications to read:

"**1021.03 Retarding and Water-Reducing Admixtures.** The admixture shall be according to the following.

(a) Retarding admixtures shall be according to AASHTO M 194, Type B (retarding) or Type D (water-reducing and retarding).

(b) Water-reducing admixtures shall be according to AASHTO M 194, Type A.

(c) High range water-reducing admixtures shall be according to AASHTO M 194, Type F (high range water-reducing) or Type G (high range water-reducing and retarding)."

Revise Article 1021.05 of the Standard Specifications to read:

"**1021.05 Self-Consolidating Admixtures.** Self-consolidating admixture systems shall consist of either a high range water-reducing admixture only or a high range water-reducing admixture combined with a separate viscosity modifying admixture. The one or two component admixture system shall be capable of producing a concrete that can flow around reinforcement and consolidate under its own weight without additional effort and without segregation.

High range water-reducing admixtures shall be according to AASHTO M 194, Type F.

Viscosity modifying admixtures shall be according to AASHTO M 194, Type S (specific performance)."

Revise Article 1021.06 of the Standard Specifications to read:

"**1021.06 Rheology-Controlling Admixture.** Rheology-controlling admixtures shall be capable of producing a concrete mixture with a lower yield stress that will consolidate easier for slipform applications used by the Contractor. Rheology-controlling admixtures shall be according to AASHTO M 194, Type S (specific performance)."

Revise Article 1021.07 of the Standard Specifications to read:

"**1021.07 Corrosion Inhibitor.** The corrosion inhibitor shall be according to one of the following.

(a) Calcium Nitrite. Corrosion inhibitors shall contain a minimum 30 percent calcium nitrite by weight (mass) of solution and shall comply with either the requirements of AASHTO M 194, Type C (accelerating) or the requirements of ASTM C 1582. The corrosion inhibiting performance requirements of ASTM C 1582 shall not apply.

(b) Other Materials. The corrosion inhibitor shall be according to ASTM C 1582.

For submittals requiring testing according to ASTM M 194, Type C (accelerating), the admixture shall meet the requirements of the AASHTO Product Eval and Audit CADD testing program according to Article 1021.01.

For submittals requiring testing according to ASTM C 1582, a report prepared by an independent laboratory accredited by AASHTO re:source for portland cement concrete shall be provided. The report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications. However, ASTM G 109 test information specified in ASTM C 1582 is not required to be from an independent accredited lab. All other information in ASTM C 1582 shall be from an independent accredited lab. Test data and other information required to be submitted to AASHTO Product Eval and Audit according to Article 1021.01, shall instead be submitted directly to the Department."

Add Article 1021.08 of the Standard Specifications as follows:

"**1021.08 Other Specific Performance Admixtures.** Other specific performance admixtures shall, at a minimum, be according to AASHTO M 194, Type S (specific performance). The Department also reserves the right to require other testing, as determined by the Engineer, to show evidence of specific performance characteristics.

Initial testing according to AASHTO M 194 may be conducted under the AASHTO Product Eval and Audit CADD testing program according to Article 1021.01, or by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete. In either case, test data and other information required to be submitted to AASHTO Product Eval and Audit according to Article 1021.01, shall also be submitted directly to the Department. The independent accredited lab report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications."

Revise Article 1024.01 of the Standard Specifications to read:

"**1024.01 Requirements for Grout.** The grout shall be proportioned by dry volume, thoroughly mixed, and shall have a minimum temperature of 50 °F (10 °C). Water shall not exceed the minimum needed for placement and finishing.

Materials for the grout shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Fine Aggregate	1003.02
(d) Fly Ash	1010
(e) Ground Granulated Blast Furnace (GGBF) Slag	1010
(f) Concrete Admixtures	1021"

Revise Note 1 of Article 1024.02 of the Standard Specifications to read:

"Note 1. Nonshrink grout shall be according to Illinois Modified ASTM C 1107.

The nonshrink grout shall have a water-soluble chloride ion content of less than 0.40 lb/cu yd (0.24 kg/cu m). The test shall be performed according to ASTM C 1218, and the grout shall have an age of 28 to 42 days at the time of test. The ASTM C 1218 test shall be performed by an independent lab a minimum of once every five years, and the test results shall be provided to the Department. Mixing of the nonshrink grout shall be according to the manufacturer's specifications. The Department will maintain a qualified product list."

Revise Article 1029.02 of the Standard Specifications to read:

"**1029.02 Materials.** Materials shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Fly Ash	1010
(c) Ground Granulated Blast Furnace (GGBF) Slag	1010
(d) Water	1002
(e) Fine Aggregate	1003
(f) Concrete Admixtures	1021
(g) Foaming Agent (Note 1)	

Note 1. The manufacturer shall submit infrared spectrophotometer trace and test results indicating the foaming agent meets the requirements of ASTM C 869 in order to be on the Department's qualified product list. Submitted data/results shall not be more than five years old."

Revise the second paragraph of Article 1103.03(a)(4) the Standard Specifications to read:

"The dispenser system shall provide a visual indication that the liquid admixture is actually entering the batch, such as via a transparent or translucent section of tubing or by independent check with an integrated secondary metering device. If approved by the Engineer, an alternate indicator may be used for admixtures dosed at rates of 25 oz/cwt (1630 mL/100 kg) or greater, such as accelerating admixtures, corrosion inhibitors, and viscosity modifying admixtures."

Revise the first two sections of Check Sheet #11 of the Supplemental Specifications and Recurring Special Provisions to read:

"Description. This work shall consist of filling voids beneath rigid and composite pavements with cement grout.

Materials. Materials shall be according to the following Articles of Division 1000 - Materials of the Standard Specifications:

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Fly Ash	1010
(d) Ground Granulated Blast Furnace (GGBF) Slag	1010
(e) Admixtures	1021
(f) Packaged Rapid Hardening Mortar or Concrete	1018"

Revise the third paragraph of Materials Note 2 of Check Sheet #28 of the Supplemental Specifications and Recurring Special Provisions to read:

"The Department will maintain a qualified product list of synthetic fibers, which will include the minimum required dosage rate. For the minimum required fiber dosage rate based on the Illinois Modified ASTM C 1609 test, a report prepared by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete shall be provided. The report shall show results of tests conducted no more than five years prior to the time of submittal."

80460

COMPENSABLE DELAY COSTS (BDE)

Effective: June 2, 2017
Revised: April 1, 2019

Revise Article 107.40(b) of the Standard Specifications to read:

"(b) Compensation. Compensation will not be allowed for delays, inconveniences, or damages sustained by the Contractor from conflicts with facilities not meeting the above definition; or if a conflict with a utility in an unanticipated location does not cause a shutdown of the work or a documentable reduction in the rate of progress exceeding the limits set herein. The provisions of Article 104.03 notwithstanding, compensation for delays caused by a utility in an unanticipated location will be paid according to the provisions of this Article governing minor and major delays or reduced rate of production which are defined as follows.

(1) Minor Delay. A minor delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two hours, but not to exceed two weeks.

(2) Major Delay. A major delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two weeks.

(3) Reduced Rate of Production Delay. A reduced rate of production delay occurs when the rate of production on the work in conflict with the utility in an unanticipated location decreases by more than 25 percent and lasts longer than seven calendar days."

Revise Article 107.40(c) of the Standard Specifications to read:

"(c) Payment. Payment for Minor, Major, and Reduced Rate of Production Delays will be made as follows.

(1) Minor Delay. Labor idled which cannot be used on other work will be paid for according to Article 109.04(b)(1) and (2) for the time between start of the delay and the minimum remaining hours in the work shift required by the prevailing practice in the area.

Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4).

(2) Major Delay. Labor will be the same as for a minor delay.

Equipment will be the same as for a minor delay, except Contractor-owned equipment will be limited to two weeks plus the cost of move-out to either the

Contractor's yard or another job and the cost to re-mobilize, whichever is less. Rental equipment may be paid for longer than two weeks provided the Contractor presents adequate support to the Department (including lease agreement) to show retaining equipment on the job is the most economical course to follow and in the public interest.

(3) Reduced Rate of Production Delay. The Contractor will be compensated for the reduced productivity for labor and equipment time in excess of the 25 percent threshold for that portion of the delay in excess of seven calendar days. Determination of compensation will be in accordance with Article 104.02, except labor and material additives will not be permitted.

Payment for escalated material costs, escalated labor costs, extended project overhead, and extended traffic control will be determined according to Article 109.13."

Revise Article 108.04(b) of the Standard Specifications to read:

"(b) No working day will be charged under the following conditions.

(1) When adverse weather prevents work on the controlling item.

(2) When job conditions due to recent weather prevent work on the controlling item.

(3) When conduct or lack of conduct by the Department or its consultants, representatives, officers, agents, or employees; delay by the Department in making the site available; or delay in furnishing any items required to be furnished to the Contractor by the Department prevents work on the controlling item.

(4) When delays caused by utility or railroad adjustments prevent work on the controlling item.

(5) When strikes, lock-outs, extraordinary delays in transportation, or inability to procure critical materials prevent work on the controlling item, as long as these delays are not due to any fault of the Contractor.

(6) When any condition over which the Contractor has no control prevents work on the controlling item."

Revise Article 109.09(f) of the Standard Specifications to read:

"(f) Basis of Payment. After resolution of a claim in favor of the Contractor, any adjustment in time required for the work will be made according to Section 108. Any adjustment in the costs to be paid will be made for direct labor, direct materials, direct equipment, direct jobsite overhead, direct offsite overhead, and other direct costs allowed by the resolution. Adjustments in costs will not be made for interest charges, loss of anticipated profit, undocumented loss of efficiency, home office overhead and unabsorbed overhead

other than as allowed by Article 109.13, lost opportunity, preparation of claim expenses and other consequential indirect costs regardless of method of calculation.

The above Basis of Payment is an essential element of the contract and the claim cost recovery of the Contractor shall be so limited."

Add the following to Section 109 of the Standard Specifications.

"**109.13 Payment for Contract Delay.** Compensation for escalated material costs, escalated labor costs, extended project overhead, and extended traffic control will be allowed when such costs result from a delay meeting the criteria in the following table.

Contract Type	Cause of Delay	Length of Delay
Working Days	Article 108.04(b)(3) or Article 108.04(b)(4)	No working days have been charged for two consecutive weeks.
Completion Date	Article 108.08(b)(1) or Article 108.08(b)(7)	The Contractor has been granted a minimum two week extension of contract time, according to Article 108.08.

Payment for each of the various costs will be according to the following.

(a) Escalated Material and/or Labor Costs. When the delay causes work, which would have otherwise been completed, to be done after material and/or labor costs have increased, such increases will be paid. Payment for escalated material costs will be limited to the increased costs substantiated by documentation furnished by the Contractor. Payment for escalated labor costs will be limited to those items in Article 109.04(b)(1) and (2), except the 35 percent and 10 percent additives will not be permitted.

(b) Extended Project Overhead. For the duration of the delay, payment for extended project overhead will be paid as follows.

(1) Direct Jobsite and Offsite Overhead. Payment for documented direct jobsite overhead and documented direct offsite overhead, including onsite supervisory and administrative personnel, will be allowed according to the following table.

Original Contract Amount	Supervisory and Administrative Personnel
Up to $5,000,000	One Project Superintendent
Over $ 5,000,000 - up to $25,000,000	One Project Manager, One Project Superintendent or Engineer, and One Clerk
Over $25,000,000 - up to $50,000,000	One Project Manager, One Project Superintendent, One Engineer, and

	One Clerk
Over $50,000,000	One Project Manager, Two Project Superintendents, One Engineer, and One Clerk

(2) Home Office and Unabsorbed Overhead. Payment for home office and unabsorbed overhead will be calculated as 8 percent of the total delay cost.

(c) Extended Traffic Control. Traffic control required for an extended period of time due to the delay will be paid for according to Article 109.04.

When an extended traffic control adjustment is paid under this provision, an adjusted unit price as provided for in Article 701.20(a) for increase or decrease in the value of work by more than ten percent will not be paid.

Upon payment for a contract delay under this provision, the Contractor shall assign subrogation rights to the Department for the Department's efforts of recovery from any other party for monies paid by the Department as a result of any claim under this provision. The Contractor shall fully cooperate with the Department in its efforts to recover from another party any money paid to the Contractor for delay damages under this provision."

80384

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000
Revised: January 2, 2025

1. OVERVIEW AND GENERAL OBLIGATION. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR Part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified in accordance with the requirements of 49 CFR Part 26 and listed in the Illinois Unified Certification Program (IL UCP) DBE Directory. Award of the contract is conditioned on meeting the requirements of 49 CFR Part 26, and failure by the Contractor to carry out the requirements of Part 26 is a material breach of the contract and may result in the termination of the contract or such other remedies as the Department deems appropriate.

2. CONTRACTOR ASSURANCE. All assurances set forth in FHWA 1273 are hereby incorporated by reference and will be physically attached to the final contract and all subcontracts.

3. CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. The Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies and that, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform **2**% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work in accordance with the requirements of 49 CFR 26.53 and SBE Memorandum No. 24-02.

4. IDENTIFICATION OF CERTIFIED DBE. Information about certified DBE Contractors can be found in the Illinois UCP Directory. Bidders can obtain additional information and assistance with identifying DBE-certified companies at the Department's website or by contacting the Department's Bureau of Small Business Enterprises at (217) 785-4611.

5. BIDDING PROCEDURES. Compliance with this Special Provision and SBE Policy Memorandum 24-02 is a material bidding requirement. The following shall be included with the bid.

   (a) DBE Utilization Plan (form SBE 2026) documenting enough DBE participation has been obtained to meet the goal, or a good faith effort has been made to meet the goal even though the efforts did not succeed in obtaining enough DBE participation to meet the goal.

(b) Applicable DBE Participation Statement (form SBE 2023, 2024, and/or 2025) for each DBE firm the bidder has committed to perform the work to achieve the contract goal.

The required forms and documentation shall be submitted as a single .pdf file using the "Integrated Contractor Exchange (iCX)" application within the Department's "EBids System".

The Department will not accept a bid if it does not meet the bidding procedures set forth herein and the bid will be declared non-responsive. A bidder declared non-responsive for failure to meet the bidding procedures will not give rise to an administrative reconsideration. In the event the bid is declared non-responsive, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty and may deny authorization to bid the project if re-advertised for bids.

6. UTILZATION PLAN EVALUATION. The contract will not be awarded until the Utilization Plan is approved. All information submitted by the bidder must be complete, accurate, and adequately document the bidder has committed to DBE participation sufficient to meet the goal, or that the bidder has made good faith efforts to do so, in the event the bidder cannot meet the goal, in order for the Department to commit to the performance of the contract by the bidder.

   The Utilization Plan will be approved by the Department if the Utilization Plan documents sufficient commercially useful DBE work to meet the contract goal or the Department determines, based upon the documentation submitted, that the bidder has made a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A and the requirements of SBE 2026.

   If the Department determines that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan of that determination in accordance with SBE Policy Memorandum 24-02.

7. CALCULATING DBE PARTICIPATION. The Utilization Plan values represent work the bidder commits to have performed by the specified DBEs and paid for upon satisfactory completion. The Department is only able to count toward the achievement of the overall goal and the contract goal the value of payments made for the work actually performed by DBE firms. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR Part 26.55(c) on questions of commercially useful functions as it affects the work. Specific guidelines for counting goal credit are provided in 49 CFR Part 26.55. In evaluating Utilization Plans for award the Department will count goal credit as set forth in Part 26 and in accordance with SBE Policy Memorandum 24-02.

8. CONTRACT COMPLIANCE. The Contractor must utilize the specific DBEs listed to perform the work and supply the materials for which each DBE is listed in the Contractor's approved Utilization Plan, unless the Contractor obtains the Department's written consent to

terminate the DBE or any portion of its work. The DBE Utilization Plan approved by SBE is a condition-of-award, and any deviation to that Utilization Plan, the work set forth therein to be performed by DBE firms, or the DBE firms specified to perform that work, must be approved, in writing, by the Department in accordance with federal regulatory requirements. Deviation from the DBE Utilization Plan condition-of-award without such written approval is a violation of the contract and may result in termination of the contract or such other remedy the Department deems appropriate. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan.

(a) NOTICE OF DBE PERFORMANCE. The Contractor shall provide the Engineer with at least three days advance notice of when all DBE firms are expected to perform the work committed under the Contractor's Utilization Plan.

(b) SUBCONTRACT. If awarded the contract, the Contractor is required to enter into written subcontracts with all DBE firms indicated in the approved Utilization Plan and must provide copies of fully executed DBE subcontracts to the Department upon request. Subcontractors shall ensure that all lower tier subcontracts or agreements with DBEs to supply labor or materials be performed in accordance with this Special Provision.

(c) PAYMENT TO DBE FIRMS. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goal has been paid to the DBE. The Contractor shall document and report all payments for work performed by DBE certified firms in accordance with Article 109.11 of the Standard Specifications. All records of payment for work performed by DBE certified firms shall be made available to the Department upon request.

(d) FINAL PAYMENT. After the performance of the final item of work or trucking, or delivery of material by a DBE and final payment to the DBE by the Contractor, but not later than 30 calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement (form SBE 2115) to the Engineer. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages.

(g) ENFORCEMENT. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.

80029

GREEN PREFORMED THERMOPLASTIC PAVEMENT MARKINGS (BDE)

Effective: January 1, 2021
Revised: January 1, 2022

Revise the following in Table 1 of Article 780.15 of the Standard Specifications to read:

"SYMBOLS [1/]		
Symbol	Large Size sq ft (sq m)	Small Size sq ft (sq m)
Through Arrow	11.5 (1.07)	6.5 (0.60)
Left or Right Arrow	15.6 (1.47)	8.8 (0.82)
2 Arrow Combination Left (or Right) and Through	26.0 (2.42)	14.7 (1.37)
3 Arrow Combination Left, Right, and Through	38.4 (3.56)	20.9 (1.94)
Lane Drop Arrow	41.5 (3.86)	--
Wrong Way Arrow	24.3 (2.26)	--
Railroad "R" 6 ft (1.8 m)	3.6 (0.33)	--
Railroad "X" 20 ft (6.1 m)	54.0 (5.02)	--
International Symbol of Accessibility	3.1 (0.29)	--
Bike Symbol	4.7 (0.44)	--
Shared Lane Symbol	8.0 (0.74)	
Intersection Bicycle Box [2/]	variable sizes	
Two-Stage Bicycle Turn Box [2/]	variable sizes	

1/ Table applies to all types of pavement marking materials, except intersection bicycle box and two-stage bicycle turn box which are limited to preformed thermoplastic.

2/ The cost of symbols appearing in the box are included in the overall square area of the box."

Add the following paragraph to the end of Article 1095.01(a)(2) of the Standard Specifications:

"The pigments used for the green thermoplastic compound shall not contain any hazardous materials listed in the Environmental Protection Agency Code of Federal Regulations (CFR) 40, Section 261.24, Table 1. The combined total of RCRA listed heavy metals shall not exceed 100 ppm when tested by X-ray fluorescence spectroscopy. The pigments shall also be heat resistant, UV stable, and color-fast greens. The pigment shall be uniformly distributed throughout the thermoplastic compound."

Add the following to Article 1095.01(b)(1)e. of the Standard Specifications:

“Green **	Daylight Reflectance	15 % min.

** Shall meet the coordinates of the following color tolerance chart.

x	0.230	0.266	0.367	0.444
y	0.754	0.460	0.480	0.583”

80433

PAVEMENT MARKING INSPECTION (BDE)

Effective: April 1, 2025

Revise the second sentence of the first paragraph of Article 780.13 of the Standard Specifications to read:

"In addition, thermoplastic, preformed plastic, epoxy, preformed thermoplastic, polyurea, and modified urethane pavement markings will be inspected following a winter performance period that extends from November 15 to April 1 of the next year."

80464

RAILROAD PROTECTIVE LIABILITY INSURANCE (BDE)

Effective: December 1, 1986
Revised: January 1, 2022

Description. Railroad Protective Liability and Property Damage Liability Insurance shall be carried according to Article 107.11 of the Standard Specifications. A separate policy is required for each railroad unless otherwise noted.

NAMED INSURED & ADDRESS	NUMBER & SPEED OF PASSENGER TRAINS	NUMBER & SPEED OF FREIGHT TRAINS
BNSF Railway Company P.O. Box 140528 Kansas City, MO 64114	None	13 / 10 MPH

Description and Designation: 7th Street, US DOT #605937E of the Barstow-Rock Island Sub in East Moline, IL; Reconstruction of the 15th Ave/7th Street Signalized Intersection

Class 1 RR (Y or N): Y
DOT/AAR No.: 605937E
RR Division: Chicago
RR Mile Post: 246.32
RR Sub-Division: Barstow-Rock Island

For Freight/Passenger Information Contact: Jacob Rzewnicki, Jacob.Rzewnicki@BNSF.com
Phone: 913-551-4257
For Insurance Information Contact: Jacob Rzewnicki, Jacob.Rzewnicki@BNSF.com
Phone: 913-551-4257

Iowa Interstate Railroad, LLC. 203 2nd Street SE, Suite 500 Cedar Rapids, Iowa 52401-1405	None	13 / 10 MPH

Class 1 RR (Y or N): N
DOT/AAR No.: 605937E
RR Division: Illinois
RR Mile Post: 175.34
RR Sub-Division: Blue Island

For Freight/Passenger Information Contact: Greg Mitchell, gdmitchell@iaisrr.com
Phone: 319-298-5424
For Insurance Information Contact: Greg Mitchell, gdmitchell@iaisrr.com Phone: 319-298-5424

Basis of Payment. Providing Railroad Protective Liability and Property Damage Liability Insurance will be paid for at the contract unit price per Lump Sum for RAILROAD PROTECTIVE LIABILITY INSURANCE.

3426I

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE)

Effective: January 1, 2024
Revised: April 1, 2024

Revise the first paragraph of Article 669.04 of the Standard Specifications to read:

"**669.04 Regulated Substances Monitoring.** Regulated substances monitoring includes environmental observation and field screening during regulated substances management activities. The excavated soil and groundwater within the work areas shall be managed as either uncontaminated soil, hazardous waste, special waste, or non-special waste.

As part of the regulated substances monitoring, the monitoring personnel shall perform and document the applicable duties listed on form BDE 2732 "Regulated Substances Monitoring Daily Record (RSMDR)"."

Revise the first two sentences of the nineteenth paragraph of Article 669.05 of the Standard Specifications to read:

"The Contractor shall coordinate waste disposal approvals with the disposal facility and provide the specific analytical testing requirements of that facility. The Contractor shall make all arrangements for collection, transportation, and analysis of landfill acceptance testing."

Revise the last paragraph of Article 669.05 of the Standard Specifications to read:

"The Contractor shall select a permitted landfill facility or CCDD/USFO facility meeting the requirements of 35 Ill. Admin. Code Parts 810-814 or Part 1100, respectively. The Department will review and approve or reject the facility proposed by the Contractor based upon information provided in BDE 2730. The Contractor shall verify whether the selected facility is compliant with those applicable standards as mandated by their permit and whether the facility is presently, has previously been, or has never been, on the United States Environmental Protection Agency (U.S. EPA) National Priorities List or the Resource Conservation and Recovery Act (RCRA) List of Violating Facilities. The use of a Contractor selected facility shall in no manner delay the construction schedule or alter the Contractor's responsibilities as set forth."

Revise the first paragraph of Article 669.07 of the Standard Specifications to read:

"**669.07 Temporary Staging.** Soil classified according to Articles 669.05(a)(2), (b)(1), or (c) may be temporarily staged at the Contractor's option. All other soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) shall be managed and disposed of without temporary staging to the greatest extent practicable. If circumstances beyond the Contractor's control require temporary staging of these latter materials, the Contractor shall request approval from the Engineer in writing.

Topsoil for re-use as final cover which has been field screened and found not to exhibit PID readings over daily background readings as documented on the BDE 2732, visual staining or

odors, and is classified according to Articles 669.05(a)(2), (a)(3), (a)(4), (b)(1), or (c) may be temporarily staged at the Contractor's option."

Add the following paragraph after the sixth paragraph of Article 669.11 of the Standard Specifications.

"The sampling and testing of effluent water derived from dewatering discharges for priority pollutants volatile organic compounds (VOCs), priority pollutants semi-volatile organic compounds (SVOCs), or priority pollutants metals, will be paid for at the contract unit price per each for VOCS GROUNDWATER ANALYSIS using EPA Method 8260B, SVOCS GROUNDWATER ANALYSIS using EPA Method 8270C, or RCRA METALS GROUNDWATER ANALYSIS using EPA Methods 6010B and 7471A. This price shall include transporting the sample from the job site to the laboratory."

Revise the first sentence of the eight paragraph of Article 669.11 of the Standard Specifications to read:

"Payment for temporary staging of soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) to be managed and disposed of, if required and approved by the Engineer, will be paid according to Article 109.04."

80455

SIGN PANELS AND APPURTENANCES (BDE)

Effective: January 1, 2025
Revised: April 1, 2025

Add Article 720.02(c) of the Standard Specifications to read:

"(c) Aluminum Epoxy Mastic .....1008.03"

Revise the second and third paragraphs of Article 720.02 of the Standard Specifications to read:

"The sign mounting support channel shall be manufactured from steel or aluminum and shall be according to Standard 720001.

Steel support channels shall be according to ASTM A 1011 (A 1011M), ASTM A 635 (A 635M), ASTM A 568 (A 568M), or ASTM A 684 (A 684M), and shall be galvanized. Galvanizing shall be according to ASTM A 653 (A 653M) when galvanized before fabrication, and AASHTO M 111 (M 111M) when galvanized after fabrication. Field or post fabricated drilled holes shall be spot painted with one coat of aluminum epoxy mastic paint prior to installation."

Revise the fifth paragraph of Article 720.02 of the Standard Specifications to read:

"The stainless steel banding for mounting signs or sign support channels to light or signal standards shall be according to ASTM A 240 (A 240M) Type 302 stainless steel."

80462

SOURCE OF SUPPLY AND QUALITY REQUIREMENTS (BDE)

Effective: January 2, 2023

Add the following to Article 106.01 of the Standard Specifications:

"The final manufacturing process for construction materials and the immediately preceding manufacturing stage for construction materials shall occur within the United States. Construction materials shall include an article, material, or supply that is or consists primarily of the following.

(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) Lumber;

(e) Drywall.

Items consisting of two or more of the listed construction materials that have been combined through a manufacturing process, and items including at least one of the listed materials combined with a material that is not listed through a manufacturing process shall be exempt."

80448

SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)

Effective: April 2, 2018

Add the following to Section 109 of the Standard Specifications.

"**109.14 Subcontractor and Disadvantaged Business Enterprise Payment Reporting.** The Contractor shall report all payments made to the following parties:

(a) first tier subcontractors;

(b) lower tier subcontractors affecting disadvantaged business enterprise (DBE) goal credit;

(c) material suppliers or trucking firms that are part of the Contractor's submitted DBE utilization plan.

The report shall be made through the Department's on-line subcontractor payment reporting system within 21 days of making the payment."

80397

SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: November 2, 2017
Revised: April 1, 2019

Replace the second paragraph of Article 109.12 of the Standard Specifications with the following:

"This mobilization payment shall be made at least seven days prior to the subcontractor starting work. The amount paid shall be at the following percentage of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor's work.

Value of Subcontract Reported on Form BC 260A	Mobilization Percentage
Less than $10,000	25%
$10,000 to less than $20,000	20%
$20,000 to less than $40,000	18%
$40,000 to less than $60,000	16%
$60,000 to less than $80,000	14%
$80,000 to less than $100,000	12%
$100,000 to less than $250,000	10%
$250,000 to less than $500,000	9%
$500,000 to $750,000	8%
Over $750,000	7%"

80391

SUBMISSION OF BIDDERS LIST INFORMATION (BDE)

Effective: January 2, 2025
Revised: March 2, 2025

In accordance with 49 CFR 26.11(c) all DBE and non-DBEs who bid as prime contractors and subcontractors shall provide bidders list information, including all DBE and non-DBE firms from whom the bidder has received a quote or bid to work as a subcontractor, whether or not the bidder has relied upon that bid in placing its bid as the prime contractor.

The bidders list information shall be submitted with the bid using the link provided within the "Integrated Contractor Exchange (iCX)" application of the Department's "EBids System".

80463

SUBMISSION OF PAYROLL RECORDS (BDE)

Effective: April 1, 2021
Revised: November 2, 2023

FEDERAL AID CONTRACTS. Revise the following section of Check Sheet #1 of the Recurring Special Provisions to read:

"STATEMENTS AND PAYROLLS

The payroll records shall include the worker's name, social security number, last known address, telephone number, email address, classification(s) of work actually performed, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof), daily and weekly number of hours actually worked in total, deductions made, and actual wages paid.

The Contractor and each subcontractor shall submit certified payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers, last known addresses, telephone numbers, and email addresses shall not be included on weekly submittals. Instead, the payrolls need only include an identification number for each employee (e.g., the last four digits of the employee's social security number). The submittals shall be made using LCPtracker Pro software. The software is web-based and can be accessed at https://lcptracker.com/. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option ("No Work", "Suspended", or "Complete") selected."

STATE CONTRACTS. Revise Item 3 of Section IV of Check Sheet #5 of the Recurring Special Provisions to read:

"3. Submission of Payroll Records. The Contractor and each subcontractor shall, no later than the 15th day of each calendar month, file a certified payroll for the immediately preceding month to the Illinois Department of Labor (IDOL) through the Illinois Prevailing Wage Portal in compliance with the State Prevailing Wage Act (820 ILCS 130). The portal can be found on the IDOL website at https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Prevailing-Wage-Portal.aspx. Payrolls shall be submitted in the format prescribed by the IDOL.

In addition to filing certified payroll(s) with the IDOL, the Contractor and each subcontractor shall certify and submit payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers shall not be included on weekly submittals. Instead, the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted. The submittals shall be made using LCPtracker Pro software. The software is web-based and can be accessed at https://lcptracker.com/.

When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option (“No Work”, “Suspended”, or “Complete”) selected.”

80437

SURVEYING SERVICES (BDE)

Effective: April 1, 2025

Delete the fourth paragraph of Article 667.04 of the Standard Specifications.

Delete Section 668 of the Standard Specifications.

80465

TRAINING SPECIAL PROVISIONS (BDE)

Effective: October 15, 1975
Revised: September 2, 2021

This Training Special Provision supersedes Section 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," and is in implementation of 23 U.S.C. 140(a).

As part of the Contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The Contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be **4**. In the event the Contractor subcontracts a portion of the contract work, it shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The Contractor shall also ensure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the Contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee it employs on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps it has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he or she has successfully completed a training course leading to journeyman status or in which he or she has been employed as a journeyman. The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor Employment Training Administration shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the Contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the Contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A Contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The Contractor shall furnish the trainee a copy of the program he will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The Contractor shall provide for the maintenance of records and furnish periodic reports documenting its performance under this Training Special Provision.

For contracts with an awarded contract value of $500,000 or more, the Contractor is required to comply with the Illinois Works Apprenticeship Initiative (30 ILCS 559/20-20 to 20-25) and all applicable administrative rules to the extent permitted by Section 20-20(g). For federally funded projects, the number of trainees to be trained under this contract, as stated in the Training Special Provisions, will be the established goal for the Illinois Works Apprenticeship Initiative 30 ILCS 559/20-20(g). The Contractor shall make a good faith effort to meet this goal. For federally funded projects, the Illinois Works Apprenticeship Initiative will be implemented using the FHWA approved OJT procedures. The Contractor must comply with the recordkeeping and reporting obligations of the Illinois Works Apprenticeship Initiative for the life of the project, including the certification as to whether the trainee/apprentice labor hour goals were met.

Method of Measurement. The unit of measurement is in hours.

Basis of Payment. This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price, and total price have been included in the schedule of prices.

20338

VEHICLE AND EQUIPMENT WARNING LIGHTS (BDE)

Effective: November 1, 2021
Revised: November 1, 2022

Add the following paragraph after the first paragraph of Article 701.08 of the Standard Specifications:

"The Contractor shall equip all vehicles and equipment with high-intensity oscillating, rotating, or flashing, amber or amber-and-white, warning lights which are visible from all directions. In accordance with 625 ILCS 5/12-215, the lights may only be in operation while the vehicle or equipment is engaged in construction operations."

80439

WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012
Revised: January 2, 2025

The following applies to all Disadvantaged Business Enterprise (DBE) trucks on the project, whether they are utilized for DBE goal credit or not.

The Contractor shall notify the Engineer at least three days prior to DBE trucking activity.

The Contractor shall submit a weekly report of DBE trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) to the Engineer on Department form "SBE 723" within ten business days following the reporting period. The reporting period shall be Sunday through Saturday for each week reportable trucking activities occur.

Any costs associated with providing weekly DBE trucking reports shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed.

80302

WORK ZONE TRAFFIC CONTROL DEVICES (BDE)

Effective: March 2, 2020
Revised: January 1, 2025

Add the following to Article 701.03 of the Standard Specifications:

"(q) Temporary Sign Supports .....1106.02"

Revise the third paragraph of Article 701.14 of the Standard Specifications to read:

"For temporary sign supports, the Contractor shall provide a FHWA eligibility letter for each device used on the contract. The letter shall provide information for the set-up and use of the device as well as a detailed drawing of the device. The signs shall be supported within 20 degrees of vertical. Weights used to stabilize signs shall be attached to the sign support per the manufacturer's specifications."

Revise the first paragraph of Article 701.15 of the Standard Specifications to read:

"**701.15 Traffic Control Devices.** For devices that must meet crashworthiness standards, the Contractor shall provide a manufacturer's self-certification or a FHWA eligibility letter for each Category 1 device and a FHWA eligibility letter for each Category 2 and Category 3 device used on the contract. The self-certification or letter shall provide information for the set-up and use of the device as well as a detailed drawing of the device."

Revise the first six paragraphs of Article 1106.02 of the Standard Specifications to read:

"**1106.02 Devices.** Work zone traffic control devices and combinations of devices shall meet crashworthiness standards for their respective categories. The categories are as follows.

Category 1 includes small, lightweight, channelizing and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These include cones, tubular markers, plastic drums, and delineators, with no attachments (e.g. lights). Category 1 devices shall be MASH compliant.

Category 2 includes devices that are not expected to produce significant vehicular velocity change but may otherwise be hazardous. These include vertical panels with lights, barricades, temporary sign supports, and Category 1 devices with attachments (e.g. drums with lights). Category 2 devices shall be MASH compliant.

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions (impact attenuators), truck mounted attenuators, and other devices not meeting the definitions of Category 1 or 2. Category 3 devices manufactured after December 31, 2019 shall be MASH compliant. Category 3 devices manufactured on or before December 31, 2019, and compliant

with NCHRP 350, may be used on contracts let before December 31, 2029. Category 3 devices shall be crash tested for Test Level 3 or the test level specified.

Category 4 includes portable or trailer-mounted devices such as sign supports, speed feedback displays, arrow boards, changeable message signs, temporary traffic signals, and area lighting supports. It is preferable for Category 4 devices manufactured after December 31, 2019 to be MASH-16 compliant; however, there are currently no crash tested devices in this category, so it remains exempt from the NCHRP 350 or MASH compliance requirement.

For each type of device, when no more than one MASH compliant is available, an NCHRP 350 compliant device may be used, even if manufactured after December 31, 2019."

Revise Articles 1106.02(g), 1106.02(k), and 1106.02(l) to read:

"(g) Truck Mounted/Trailer Mounted Attenuators. The attenuator shall be approved for use at Test Level 3. Test Level 2 may be used for normal posted speeds less than or equal to 45 mph.

(k) Temporary Water Filled Barrier. The water filled barrier shall be a lightweight plastic shell designed to accept water ballast and be on the Department's qualified product list.

Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings.

(l) Movable Traffic Barrier. The movable traffic barrier shall be on the Department's qualified product list.

Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings. The barrier shall be capable of being moved on and off the roadway on a daily basis."

80427

DRILLED SHAFTS
Effective: October 5, 2015
Revised: October 27, 2023

Revise Section 516 of the Standard Specifications to read:

"SECTION 516. DRILLED SHAFTS

516.01 Description. This work shall consist of constructing drilled shaft foundations.

516.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Portland Cement Concrete (Note 1)	1020
(b) Reinforcement Bars	1006.10
(c) Grout (Note 2)	1024.01
(d) Permanent Steel Casing	1006.05(d)
(e) Slurry (Note 3)	

Note 1. When the soil contains sulfate contaminates, ASTM C 1580 testing will be performed to assess the severity of sulfate exposure to the concrete. If the sulfate contaminate is >0.10 to < 0.20 percent by mass, a Type II (MH) cement shall be used. If the sulfate contaminate is >0.20 to < 2.0 percent by mass, a Type V cement shall be used. If the sulfate contaminate is ≥ 2.0 percent by mass, refer to ACI 201.2R for guidance.

Note 2. The sand-cement grout mix shall be according to Section 1020 and shall be two to five parts sand and one part Type I or II cement. The maximum water cement ratio shall be sufficient to provide a flowable mixture with a typical slump of 10 in. (250 mm).

Note 3. Slurry shall be bentonite, emulsified polymer, or dry polymer, and shall be approved by the Engineer.

516.03 Equipment. Equipment shall be according to the following.

Item	Article/Section
(a) Concrete Equipment	1020.03
(b) Drilling Equipment (Note 1)	
(c) Hand Vibrator	1103.17(a)
(d) Underwater Concrete Placement Equipment	1103.18

Note 1. The drilling equipment shall have adequate capacity, including power, torque and down thrust, to create a shaft excavation of the maximum diameter specified to a depth of 20 percent beyond the depths shown on the plans.

516.04 Submittals. The following information shall be submitted on form BBS 133.

(a) Qualifications. At the time of the preconstruction conference, the Contractor shall provide the following documentation.

(1) References. A list containing at least three projects completed within the three years prior to this project's bid date which the Contractor performing this work has installed drilled shafts of similar diameter, length, and site conditions to those shown in the plans. The list of projects shall contain names and phone numbers of owner's representatives who can verify the Contractor's participation on those projects.

(2) Experience. Name and experience record of the drilled shaft supervisor, responsible for all facets of the shaft installation, and the drill operator(s) who will be assigned to this project. The supervisor and operator(s) shall each have a minimum of three years experience in the construction of drilled shafts.

(b) Installation Procedure. A detailed installation procedure shall be submitted to the Engineer for acceptance at least 28 days prior to drilled shaft construction and shall address each of the following items unless otherwise directed by the Engineer in writing.

(1) Equipment List. List of proposed equipment to be used including cranes, drill rigs, augers, belling tools, casing, vibratory hammers, core barrels, bailing buckets, final cleaning equipment, slurry equipment, tremies, or concrete pumps, etc.

(2) General Sequence. Details of the overall construction operation sequence, equipment access, and the sequence of individual shaft construction within each substructure bent or footing group. The submittal shall address the Contractor's proposed time delay and/or the minimum concrete strength necessary before initiating a shaft excavation adjacent to a recently installed drilled shaft.

(3) Shaft Excavation. A site specific step by step description of how the Contractor anticipates the shaft excavation to be advanced based on their evaluation of the subsurface data and conditions expected to be encountered. This sequence shall note the method of casing advancement, anticipated casing lengths, tip elevations and diameters, the excavation tools used and drilled diameters created. The Contractor shall indicate whether wet or dry drilling conditions are expected and if groundwater will be sealed from the excavation.

(4) Slurry. When the use of slurry is proposed, details on the types of additives to be used and their manufacturers shall be provided. In addition, details covering the measurement and control of the hardness of the mixing water, agitation, circulation, de-sanding, sampling, testing, and chemical properties of the slurry shall be submitted.

(5) Shaft Cleaning. Method(s) and sequence proposed for the shaft cleaning operation.

(6) Reinforcement Cage and Permanent Casing. Details of reinforcement placement including rolling spacers to be used and method to maintain proper elevation and location of the reinforcement cage within the shaft excavation during concrete placement. The method(s) of adjusting the reinforcement cage length and permanent casing if rock is encountered at an elevation other than as shown on the plans. As an option, the Contractor may perform soil borings and rock cores at the drilled shaft locations to determine the required reinforcement cage and permanent casing lengths.

(7) Concrete Placement. Details of concrete placement including proposed operational procedures for free fall, tremie or pumping methods. The sequence and method of casing removal shall also be stated along with the top of pour elevation, and method of forming through water above streambed.

(8) Mix Design. The proposed concrete mix design(s).

(9) Disposal Plan. Containment and disposal plan for slurry and displaced water. Containment and disposal plan for contaminated concrete pushed out of the top of the shaft by uncontaminated concrete during concrete placement.

(10) Access and Site Protection Plan. Details of access to the drilled shafts and safety measures proposed. This shall include a list of casing, scaffolding, work platforms, temporary walkways, railings, and other items needed to provide safe access to the drilled shafts. Provisions to protect open excavations during non- working hours shall be included.

The Engineer will evaluate the drilled shaft installation procedure and notify the Contractor of acceptance, need for additional information, or concerns with the installation's effect on the existing or proposed structure(s).

CONSTRUCTION REQUIREMENTS

516.05 General. Excavation for drilled shaft(s) shall not proceed until written authorization is received from the Engineer. The Contractor shall be responsible for verification of the dimensions and alignment of each shaft excavation as directed by the Engineer.

Unless otherwise approved in the Contractor's installation procedure, no shaft excavation, casing installation, or casing removal with a vibratory hammer shall be made within four shaft diameters center to center of a shaft with concrete that has a compressive strength less than 1500 psi (10,300 kPa). The site-specific soil strengths and installation methods selected will determine the actual required minimum spacing, if any, to address vibration and blow out concerns.

Lost tools shall not remain in the shaft excavation without the approval of the Engineer.

Blasting shall not be used as a method of shaft excavation.

516.06 Shaft Excavation Protection Methods. The construction of drilled shafts may involve the use of one or more of the following methods to support the excavation during the various phases of shaft excavation, cleaning, and concrete placement dependent on the site conditions encountered. Surface water shall not flow uncontrolled into the shaft excavation, however water may be placed into the shaft excavation in order to meet head pressure requirements according to Articles 516.06(c) and 516.13.

The following are general descriptions indicating the conditions when these methods may be used.

(a) Dry Method. The dry construction method shall only be used at sites where the groundwater and soil conditions are suitable to permit the drilling and dewatering of the excavation without causing subsidence of adjacent ground, boiling of the base soils, squeezing, or caving of the shaft side walls. The dry method shall consist of drilling the shaft excavation, removing accumulated water, cleaning the shaft base, and placing the reinforcement cage and concrete in a predominately dry excavation.

(b) Slurry Method. The slurry construction method may be used at sites where dewatering the excavation would cause collapse of the shaft sidewalls or when the volume and head of water flowing into the shaft is likely to contaminate the concrete during placement resulting in a shaft defect. This method uses slurry, or in rare cases water, to maintain stability of the shaft sidewall while advancing the shaft excavation. After the shaft excavation is completed, the slurry level in the shaft shall be kept at an elevation to

maintain stability of the shaft sidewall, maintain stability of the shaft base, and prevent additional groundwater from entering the shaft. The shaft base shall be cleaned, the reinforcement cage shall be set, and the concrete shall be discharged at the bottom of the shaft excavation, displacing the slurry upwards.

(c) Temporary Casing Method. Temporary casing shall be used when either the dry or slurry methods provide inadequate support to prevent sidewall caving or excessive deformation of the shaft excavation. Temporary casing may be used with slurry or be used to reduce the flow of water into the excavation to allow dewatering and concrete placement in a dry shaft excavation. Temporary casing shall not be allowed to remain permanently without the approval of the Engineer.

During removal of the temporary casing, the level of concrete in the casing shall be maintained at a level such that the head pressure inside the casing is a minimum of 1.25 times the head pressure outside the casing, but in no case is less than 5 ft (1.5 m) above the bottom of the casing. Casing removal shall be at a slow, uniform rate with the pull in line with the shaft axis. Excessive rotation of the casing shall be avoided to limit deformation of the reinforcement cage. In addition, the slump requirements during casing removal shall be according to Article 516.12.

When called for on the plans, the Contractor shall install a permanent casing as specified. Permanent casing may be used as a shaft excavation support method or may be installed after shaft excavation is completed using one of the above methods. After construction, if voids are present between the permanent casing and the drilled excavation, the voids shall be filled with grout by means of tremie(s) or concrete pump which shall be lowered to the bottom of the excavation. The contractor's means and methods for grout placement shall fill the annular void(s) between the permanent casing and the surrounding earth material to restore and provide lateral earth resistance to the shaft. Grout yield checks shall be performed by the contractor for submittal to the Engineer. Permanent casing shall not remain in place beyond the limits shown on the plans without the specific approval of the Engineer.

When the shaft extends above the streambed through a body of water and permanent casing is not shown, the portion above the streambed shall be formed with removable casings, column forms, or other forming systems as approved by the Engineer. The forming system shall not scar or spall the finished concrete or leave in place any forms or casing within the removable form limits as shown on the plans unless approved as part of the installation procedure. The forming system shall not be removed until the concrete has attained a minimum compressive strength of 2500 psi (17,200 kPa) and cured for a minimum of 72 hours. For shafts extending through water, the concrete shall be protected from water action after placement for a minimum of seven days.

516.07 Slurry. When slurry is used, the Contractor shall provide a technical representative of the slurry additive manufacturer at the site prior to introduction of the slurry into the first shaft where slurry will be used, and during drilling and completion of a minimum of one shaft to adjust the slurry mix to the specific site conditions. During construction, the level of the slurry shall be maintained a minimum of 5 feet (1.5 m) above the height required to prevent

caving of the shaft excavation. In the event of a sudden or significant loss of slurry in the shaft excavation, the construction of that foundation shall be stopped and the shaft excavation backfilled or supported by temporary casing, until a method to stop slurry loss, or an alternate construction procedure, has been approved by the Engineer.

(a) General Properties. The material used to make the slurry shall not be detrimental to the concrete or surrounding ground. Mineral slurries shall have both a mineral grain size that remains in suspension and sufficient viscosity and gel characteristics to transport excavated material to a suitable screening system. Polymer slurries shall have sufficient viscosity and gel characteristics to transport excavated material to suitable screening systems or settling tanks. The percentage and specific gravity of the material used to make the slurry shall be sufficient to maintain the stability of the excavation and to allow proper concrete placement.

If approved by the Engineer, the Contractor may use water and excavated soils as drilling slurry. In this case, the range of acceptable values for density, viscosity and pH, as shown in the following table for bentonite slurry shall be met.

When water is used as the slurry to construct rock sockets in limestone, dolomite, sandstone or other formations that are not erodible, the requirements for slurry testing shall not apply if the entire fluid column is replaced with fresh water after drilling. To do so, fresh water shall be introduced at the top of the shaft excavation and existing water used during drilling shall be pumped out of the shaft excavation from the bottom of the shaft excavation until the entire volume of fluid has been replaced.

(b) Preparation. Prior to introduction into the shaft excavation, the manufactured slurry admixture shall be pre-mixed thoroughly with clean, fresh water and for adequate time in accordance with the slurry admixture manufacturer's recommendations. Slurry tanks of adequate capacity shall be used for slurry mixing, circulation, storage and treatment. No excavated slurry pits will be allowed in lieu of slurry tanks without approval from the Engineer. Adequate desanding equipment shall be provided to control slurry properties during the drilled shaft excavation in accordance with the values provided in Table 1.

(c) Quality Control. Quality control tests shall be performed on the slurry to determine density, viscosity, sand content and pH of freshly mixed slurry, recycled slurry and slurry in the shaft excavation. Tests of slurry samples from within two feet of the bottom and at mid-height of the shaft excavation shall be conducted in each shaft excavation during the excavation process to measure the consistency of the slurry. A minimum of four sets of tests shall be conducted during the first eight hours of slurry use on the project. When a series of four test results do not change more than 1% from the initial test, the testing frequency may be decreased to one set every four hours of slurry use. Reports of all tests, signed by an authorized representative of the Contractor, shall be furnished to the

Engineer upon completion of each drilled shaft. The physical properties of the slurry shall be as shown in Table 1.

The slurry shall be sampled and tested less than 1 hour before concrete placement. Any heavily contaminated slurry that has accumulated at the bottom of the shaft shall be removed. The contractor shall perform final shaft bottom cleaning after suspended solids have settled from the slurry. Concrete shall not be placed if the slurry does not have the required physical properties.

Table 1 – SLURRY PROPERTIES				
	Bentonite	Emulsified Polymer	Dry Polymer	Test Method
Density, lb/cu ft (kg/cu m) (at introduction)	65.2 ± 1.6[1] (1043.5 ± 25.6)	63 (1009.0) max.	63 (1009.0) max.	ASTM D 4380
Density, lb/cu ft (kg/cu m) (prior to concrete placement)	67.0 ± 3.5[1] (1073.0 ± 56.0)	63 (1009.0) max.	63 (1009.0) max.	ASTM D 4380
Viscosity[2], sec/qt (sec/L)	46 ± 14 (48 ± 14)	38 ± 5 (40 ± 5)	65 ± 15 (69 ± 16)	ASTM D 6910
pH	9.0 ± 1.0	9.5 ± 1.5	9.0 ± 2.0	ASTM D 4972
Sand Content, percent by volume (at introduction)	4 max.	1 max.	1 max.	ASTM D 4381
Sand Content, percent by volume (prior to concrete placement)	10 max.	1 max.	1 max.	ASTM D 4381
Contact Time[3], hours	4 max.	72 max.	72 max	

Note 1. When the slurry consists of only water and excavated soils, the density shall not exceed 70 lb/cu ft (1121 kg/cu m).
Note 2. Higher viscosities may be required in loose or gravelly sand deposits.
Note 3. Contact time is the time without agitation and sidewall cleaning.

516.08 Obstructions. An obstruction is an unknown isolated object that causes the shaft excavation method to experience a significant decrease in the actual production rate and requires the Contractor to core, break up, push aside, or use other means to mitigate the obstruction. Subsurface conditions such as boulders, cobbles, or logs and buried infrastructure such as footings, piling, or abandoned utilities, when shown on the plans, shall not constitute an obstruction. When an obstruction is encountered, the Contractor shall notify the Engineer immediately and upon concurrence of the Engineer, the Contractor shall mitigate the obstruction with an approved method.

516.09 Top of Rock. The top of rock will be considered as the point where rock, defined as bedded deposits and conglomerate deposits exhibiting the physical characteristics and difficulty of rock removal as determined by the Engineer, is encountered which cannot be drilled with augers and/or underreaming tools configured to be effective in the soils indicated in the contract documents.

516.10 Design Modifications. If the top of rock elevation differs from that shown on the plans by more than 10 percent of the length of the drilled shaft above the rock, the Engineer shall be contacted to determine if any drilled shaft design changes may be required. In addition, if the type of soil or rock encountered is not similar to that shown in the subsurface exploration data, the Contractor may be required to extend the drilled shaft length(s) beyond those specified in the plans. In either case, the Engineer will determine if revisions are necessary and the extent of the modifications required.

516.11 Excavation Cleaning and Inspection. Materials removed or generated from the shaft excavations shall be disposed of according to Article 202.03.

After excavation, each shaft shall be cleaned. For a drilled shaft terminating in soil, the depth of sediment or debris shall be a maximum of 1 1/2 in. (38 mm). For a drilled shaft terminating in rock, the depth of sediment or debris shall be a maximum of 1/2 in. (13 mm).

A shaft excavation shall be overreamed when, in the opinion of the Engineer, the sidewall has softened, swelled, or has a buildup of slurry cake. Overreaming may also be required to correct a shaft excavation which has been drilled out of tolerance. Overreaming may be accomplished with a grooving tool, overreaming bucket, or other approved equipment. Overreaming thickness shall be a minimum of 1/2 in. (13 mm) and a maximum of 3 in. (75 mm).

516.12 Reinforcement. This work shall be according to Section 508 and the following.

The shaft excavation shall be cleaned and inspected prior to placing the reinforcement cage. The reinforcement cage shall be completely assembled prior to drilling and be ready for adjustment in length as required by the conditions encountered. The reinforcement cage shall be lifted using multiple point sling straps or other approved methods to avoid reinforcement

cage distortion or stress. Cross frame stiffeners may be required for lifting or to keep the reinforcement cage in proper position during lifting and concrete placement.

The Contractor shall attach rolling spacers to keep the reinforcement cage centered within the shaft excavation during concrete placement and to ensure that at no point will the finished shaft have less than the minimum concrete cover(s) shown on the plans. The rolling spacers or other approved non-corrosive spacing devices shall be installed within 2 ft (0.6 m) of both the top and bottom of the drilled shaft and at intervals not exceeding 10 ft (3 m) throughout the length of the shaft to ensure proper reinforcement cage alignment and clearance for the entire shaft. The number of rolling spacers at each level shall be one for each 1.0 ft (300 mm) of shaft diameter, with a minimum of four rolling spacers at each level. For shafts with different shaft diameters throughout the length of the excavation, different sized rolling spacers shall be provided to ensure the reinforcement cage is properly positioned throughout the entire length of the shaft.

When a specific concrete cover between the base of the drilled shaft and the reinforcement cage is shown on the plans, the bottom of the reinforcement cage shall be supported so that the proper concrete cover is maintained.

If the conditions differ such that the length of the shaft is increased, additional longitudinal bars shall be either mechanically spliced or lap spliced to the lower end of the reinforcement cage and confined with either hoop ties or spirals. The Contractor shall have additional reinforcement available or fabricate the reinforcement cages with additional length as necessary to make the required adjustments in a timely manner as dictated by the encountered conditions. The additional reinforcement may be non-epoxy coated.

516.13 Concrete Placement. Concrete work shall be performed according to the following.

Throughout concrete placement the head pressure inside the drilled shaft shall be at least 1.1 times the head pressure outside the drilled shaft.

Concrete placement shall begin within 1 hour of shaft cleaning and inspection. The pour shall be made in a continuous manner from the bottom to the top elevation of the shaft as shown on the contract plan or as approved in the Contractor's installation procedure. Concrete placement shall continue after the shaft excavation is full and until 18 in. (450 mm) of good quality, uncontaminated concrete is expelled at the top of shaft. Vibration of the concrete will not be allowed when the concrete is displacing slurry or water. In dry excavations, the concrete in the top 10 ft (3 m) of the shaft shall be vibrated.

When using temporary casing or placing concrete under water or slurry, a minimum of seven days prior to concrete placement, a 4 cu yd (3 cu m) trial batch of the concrete mixture shall be

performed to evaluate slump retention. Temporary casing shall be withdrawn before the slump of the concrete drops below 6 in. (150 mm). For concrete placed using the slurry method of construction, the slump of all concrete placed shall be a minimum of 6 in. (150 mm) at the end of concrete placement.

Devices used to place concrete shall have no aluminum parts in contact with concrete.

When the top of the shaft is at the finished elevation and no further concrete placement above the finished elevation is specified, the top of the shaft shall be level and finished according to Article 503.15(a).

Concrete shall be placed by free fall, tremie, or concrete pump subject to the following conditions.

(a) Free Fall Placement. Concrete shall only be placed by free fall when the rate of water infiltration into the shaft excavation is less than 12 in. (300 mm) per hour and the depth of water in the shaft excavation is less than 3 in. (75 mm) at the time of concrete placement.

Concrete placed by free fall shall fall directly to the base without contacting the reinforcement cage, cross frame stiffeners, or shaft sidewall. Drop chutes may be used to direct concrete to the base during free fall placement.

Drop chutes used to direct placement of free fall concrete shall consist of a smooth tube. Concrete may be placed through either a hopper at the top of the tube or side openings as the drop chute is retrieved during concrete placement. The drop chute shall be supported so that free fall does not exceed 60 ft (18.3 m) for conventional concrete or 30 ft (9.1 m) for self-consolidating concrete. If placement cannot be satisfactorily accomplished by free fall in the opinion of the Engineer, either a tremie or pump shall be used to accomplish the pour.

(b) Tremie and Concrete Pump Placement. Concrete placement shall be according to Article 503.08, except the discharge end of the steel pipe shall remain embedded in the concrete a minimum of 10 ft (3.0 m) throughout concrete placement when displacing slurry or water.

516.14 Construction Tolerances. The following construction tolerances shall apply to all drilled shafts.

(a) Center of Shaft. The center of the drilled shaft shall be within 3 in. (75 mm) of the plan station and offset at the top of the shaft.

(b) Center of Reinforcement Cage. The center of the reinforcement cage shall be within 1 1/2 in. (40 mm) of plan station and offset at the top of the shaft.

(c) Vertical Plumbness of Shaft. The out of vertical plumbness of the shaft shall not exceed 1.5 percent.

(d) Vertical Plumbness of Reinforcement Cage. The out of vertical plumbness of the shaft reinforcement cage shall not exceed 0.83 percent.

(e) Top of Shaft. The top of the shaft shall be no more than 1 in. (25 mm) above and no more than 3 in. (75 mm) below the plan elevation.

(f) Top of Reinforcement Cage. The top of the reinforcement cage shall be no more than 1 in. (25 mm) above and no more than 3 in. (75 mm) below the plan elevation.

(g) Bottom of shaft. Excavation equipment and methods used to complete the shaft excavation shall have a nearly planar bottom. The cutting edges of excavation equipment used to create the bottom of shafts in rock shall be normal to the vertical axis of the shaft within a tolerance of 6.25 percent.

516.15 Method of Measurement. This work will be measured for payment in place and the volume computed in cubic yards (cubic meters). The volume will be computed using the plan diameter of the shaft multiplied by the measured length of the shaft. The length of shaft in soil will be computed as the difference in elevation between the top of the drilled shaft shown on the plans, or as installed as part of the Contractor's installation procedure, and the bottom of the shaft or the top of rock (when present) whichever is higher. The length of shaft in rock will be computed as the difference in elevation between the measured top of rock and the bottom of the shaft.

When permanent casing is specified, it will be measured for payment in place, in feet (meters). Permanent casing installed at the Contractor's option will not be measured for payment.

Reinforcement furnished and installed will be measured for payment according to Article 508.07.

516.16 Basis of Payment. This work will be paid for at the contract unit price per cubic yard (cubic meter) for DRILLED SHAFT IN SOIL, and/or DRILLED SHAFT IN ROCK.

Permanent casing will be paid for at the contract unit price per foot (meter) for PERMANENT CASING.

Reinforcement furnished and installed will be paid for according to Article 508.08.

Obstruction mitigation will be paid for according to Article 109.04.”

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (*see* 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:
(1) Withholding monthly progress payments;
(2) Assessing sanctions;
(3) Liquidated damages; and/or
(4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than $10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 “Contract provisions and related matters” with minor revisions to conform to the FHWA- 1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided,* That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH–1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to *DBAconformance@dol.gov*. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to *DBAconformance@dol.gov*, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided,* That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

3. Records and certified payrolls (29 CFR 5.5)

a. *Basic record requirements* (1) *Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements* (1) *Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (*e.g.,* the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH–347 or in any other format desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division website at *https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347/.pdf* or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) *Use of Optional Form WH–347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices* (1) *Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* $31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term “perform work with its own organization” in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal- aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of $150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. **Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. “First Tier Covered Transactions” refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

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2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

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3. **Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. “First Tier Covered Transactions” refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

* * * * *

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

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XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B) This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.