

# 211

**Letting January 16, 2026**

## **Notice to Bidders, Specifications and Proposal**



**Contract No. 85780  
ROCK ISLAND County  
Section 22-00159-03-PV & 22-00159-00-PV (East Moline)  
Routes FAU 5755 & FAU 5851 (12th Ave. & 7th St.)  
Project VI5U-891 ()  
District 2 Construction Funds**

Prepared by

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Checked by

(Printed by authority of the State of Illinois)



## **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. January 16, 2026 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. 85780  
ROCK ISLAND County  
Section 22-00159-03-PV & 22-00159-00-PV (East Moline)  
Project VI5U-891 ()  
Routes FAU 5755 & FAU 5851 (12th Ave. & 7th St.)  
District 2 Construction Funds**

**Pavement reconstruction, PCC pavement, sidewalks, storm sewer, curb & gutter, traffic signals, roadway lighting, and landscaping on 12 Avenue from 1st Street to 7th street, and improvements to 3rd Street and 7th 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,  
Secretary

**CONTRACT 85780**

INDEX  
FOR  
SUPPLEMENTAL SPECIFICATIONS  
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2026

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 1-1-26)

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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.

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80099		<input type="checkbox"/>	Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2022
80274	102	<input checked="" type="checkbox"/>	Aggregate Subgrade Improvement	April 1, 2012	April 1, 2022
80192		<input type="checkbox"/>	Automated Flagger Assistance Device	Jan. 1, 2008	April 1, 2023
80173		<input type="checkbox"/>	Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
80426		<input type="checkbox"/>	Bituminous Surface Treatment with Fog Seal	Jan. 1, 2020	Jan. 1, 2022
* 80475		<input type="checkbox"/>	Bridge Deck Concrete Overlays	Jan. 1, 2026	
80241		<input type="checkbox"/>	Bridge Demolition Debris	July 1, 2009	
50531		<input type="checkbox"/>	Building Removal	Sept. 1, 1990	Aug. 1, 2022
50261		<input type="checkbox"/>	Building Removal with Asbestos Abatement	Sept. 1, 1990	Aug. 1, 2022
* 80460	105	<input checked="" type="checkbox"/>	Cement, Finely Divided Minerals, Admixtures, Concrete, and Mortar	Jan. 1, 2025	Jan. 1, 2026
80384	122	<input checked="" type="checkbox"/>	Compensable Delay Costs	June 2, 2017	April 1, 2019
80198		<input type="checkbox"/>	Completion Date (via calendar days)	April 1, 2008	
80199		<input type="checkbox"/>	Completion Date (via calendar days) Plus Working Days	April 1, 2008	
80461		<input type="checkbox"/>	Concrete Barrier	Jan. 1, 2025	
80453		<input type="checkbox"/>	Concrete Sealer	Nov. 1, 2023	
80261		<input type="checkbox"/>	Construction Air Quality – Diesel Retrofit	June 1, 2010	Jan. 1, 2025
* 80476		<input type="checkbox"/>	Deck Slab Repair	Jan. 1, 2026	
80029		<input type="checkbox"/>	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Jan. 2, 2025
80467	126	<input checked="" type="checkbox"/>	Erosion Control Blanket	Aug. 1, 2025	
80229		<input type="checkbox"/>	Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
80452		<input type="checkbox"/>	Full Lane Sealant Waterproofing System	Nov. 1, 2023	
80433		<input type="checkbox"/>	Green Preformed Thermoplastic Pavement Markings	Jan. 1, 2021	Jan. 1, 2022
80471		<input type="checkbox"/>	Guardrail	Nov. 1, 2025	
80472		<input type="checkbox"/>	High Friction Surface Treatment	Nov. 1, 2025	
* 80456	129	<input checked="" type="checkbox"/>	Hot-Mix Asphalt	Jan. 1, 2024	Jan. 1, 2026
80446		<input type="checkbox"/>	Hot-Mix Asphalt – Longitudinal Joint Sealant	Nov. 1, 2022	Aug. 1, 2023
80438		<input type="checkbox"/>	Illinois Works Apprenticeship Initiative – State Funded Contracts	June 2, 2021	April 2, 2024
* 80477	132	<input checked="" type="checkbox"/>	Longitudinal Tining	Jan. 1, 2026	
80450		<input type="checkbox"/>	Mechanically Stabilized Earth Retaining Walls	Aug. 1, 2023	Aug. 1, 2025
* 80478		<input type="checkbox"/>	Modified Longitudinal Construction Joint	Jan. 1, 2026	
80464	133	<input checked="" type="checkbox"/>	Pavement Marking	April 1, 2025	Nov. 1, 2025
80468		<input type="checkbox"/>	Pavement Patching	Aug. 1, 2025	
80441	134	<input checked="" type="checkbox"/>	Performance Graded Asphalt Binder	Jan 1, 2023	
80459		<input type="checkbox"/>	Preformed Plastic Pavement Marking	June 2, 2024	
34261	139	<input checked="" type="checkbox"/>	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2022
80473		<input type="checkbox"/>	Raised Reflective Pavement Markers	Nov. 1, 2025	
80455	140	<input checked="" type="checkbox"/>	Removal and Disposal of Regulated Substances	Jan. 1, 2024	April 1, 2024
80474		<input type="checkbox"/>	Residential Driveway Temporary Signal	Nov. 1, 2025	
80445	142	<input checked="" type="checkbox"/>	Seeding	Nov. 1, 2022	
80457	148	<input checked="" type="checkbox"/>	Short Term and Temporary Pavement Markings	April 1, 2024	April 2, 2024
* 80462	152	<input checked="" type="checkbox"/>	Sign Panels and Appurtenances	Jan. 1, 2025	Jan. 1, 2026
* 80479		<input type="checkbox"/>	Sinusoidal Rumble Strips	Jan. 1, 2026	
80469		<input type="checkbox"/>	Slope Wall	Aug. 1, 2025	
* 80448	154	<input checked="" type="checkbox"/>	Source of Supply and Quality Requirements	Jan. 2, 2023	Jan. 1, 2026
80340		<input type="checkbox"/>	Speed Display Trailer	April 2, 2014	Jan. 1, 2022
80127		<input type="checkbox"/>	Steel Cost Adjustment	April 2, 2004	Nov. 1, 2025
* 80480		<input type="checkbox"/>	Structural Repair of Concrete	Jan. 1, 2026	
80397	156	<input checked="" type="checkbox"/>	Subcontractor and DBE Payment Reporting	April 2, 2018	
80391	157	<input checked="" type="checkbox"/>	Subcontractor Mobilization Payments	Nov. 2, 2017	April 1, 2019
80463	158	<input checked="" type="checkbox"/>	Submission of Bidders List Information	Jan. 2, 2025	Mar. 2, 2025
80437	159	<input checked="" type="checkbox"/>	Submission of Payroll Records	April 1, 2021	Nov. 2, 2023



<b><u>File Name</u></b>	<b><u>Pg.</u></b>		<b><u>Special Provision Title</u></b>	<b><u>Effective</u></b>	<b><u>Revised</u></b>
80435		<input type="checkbox"/>	Surface Testing of Pavements – IRI	Jan. 1, 2021	Jan. 1, 2023
80465	161	<input checked="" type="checkbox"/>	Surveying Services	April 1, 2025	
* 80481		<input type="checkbox"/>	Temporary Concrete Barrier	Jan. 1, 2026	
80466		<input type="checkbox"/>	Temporary Rumble Strips	April 1, 2025	
80470	162	<input checked="" type="checkbox"/>	Traffic Signal Backplate	Aug. 1, 2025	
20338	163	<input checked="" type="checkbox"/>	Training Special Provisions	Oct. 15, 1975	Sept. 2, 2021
80429		<input type="checkbox"/>	Ultra-Thin Bonded Wearing Course	April 1, 2020	Jan. 1, 2022
80439	166	<input checked="" type="checkbox"/>	Vehicle and Equipment Warning Lights	Nov. 1, 2021	Nov. 1, 2022
80458		<input type="checkbox"/>	Waterproofing Membrane System	Aug. 1, 2024	
80302		<input type="checkbox"/>	Weekly DBE Trucking Reports	June 2, 2012	Jan. 2, 2025
80454		<input type="checkbox"/>	Wood Sign Support	Nov. 1, 2023	
* 80427	167	<input checked="" type="checkbox"/>	Work Zone Traffic Control Devices	Mar. 2, 2020	Jan. 1, 2026
80071		<input type="checkbox"/>	Working Days	Jan. 1, 2002	

## **STATE OF ILLINOIS 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 12<sup>th</sup> Avenue, Section 22-0159-03-PV / 7<sup>th</sup> Street, Section 22-00159-00-PV in Rock Island County, 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 12<sup>th</sup> Avenue and 7<sup>th</sup> Street in East Moline, Section 22-00159-03-PV / 22-00159-00-PV. The project is in Rock Island County in Section 25, Township 18N, Range 1W of the 4<sup>th</sup> principal meridian. The project limits are along 12<sup>th</sup> Avenue from 1<sup>st</sup> Street to 7<sup>th</sup> Street.

### **DESCRIPTION OF PROJECT**

The project involves reconstruction with new pavement including storm drainage and traffic signals, and construction of a new shared use path. ADA ramps, roadway lighting, wayfinding signage, landscaping, and site amenities of benches and trash receptacles are included.

### **COMPLETION DATE PLUS WORKING DAYS**

Completion Date: The Contractor shall schedule their operations to complete all work specified for Stages 1 through 2 as shown in the plans and open the roadway to traffic on or before December 1, 2026.

The Contractor shall take note the completion date is based on an expedited work schedule. The Contractor will be allowed 30 working days, after the final completion date, to complete final pavement marking, roadway lighting, landscaping, seeding, and 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 30 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.

### **COOPERATION WITH RAILROAD CONTRACTORS**

Concurrently with this project, railroad crossing surfaces will be widened and pedestrian crossing gates will be installed. The Contractor shall conduct his/her work so as not to interfere with or hinder the progress or completion of the work being performed by the Railroad Contractors. In case of dispute, the Engineer shall be the referee and the Engineer's decision shall be final and binding on all. Each Contractor involved shall assume all liability, financial or otherwise, in connection with his/her contract, and shall protect and save harmless the Department and the City of East Moline from any and all damages or claims that may arise because of inconvenience, delay, or loss

experienced by the Contractor because of the presence and operation of other Contractors working within the limits of the same improvement. Each Contractor shall assume all responsibility for all work not completed or accepted because of the presence and operations of the other Contractors.

The Contractor shall arrange the work and shall place and dispose of the materials being used so as not to interfere with the operations of the other Contractors within the limits of the same project. The Contractor shall join his/her work with that of the others in an acceptable manner and shall perform it in proper sequence to that of the others.

## **SEQUENCE OF CONSTRUCTION**

The Contractor shall submit a progress schedule to the 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 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 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 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 sidewalks 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**

### Standards:

701001	701006	701301	701311	701501	701801
701901	BLR 21-9	728001	729001		

### Details:

District 2 Detail 40.1 – Traffic Control for Road Closures

### 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 to cover 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 or vertical barricades spaced at 4 feet shall be placed at each return when the sideroad is open.

Flaggers:

Flaggers shall comply with all requirements and signaling methods contained in the Department's "Traffic Control Field Manual" current at the time of letting. The flagger equipment listed for flaggers employed by the Illinois Department of Transportation shall apply to all flaggers.

In addition to the flaggers shown on applicable standards, on major sideroads, flaggers shall be required on all legs of the intersection. Major sideroads for this project shall be 1<sup>st</sup> Street, Bend Boulevard, 3<sup>rd</sup> Street (Mississippi Parkway), and 7<sup>th</sup> Street.

In addition to the flaggers shown on applicable standards, a flagger shall be required on high volume commercial entrances listed below. High volume commercial entrances for this project shall be Green Current Solutions and The Rust Belt.

See Staging Plans for additional requirements.

When the mainline flagger is within 200 feet of an intersection, the sideroad flagger shall be required.

When the road is closed to through traffic and it is necessary to provide access for local traffic, all flaggers as shown on the applicable standards will be required. No reduction in the number of flaggers shall be allowed.

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.

District Standards Application:

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.

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

Signing and devices required to close the road, 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

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 nighttime 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.

Temporary Signals: The Contractor will be required to have someone available at all times to receive phone calls during non-work hours and who is able to reach the job site within one hour of being called. This person will be able to repair the temporary signals or will be able to have flaggers on site within another hour to flag traffic until the signals are again in operation. Failure to have a person on site within an hour after the initial call out will result in the Contractor being charged a monetary deduction by the Department of One Thousand Dollars (\$1,000). Failure to have traffic restored either with repaired signals or with flaggers within two hours after the initial call out will result in the Contractor being charged monetary deduction by the Department of One Thousand Dollars (\$1,000) per hour until traffic is restored. The Contractor may use a traffic control subcontractor for the first call; however, this does not relieve the prime Contractor from having a person on call.

Traffic Signal Work: No traffic signal work shall begin until all of the traffic signal hardware is on the job site. The existing traffic signal system shall remain in operation during the modernization work. The work shall be scheduled so that a minimum of two signal indications for each phase remains in operation. No signal indication shall be absent for more than seven calendar days.

The Contractor will be allowed to shut down the existing signal system not to exceed 8 hours to replace the existing controller and cabinet. During this shutdown, the intersection will operate as a 4-way "Stop".

Maintenance of Traffic: The Contractor shall notify the City of East Moline, emergency response agencies (i.e.: fire, ambulance, police), school bus companies and the Department of Transportation (Bureau of Project Implementation) regarding any changes in traffic control.

The Contractor shall notify the City of East Moline for any sideroad closure or opening.

The Contractor shall submit a maintenance of local traffic plan to the Engineer at the preconstruction meeting telling how local access will be maintained at each access location. It will show which

locations will be completely closed, and which locations will be constructed utilizing Traffic Control Standard 701206 and/or barricades. This traffic plan will need to be approved by the Engineer before the roadway is closed to traffic.

Milled pavement shall be resurfaced before opening the road to traffic.

Two (2) changeable message signs shall be placed on this project two (2) weeks prior to the start of work informing the public of lane closures. Location of the message signs will be determined by the Resident Engineer. Additional changeable message signs will be paid for separately.

All costs involved in conforming with this provision shall be considered a part of TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

### **GUARDRAIL REMOVAL**

Effective: August 20, 1990

Revised: April 10, 2014

This work shall be done according to Section 632 of the Standard Specifications except that all removed guardrail will become the property of the Contractor.

This work will be paid for at the contract unit price per Foot for GUARDRAIL REMOVAL, measured from center-to-center of end posts.

### **MAINTENANCE OF ROADWAYS**

Beginning on the date that work begins on this project, the Contractor shall assume responsibility for normal maintenance of all existing roadways within the limits of the improvement. This normal maintenance shall include all repair work such as patching, intermittent resurfacing, sign maintenance, and shoulder work deemed necessary by the Engineer, but shall not include snow removal operations. Traffic control and protection for maintenance of roadways will be provided by the Contractor as required by the Engineer.

### **AVAILABILITY OF ELECTRONIC FILES**

Electronic files of this project will be made available to the Contractor after the contract has been awarded. This information will be provided upon request in a AutoCad Platform software format ONLY. If data is required in other formats, it will be your responsibility to make these conversions. The Contractor shall coordinate obtaining electronic files through the Project Engineer. If there is a conflict between the electronic files and the printed contract plans and documents, the printed contract plans and documents shall take precedence over the electronic files. The Contractor shall accept all risk associated with using the electronic files and shall hold the Department harmless for any errors or omissions in the electronic files and the data contained therein. Errors or delays resulting from the use of the electronic files by the Contractor shall not result in an extension of time for any interim or final completion date or shall not be considered cause for additional compensation. The Contractor shall not use, share, or distribute these electronic files except for the purpose of constructing this contract. Any claims by third parties due to use or errors shall be the sole responsibility of the Contractor. The Contractor shall include this disclaimer with the transfer of these electronic files to any other parties and shall include appropriate language binding them to similar responsibilities.

## **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.

Existing integral curb removal is included in pavement removal.

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

## **PIPE HANDRAIL**

Description: This work shall include the design, fabrication, and installation of pipe handrailing indicated on plans. Metal Railing work shall be provided in accordance with Section 509 of IDOT Standards Specifications and 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. Supports, anchors and footings (if required) should be appropriately sized for the sign total.
- g. Design of supports, anchors, and footings (if required) shall be coordinated with locations of adjacent features.



- 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. 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. Submit samples for verification.
3. Cleaning and Maintenance Data: Include procedures for operation and maintenance including stain/graffiti removal.
4. Warranties: Submit warranties from 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 Contract.

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. Tubular Steel Railing: As Indicated on drawings.
3. Anchors and Inserts: As indicated on drawings.
4. 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 ornamental railings 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. Metal Assemblies:

- a. Clean and prepare according to coating Manufacturer's recommendation for maximum adhesion.
- b. 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 indicated on drawings.
- 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 (if required) 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 Section.

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

## **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.

Backfill will not be measured for payment and shall be considered included in the cost of the various storm sewer removal pay items.

## **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.

#### **VALVE BOXES TO BE ADJUSTED**

This work includes all labor, equipment, and materials required to adjust any utility valve boxes 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 VALVE BOXES TO BE ADJUSTED.

#### **CONCRETE BARRIER MEDIAN**

Description: This work shall consist of constructing concrete barrier median in accordance with plan details, Highway Standard 606301, Section 606 of the Standard Specifications and with the following requirements.

The concrete barrier median shall be painted yellow with epoxy paint meeting the requirements of Section 780 of the Standard Specifications.

Method of Measurement. Concrete barrier median will be measured for payment in square feet.

Basis of Payment: This work shall be measured and paid for at the contract unit price per Square Foot for CONCRETE BARRIER MEDIAN. Painting of the concrete barrier median will not be measured for payment and shall be considered included in the cost of the CONCRETE BARRIER MEDIAN.

#### **RAILROAD, FULL-ACTUATED CONTROLLER AND CABINET**

Description. - This work shall consist of furnishing and installing a traffic actuated solid state digital controller in the controller cabinet of the type specified, meeting the requirements of Section 857 of the Standard Specifications as modified herein and including conflict monitor or MMU, load switches and flasher relays, with interlock function to the railroad preemptor and all necessary connections for proper operation.

If the intersection is part of an existing system and/or when specified in the plans, this work shall consist of furnishing and installing a traffic actuated solid state controller.

Controller and cabinet shall be assembled only by an approved IDOT District Two traffic signal equipment supplier. The equipment shall be tested and approved in the equipment supplier's District Two's facility prior to field installation.

Materials. - Add the following to Article 857.02 of the Standard Specifications:

For installation as a stand-alone traffic signal, connected to a closed loop system or integrated into an advance traffic management system (ATMS), controllers shall be Econolite Cobalt or Eagle/Siemens M52 or M60 unless specified otherwise on the plans or elsewhere on these specifications. Only controllers supplied by one of the District Two approved closed loop equipment supplier will be allowed. The controller shall be the most recent model and software version approved by IDOT for use with railroad intersections supplied by the equipment supplier at the time of the traffic signal TURN-ON unless specified otherwise on plans or this specification, and include a removable data key. Individual load switches shall be provided for each vehicle, pedestrian, and right turn over lap phase. The controller shall prevent phases from being omitted during program changes and after all preemption events and shall inhibit simultaneous display of circular yellow and yellow arrow indications.

For integration into an ATMS such as Centrac, Tactics, or TransSuite, the controller shall have the latest version of NTCIP software installed. For operation prior to integration into an ATMS, the controller shall maintain existing communications.

Controller shall comply with Article 1073.01 as amended herein.

Controller Cabinet and Peripheral Equipment shall comply with Article 1074.03 as amended in these Traffic Signal Special Provisions.

Add the following to Articles 1073.01 (c) (2) and 1074.03 (a) (5) (e) of the Standard Specifications:

Controllers and cabinets shall be new and NEMA TS2 Type 1 or NEMA TS2 Type 2 design.

Railroad interconnected controllers and cabinets shall be assembled only by an approved traffic signal equipment supplier. All railroad interconnected (including temporary railroad interconnect) controllers and cabinets shall be new, built, tested and approved by the controller equipment vendor, in the vendor's State of Illinois facility, prior to field installation. The vendor shall provide the technical equipment and assistance as required by the Engineer to fully test this equipment.

Add the following to Article 1074.03 of the Standard Specifications:

(a) (6) Cabinets shall be designed for NEMA TS2 Type 1 or NEMA TS2 Type 2 operation. All cabinets shall be pre-wired for a minimum of eight (8) phases of vehicular, four (4) phases of pedestrian and four (4) phases of overlap operation.

(b) (1) Revise "conflict monitor" to read "Malfunction Management Unit"

(b) (5) Cabinets – Provide 1/8" (3.2 mm) thick unpainted aluminum alloy 5052-H32. The surface shall be smooth, free of marks and scratches. All external hardware shall be stainless steel.

(b) (6) Controller Harness – Provide a TS2 Type 2 "A" wired harness in addition to the TS2 Type 1 harness.

- (b) (7) Surge Protection – Shall be a 120VAC Single phase Modular filter Plug-in type, supplied from an approved vendor.
- (b) (8) BIU – shall be secured by mechanical means.
- (b) (9) Transfer Relays – Solid state or mechanical flash relays are acceptable.
- (b) (10) Switch Guards – All switches shall be guarded.
- (b) (11) Heating – One (1) 200 watt, thermostatically-controlled, electric heater.
- (b) (12) Lighting – One (1) LED Panel shall be placed inside the cabinet top panel and one (1) LED Panel shall be placed on each side of the pull-out drawer/shelf assembly located beneath the controller support shelf. The LED Panels shall be controlled by a door switch. The LED Panels shall be provided from an approved vendor.
- (b) (13) The cabinet shall be equipped with a pull-out drawer/shelf assembly. A 1 ½ inch (38mm) deep drawer shall be provided in the cabinet, mounted directly beneath the controller support shelf. The drawer shall have a hinged top cover and shall be capable of accommodating one (1) complete set of cabinet prints and manuals. This drawer shall support 50 lbs. (23 kg) in weight when fully extended. The drawer shall open and close smoothly. Drawer dimensions shall make maximum use of available depth offered by the controller shelf and be a minimum of 18 inches (610mm) wide.
- (b) (14) Plan & Wiring Diagrams – 12" x 15" (3.05mm x 4.06mm) moisture sealed container attached to door.
- (b) (15) Detector Racks – Fully wired and labeled for four (4) channels of emergency vehicle pre-emption and sixteen (16) channels of vehicular operation.
- (b) (16) Field Wiring Labels – All field wiring shall be labeled.
- (b) (17) Field Wiring Termination – Approved channel lugs required.
- (b) (18) Power Panel – Provide a nonconductive shield.
- (b) (19) Circuit Breaker – The circuit breaker shall be sized for the proposed load but shall not be rated less than 30 amps.
- (b) (20) Police Door – Provide wiring and termination for plug in manual phase advance switch.
- (b) (21) Railroad Pre-Emption Test Switch – Shall be provided from an approved vendor.
- (b) (22) An eight (8) outlet grounded three wire, 15A, 120V, surge protector shall be provided and mounted inside the cabinet above the cabinet power supply. The device shall have UL 1449 3<sup>rd</sup> Edition and UL 1363 certifications. The maximum device surge amps shall be greater than or equal to 84,000, AC suppression joule rating of 1,440, and capable of outputting 1,800 watts.
- (b) (23) A self-adhering phasing diagram shall be placed on the inside of the cabinet door.

Installation. - This item requires that a factor representative capable of ensuring that the controller and cabinet are operating to the satisfaction of the Engineer shall be present at the turn on of the controller and shall remain until the intersection is operating to the satisfaction of the Engineer.

Should a defect appear in the controller or cabinet operation, the representative shall return as often as necessary until all defects are repaired.

At the preconstruction meeting, the Contractor shall provide the names and phone numbers of two technicians who would be able to respond to controller malfunctions that occur within the 30 day acceptance period after the controller is turned on. If neither person can be reached at the time of the malfunction nor be at the location within 2 hours of receiving the call, any available electrician capable of evaluating and correcting the malfunction may be called at the City's discretion. Any and all bills resulting from defective operation of the controller or cabinet shall be the responsibility of the Contractor.

Basis of Payment. - This work will be paid for at the contract unit price Each for RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE V CABINET.

### **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.

### **REMOVE EXISTING DOUBLE HANDHOLE**

Description: This work shall consist of the removal of existing double handholes at locations noted in the plans in accordance Section 895 of the Standard Specifications.

Basis of Payment. This work will be paid for at the contract unit price per Each for REMOVE EXISTING DOUBLE HANDHOLE.

### **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 remain the property of the City of East Moline for salvage.

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 all labor and equipment necessary to complete the work as herein specified.

## **LANDSCAPING GRAVEL**

Description: This work shall include furnishing and installing decorative gravel / cobble surfacing.

Submittal Requirements: Submit following for review and approval.

1. Product Data: Submit photos indicating size, color, and shape representative of stone material intended for use. Submit product data for base aggregate and weed barrier.
2. Samples: Provide samples of material for Engineer / Owner review.

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

1. Natural Decorative River Rock, meeting the following specifications:
  - a. Obtained from regional sources.
  - b. Size: 60% in 3" to 5" size range, 40% in 6" to 10" size range
  - c. Color: Mix of grays and buff, with red and dark accents.

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

1. Decorative gravel to be installed to a minimum depth of 8".
2. Average finish surface grade of decorative gravel shall be flush pavement.
3. Install decorative gravel over a 4" compacted crushed limestone aggregate base.
4. Install weed barrier between decorative gravel and compacted base. Weed barrier to be woven, needle punched polypropylene fabric with a weight of 5 oz. per square yard.

This work will be paid for at the contract unit price per Square Yard for LANDSCAPING GRAVEL, which price shall include all labor, materials, and equipment necessary to complete the work specified herein.

## **WAYFINDING**

Description: Sign, Sign & Post, Small Entrance Sign, And Information Kiosk.

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.

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 color, as indicated on the drawings, 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 Sign Contractors will provide a paint color to match the design intent color, as indicated on the drawings.
  - 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 Sign Contractors will provide a vinyl film to match the design intent color, as indicated on the drawings.

- 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 Sign Contractors will provide a vinyl film to match the design intent color, as indicated on the drawings.
    - 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:

a. 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.

b. 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.

c. 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 (Wayfinding Sign, Sign & Post, Small Entrance Sign): This work will be paid for furnishing and installing at the contract unit price per Each WAYFINDING 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 (Information Kiosk): 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.



## 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 bench 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, Corten.
  - h. Wood Slats Color & Finish: Robinia
  - i. Inner Bin: Manufacturer provided inner bin with min. 30 Gal capacity.
  - j. 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.

#### **SPARE RAILROAD, FULL ACTUATED CONTROLLER, SPECIAL**

This work shall consist of furnishing a traffic actuated solid state digital controller identical to the controller supplied and programmed with RAILROAD FULL-ACTUATED CONTROLLER AND CABINET. This controller shall meet all requirements specified herein for RAILROAD, FULL-ACTUATED CONTROLLER AND CABINET, including programming and testing. The equipment shall be tested and approved in the equipment supplier's Illinois facility prior to field installation.

No cabinet shall be provided as part of this item.

Basis of Payment. - This work will be paid for at the contract unit price per Each for SPARE RAILROAD, FULL-ACTUATED CONTROLLER, SPECIAL.

#### **TRENCH BACKFILL (SPECIAL)**

Description. This work shall consist of furnishing aggregate for backfilling all trenches made in the subgrade of the proposed improvement, and all trenches where the inner edge of the trench is within 2 ft (600 mm) of the proposed edge of pavement, curb, gutter, curb and gutter, stabilized shoulder, or sidewalk.

This work also includes the disposal of the surplus excavated material which is replaced by trench backfill. Such disposal shall be made according to Article 202.03.

Materials. Materials shall be according to the following.

Item Article/Section

(b) Coarse Aggregate (Note 1) ..... 1004.05

Note 1. The gradation of the course aggregate shall be CA-6.

Method of Measurement. This work will be measured for payment in accordance with Article 208.03 of the Standard Specifications

Basis of Payment. This work will be paid for at the contract unit price per Cubic Yard for TRENCH BACKFILL (SPECIAL).

#### **PORTLAND CEMENT CONCRETE SURFACE REMOVAL 1 1/2"**

Description. This work shall consist the removal of Portland Cement Concrete (PCC) surfaces in preparation for subsequent resurfacing according to Section 440 of the Standard Specifications.

Method of Measurement. PCC surface removal will be measured for payment in square yards.

Basis of Payment. This work will be paid for at the contract unit price per Square Yard for PORTLAND CEMENT CONCRETE SURFACE REMOVAL 1 1/2.

### **BICYCLE RAILING (SPECIAL)**

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. Supports, anchors and footings (if required) should be appropriately sized for the sign total.
  - g. Design of supports, anchors, and footings (if required) shall be coordinated with locations of adjacent features.
  - 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. 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 Contract.

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 Matte Finish.
  - c. Compatibility: Coating compatible with galvanized steel substrate.
- 4. Fasteners:
  - a. Mechanical fasteners shall be concealed unless noted otherwise as part of the 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.
- 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. 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 ornamental railings 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 Section.

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

**REMOVE SHEET PILING**

Description. This work shall consist of complete removal of the existing sheet pile retaining walls at locations shown on the plans.

Removal of sheet piling will be paid for at the contract Lump Sum price for REMOVE SHEET PILING.

**INLETS, TYPE A, TYPE 1 FRAME, CLOSED LID (SPECIAL)**

Description. This work shall consist of constructing an Inlet Type A with two pipe connections and a Type 1 Frame, Closed Lid, according to plan details and Section 602 of the Standard Specifications.

Basis of Payment. This work will be paid for at the contract unit price per Each for INLETS, TYPE A, TYPE 1 FRAME, CLOSED LID (SPECIAL).

**INLETS, TYPE A, TYPE 3 FRAME AND GRATE (SPECIAL)**

Description. This work shall consist of constructing an Inlet Type A, storm sewer pipe, connection to the existing storm sewer pipe trench backfill, and a Type 3 Frame and Grate, according to plan details and Section 208, 550 and 602 of the Standard Specifications.

Basis of Payment. This work will be paid for at the contract unit price per Each for INLETS, TYPE A, TYPE 3 FRAME AND GRATE (SPECIAL). Installation of the pipe, trench backfill and connection to the existing pipe will not be paid for separately.

### **DOUBLE INLET (SPECIAL) AND INLETS (SPECIAL)**

Description. This work shall consist of constructing inlets or double inlets, with frames and grates according to plan details and Section 602 of the Standard Specifications.

Basis of Payment. This work will be paid for at the contract unit price per Each for DOUBLE INLET (SPECIAL), or INLETS (SPECIAL).

### **INLETS, SPECIAL, NO. 1 AND INLETS, SPECIAL, NO. 2**

Description. This work shall consist of constructing inlets or double inlets, with frames and grates according to plan details and Section 602 of the Standard Specifications.

Basis of Payment. This work will be paid for at the contract unit price per Each for INLETS, SPECIAL, NO. 1, or INLETS, SPECIAL, NO. 2.

### **SANITARY MANHOLES TO BE ADJUSTED AND SANITARY MANHOLES TO BE RECONSTRUCTED**

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, or SANITARY MANHOLES TO BE RECONSTRUCTED 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.

### **FENCE REMOVAL**

Description. This work shall consist of the removal and disposal of existing fence including posts, gates, appurtenances and foundations at locations shown on plans.

Method of Measurement. This work will be measured for payment in feet, measured from center to center of end posts.

Basis of Payment. This work will be paid for at the contract unit price per Foot for FENCE REMOVAL.

### **COMBINATION LIGHTING CONTROLLER**

Description: This work shall consist of furnishing and installing a photocell with integral surge arrester, 3-position selector switch (H-O-A), terminal/splice blocks, and 30 Amp lighting contactor (120V) in the traffic signal cabinet to control the operation of the combination lighting units.

A 120 Volt 20 Amp circuit breaker shall be installed inside the traffic signal controller connected to the main breaker, to serve the roadway lighting, per section 1068.01(e)(3) of the Standard Specifications. The circuit breaker shall be clearly labeled for lighting according to Article 1068.01(f) of the Standard Specifications.

Install all lighting components independent of the traffic signal components on one side of the cabinet and label as "LIGHTING". The under-eave photocell shall be mounted on the traffic signal controller



cabinet, per section 1068.01(e)(2) of the Standard Specifications. Furnish and install all wiring between components to make a fully functional lighting control system for the combination lights.

Basis of Payment: This work shall be paid for at the contract unit price per Each for COMBINATION LIGHTING CONTROLLER, which shall be payment in full for all labor, materials, and equipment required to complete the installation.

### **PANELBOARD, NEMA 4X, SPECIAL**

Description: This work shall consist of furnishing, transporting, and installing the Panelboard, NEMA 4X, Special on an equipment rack 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 Panelboard shall be 120/240 VAC, 1-phase, 3 wire, output 100 Amp, 100 Amp main circuit breaker, 18 Pole, sixteen 20 Amp, 1 Pole circuit breakers, one 30 Amp, 2 pole circuit breaker, NEMA 4X Enclosure.

Basis of Payment: Work will be paid for at the Contract Unit Price per Each of PANELBOARD, NEMA 4X, SPECIAL for the 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.

### **HANDHOLE SPECIAL 12" X 12"**

Description: This work shall consist of furnishing, transporting, and installing the Handhole Special 12" x 12" in accordance with Section 825 of the Standard Specifications, the plans, and as directed by the Engineer.

Materials: The Handhole shall be polymer concrete with the following size: 12" width, 12" length, and 12" depth. Handhole shall be rated tier 8. Handhole cover shall state "ELECTRIC". Hardware shall be 3/8" penta bolts.

Basis of Payment: Work will be paid for at the Contract Unit Price per Each of HANDHOLE SPECIAL 12" X 12" for the 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.

### **PEDESTRIAN PUSH-BUTTON POST**

Description: This work shall consist of furnishing and installing a metal pedestrian push-button post. All installations shall meet the requirements of the details shown on the plans

#### Materials.

- General. The pedestrian signal post shall be designed to support the traffic signal loading shown on the plans. The design and fabrication shall be according to the Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, as published by AASHTO.
- Post. The post shall be made of steel or aluminum and have an outside diameter of 4 1/2 in. The post shall be threaded for assembly to the base. Aluminum posts shall be according to the specifications for Schedule 80 aluminum pipe. Steel posts shall be according to the

specifications for Schedule 40 steel pipe. The post shall have a safety tether connected to the anchor rod.

- **Base.** The base of a steel post shall be cast iron. The base of an aluminum post shall be aluminum. The base shall be threaded for the attachment to the threaded post. The base shall be approximately 10 in. high and 6 3/4 in. square at the bottom. The bottom of the base shall be designed to accept four 5/8 in. diameter anchor rods evenly spaced in a 6 in. diameter circle. The base shall be true to pattern, with sharp clean cutting ornamentation, and equipped with access doors for cable handling. The door shall be fastened to the base with stainless steel screws. A grounding lug shall be provided inside the base.
- **Anchor Rods.** The anchor rods shall be 5/8 in. in diameter and 16 in. long and shall be according to Article 1006.09. The anchor rods shall be threaded approximately 6 in. at one end and have a bend at the other end. The first 12 in. at the threaded end shall be galvanized. One each galvanized nut and washer shall be furnished with each anchor rod. The washer shall be properly sized to fully engage and sit flush on all sides of the slot of the base plate.
- The aluminum post and base shall be drilled at the third points around the diameter and 1/4 in. by 2 in. stainless steel bolts shall be inserted to prevent the post from turning and wobbling.
- **Finish.** The steel post, steel post cap and the cast iron base shall be hot-dipped galvanized according to AASHTO M 111. If the post and the base are threaded after the galvanization, the bare exposed metal shall be immediately cleaned to remove all cutting solvents and oils and then spray painted with two coats of an approved galvanized paint. The aluminum post, post cap and base shall be clear anodized.

***The posts that are to be installed at the intersections on 12th Avenue with 3rd Street and 7th Street shall be painted dull (matte) black.***

- **Installation.** The pedestrian signal post shall be erected plumb, securely bolted to a concrete foundation, and grounded to a ground rod according to the details shown on the plans. No more than 3/4 in. of the post threads shall protrude above the base.  
A post cap shall be furnished and installed on the top of the post. The post cap shall match the material of the post. The Contractor shall apply an anti-seize paste compound on all nuts and bolts prior to assembly.

Prior to the assembly, the Contractor shall apply two additional coats of galvanized paint on the threads of the post and the base. The Contractor shall use a fabric post tightener to screw the post to the base.

**Basis of Payment.** This work will be paid for at the contract unit price per EACH for PEDESTRIAN PUSH-BUTTON POST.

## **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 12<sup>TH</sup> 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.

## **ACCESSIBLE PEDESTRIAN SIGNALS**

Effective: April 1, 2003

Revised: August 1, 2023

888.02TS

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.

Add the following to Article 888.03 of the Standard Specifications:

A mounting bracket and/or extension shall be used to assure proper orientation and accessibility where needed. The price of the bracket and/or extension shall be included in the cost of the pedestrian push button. The contractor is not allowed to install a push-button assembly with the sign below the push-button to meet mounting requirements.

Add the following to Article 1074.02(e) of the Standard Specifications:

Stations shall be designed to be mounted to a post, mast arm pole or wood pole. The station shall be aluminum and shall accept a 3 inch round push-button assembly and a regulatory pedestrian instruction sign according to MUTCD sign series R10-3b 9" x 12" sign with arrow(s) for a pedestrian signal. Stations shall be powder coated yellow with a black pushbutton and stainless steel arrow on pushbutton.

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". Locator tones shall be audible 6 to 12 ft from pushbutton.

If two accessible pedestrian pushbuttons are placed less than 10 ft apart or placed on the same pole, the audible walk and don't walk indication shall be a speech message. This speech message shall sound throughout the WALK interval only. Common street name shall be used and not the route number of the street unless there is no common street name. The street name used in programming shall reflect the street name mast arm mounted sign panel. Locations without street name (ex. private benefit driveways, shopping plaza entrance, etc.) shall use a general term "Commercial Driveway" as a street name for that leg. The speech 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 during DON'T WALK interval. This verbal message shall be modeled after: "Wait". The extended press option verbal message shall be: "Wait to cross 'Street Name' at 'Street Name'".

#### Railroad Preemption.

At locations with railroad interconnection APS pushbutton shall be capable of receiving a railroad preemption similar to a traffic signal controller and shall be hard wired to the railroad preemption relay inside the traffic signal cabinet. A shelf mount control unit shall be provided and installed inside the cabinet capable of receiving and transmitting the railroad preemption to all the push buttons.

At railroad intersections all APS pushbuttons shall use the speech message and shall follow the below speech models.

During Don't Walk: "Wait to cross 'Street Name' at 'Street Name', Caution, Walk time shortened when train approaches" – this does not repeat, plays only once with every push button press.

During Walk: "Walk sign is on to cross 'Street Name', – this repeats as many times as possible during Walk interval only.

During Railroad preemption: All push buttons at same time "Train Approaching" – this message shall be repeated two times.

At locations with emergency vehicle preemption, NO additional speech message shall be provided.

At locations with Equestrian Pushbuttons style installation the APS push buttons shall use speech message only and shall emit the audible message from the bottom mounted push button only.

#### Locations with Corner Islands or Center Medians

At locations with corner islands pushbuttons shall follow the requirement of the 10 ft as specified herein regarding the percussive tone vs a speech message. When push buttons are closer than 10 ft apart the speech message shall follow the format specified herein for the main street crossing. The speech message shall follow the below speech models for the unusual configurations.

Crossing of the right turn lane from or to Corner Island: "Wait to cross right turn lane for 'Street Name' at 'Street Name' crosswalks" and "Walk sign is on to cross right turn lane for 'Street Name' at 'Street Name' crosswalks"

Crossing from Corner Island to Corner Island where second pushbutton actuation is required: "Wait to cross 'Street Name' at 'Street Name' to median with second pushbutton" and "Walk sign is on to cross 'Street Name' to median with second pushbutton"

Center Medians on a divided highways with push buttons will require pushbutton to have a dual arrow on the pushbutton.

Where two accessible pedestrian pushbuttons are separated by 10 ft or more, 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. Percussive tone shall be uniform at all stations at the intersection and shall not change for different directions.

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. Locator tone and speech message shall be programmed at same volume one shall not be significantly louder than the other and shall be adjusted as directed by the Engineer.

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.

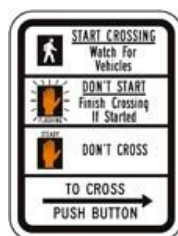
APS pushbutton systems that utilize any wireless technology including Bluetooth technology to place calls or communicate with controller will not be allow. A central master control unit shall be provided and installed in the traffic signal cabinet. Push button shall be connected directly to the master control unit in the traffic signal cabinet using only 2 wires. All pushbuttons shall be capable of placing a pedestrian call request into the controller and shall be hard wired. APS pushbuttons shall be a direct replacement of existing standard push buttons and shall be weather resistant with a minimum warranty of 5 years.

APS push buttons shall be compatible with one another and easily replaceable on future replacements or maintenance repairs no multiple model variations will be allowed.

All APS pushbuttons shall come with the messages pre-programmed for each particular intersection regardless of the location or the 10 ft separation. Final field adjustments including percussive tone vs speech message use shall be completed once push buttons are installed in the final location. All push buttons shall be programmed with the appropriate parameters and settings as directed by the Engineer. These settings shall be standard for all pushbuttons and will vary based on the manufacturer. Access to pushbutton settings shall be provided through an app either through wired, wireless, or Bluetooth connection. Pushbutton information, settings, and access instructions shall all be provided in a weatherproof pouch and safely stored inside each traffic signal cabinet.

Contractor shall remove any existing pedestrian isolation boards, field wire terminals, and any wires to the board when easily accessible. If the pedestrian isolation board has been installed from the factory on the back panel of the cabinet, contractor is to disconnect the power to the isolation board and any wires while leaving the board mounted. This work shall be included in the cost of Accessible Pedestrian Signals and will not be paid for separately.

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 the following standard MUTCD design: R10-3b.



R10-3b

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.

Basis of Payment. This work will be paid for at the contract unit price per Each for ACCESSIBLE PEDESTRIAN SIGNALS and shall include furnishing, installation, mounting hardware including extension brackets if required, and programming of the push button.

## **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 included 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 (-35 to +74 degrees C) 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 -29F to +165F (-34C to +74C) 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 an Edco RMCXI-06 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, such as Belden 8281 or West Penn P806.

## 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 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.

#### 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.

### **CONDUIT SPLICE**

Description. This work shall consist of locating and intercepting the existing conduit at locations as shown on the plans or as directed by the Engineer. The Contractor shall locate the conduit, cut the conduit, and make any preparations to the existing conduit in order to connect the proposed conduit.

Construction Requirements. This pay item shall include the necessary work to splice the conduit as shown on the plans. This work shall conform to Section 810 of the IDOT "Standard Specifications for Road and Bridge Construction". The existing conduits shall be exposed and cut at the location shown on the plans or as directed by the Engineer. Coupler shall be rated for joining the conduit(s) material types and be UL listed.

Basis of Payment. This work shall be paid for at the contract unit price Each for CONDUIT SPLICE which shall include all connections, materials and labor, necessary to locate the existing conduit and prepare the existing conduit for connection to the proposed conduit. The proposed conduit shall be paid for separately.

### **CONCRETE PAVERS**

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 (Solid Interlocking Paving Units): Pressed concrete Plank Style architectural paver meeting the following specifications:
  - a. Nominal Size: Plank Style, acceptable uniform sizes include:
    - i. 8" width x 24" Length x 2 ¾" (Min) Thickness
    - ii. 6" width x 24" Length x 2 ¾" (Min) Thickness
    - iii. 10" width x 30" Length x 2 ¾" (Min) Thickness
    - iv. 12" Width x 48" Length x 2 ¾" (Min) 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)
3. Concrete Pavers, Type B (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)
  - g. Manufacturer's certification stating the product is fully compliant with accessibility standards shall be submitted for review and approval before acceptance of product.

**NOTE- FREEZE/THAW TESTING, IF NOT LREADY DOCUMENTED MAY TAKE 8 TO 10 WEEKS TO COMPLETE.**

4. Concrete Substructure: 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
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. Sand for Leveling Course: Sound, sharp, washed, natural sand or crushed stone complying with gradation requirements in ASTM C33/C33M for fine aggregate.
8. Sand for Joints: Manufactured Polymeric Sand designed for paver joint installations.

**The contractor is responsible for ensuring any required material testing is completed without delay to the project schedule. Any temporary protection of open holes or gaps shall be done as directed by the Engineer at no additional cost to the contract.**

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 and 1/4 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.

Decorative paver work will be paid for at the contract unit price per Square Foot for CONCRETE PAVERS TYPE A, 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.

ADA compliant truncated dome paver work will be paid for at the contract unit price per Square Foot as CONCRETE PAVERS TYPE B, 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.

## **ELECTRIC BOX TO BE ADJUSTED**

Description. This work shall consist of all labor and materials necessary to remove and relocate the existing vacuum and air pump station in the southwest corner of the 12<sup>th</sup> Avenue and 3<sup>rd</sup> Street (Mississippi Parkway) intersection to the location shown on the plans.

All wiring, conduit, and concrete pad and foundation matching the depth and dimensions of the existing concrete pad and foundation is included in this work.

Basis of Payment. This work will be paid for at the contract unit price per Each for ELECTRIC BOX TO BE ADJUSTED.

## **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: Rough & Ready Curved Bench
  - b. Manufacturer Contact: Jeronimo Mejia, jmejia@streetlife.com, 1.484.496.8280
  - c. Dimension: 196" Length x 24" D x 16 1/2" Height
  - d. Model/Configuration: Rough & Ready Curved Benc, To Match Drawings
  - e. Wood Material: Accoya Wood - Virgin
  - f. Frame Material: Corten Steel
  - g. Frame Finish: Weathered Corten Steel
  - h. Armrest: As Indicated on drawings.
  - i. Backrest: As Indicated on drawings.
  - j. Mounting: Surface Mount
  - k. 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.

## **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.

### Material Requirements:

#### 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 watermain.
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.

**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](mailto: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, Dark Corten Texture, 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 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](mailto: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 Corten Texture.
  - 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.

#### **DRAINAGE STRUCTURE TO BE REMOVED**

Description. This work shall consist of removing drainage structures according to plan details and Section 605 of the Standard Specifications.

Basis of Payment. This work will be paid for at the contract unit price per Each for DRAINAGE STRUCTURE TO BE REMOVED.

#### **STORM SEWER (WATER MAIN REQUIREMENTS)**

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/F442M. 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 paid for at the contract unit price per Foot for STORM SEWER (WATER MAIN REQUIREMENTS), of the diameter specified.

## **TEMPORARY PAVEMENT**

**Description.** This work shall consist of constructing and removing temporary pavement according to plan details and Sections 351, 408 and 420 of the Standard Specifications.

**Method of Measurement.** Temporary pavement will be measured for payment in square yards.

**Basis of Payment.** This work will be paid for at the contract unit price per Square Yard for TEMPORARY PAVEMENT.

## **TEMPORARY TRAFFIC SIGNAL TIMING**

**Description:** This work shall consist of developing and maintaining appropriate traffic signal timings for the specified intersections for the duration of the temporary signalized condition, as well as impact to existing traffic signal timings caused by detours or other temporary conditions.

All timings and adjustments necessary for this work shall be performed by an approved Consultant who has previous experience in optimizing Closed Loop Traffic Signal Systems for District 2 of the Illinois Department of Transportation. The Contractor shall contact the Traffic Signal Engineer for a listing of approved Consultants.

The following tasks are associated with TEMPORARY TRAFFIC SIGNAL TIMING:

- a. Consultant shall attend temporary traffic signal inspection (turn-on) and conduct on-site implementation of the traffic signal timings.
- b. Make fine tuning adjustments to the timings in the field to alleviate observed adverse operating conditions and to enhance operations.
- c. Consultant shall provide monthly observation of traffic signal operations in the field.
- d. Consultant shall provide on-site consultation and adjust timings as necessary for construction stage changes, temporary traffic signal phase changes and any other conditions affecting timing and phasing, including lane closures, detours and other construction activities.
- e. Consultant shall make timing adjustments and prepare comment responses as directed by the Area Traffic Signal Operations Engineer.

**Basis of Payment:** The work shall be paid for at the contract unit price per Each for TEMPORARY TRAFFIC SIGNAL TIMING, which price shall be payment in full for performing all work described herein per intersection. When the temporary traffic signal installation is turned on and/or detour implemented, 50% of the bid price will be paid. The remaining 50% of the bid price will be paid following the removal of the temporary traffic signal installation and/or detour.

## **BIKE REPAIR STATION**

**Description:** This work shall include:

1. Furnishing, assembling and installing bike repair station ("BIKE REPAIR STATION") at the positions and grades designated on the construction drawings.
2. Furnishing and installing the appurtenant materials required for the installation of the bike repair station as shown on the construction drawings.

General Requirements: The contractor shall comply with manufacturer's recommendations for transportation, installation and approved submittals. All bike repair stations 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. Bike Repair Station: Meeting the following specifications:
  - a. Main body: 6 x 12g. tube.
  - b. Bike Hanger: 1" solid round bar. One set of hanger arms for one bike.
  - c. Foot: 10" dia. x .25" plate.
  - d. Tool tethers: 3/16" stainless steel cable.
  - e. Manual air pump kit, attached to repair station.
  - f. Cane-detectable stop provided at base of station and aligned with bike hangers.
  - g. Hand tools:
    - i. Philips and flat head screwdrivers
    - ii. 2.5, 3, 4, 5, 6, 8mm Allen wrenches
    - iii. T25 Torx wrench
    - iv. 32mm headset wrench
    - v. 15mm pedal wrench
    - vi. 8, 9, 10, 11mm box wrenches
    - vii. Tire levers
  - h. Finishes.
    - i. A hot-dipped galvanized finish performed after fabrication prior to powder coating.
    - ii. TGIC powder-coated finish, the following specifications are required: Parts are prepared for painting with hard sandblasting. An epoxy primer is electrostatically applied. A final TGIC, UV resistant polyester powder coat is applied. Final coating mil thickness shall be no less than 6 mils.
    - iii. Bronze Color Finish to be used. Provide physical sample for owner review and approval prior to fabrication.
  - i. Manufacturer's Warranty: One (1) 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. Bike Repair Station must be supplied by a single manufacturer having the resources to provide consistent quality in appearance and physical properties.
4. Bike Repair Station 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 Bike Repair Station shall comply with the following:

1. Bike Repair Station are to be installed as per manufacturer's instructions.
2. Bike Repair Station 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. Bike Repair Station to be anchored to concrete slab using Manufacturer recommended hardware.
4. Follow manufacture's specifications and recommendations for space use and setbacks from adjacent elements.

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

#### **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 #17: Mutual Wheel Company, 305 12th Avenue, East Moline, Illinois 61244**

Station 16+92 to 17+79 (Westbound + Eastbound 12th Avenue), 0 to 33 feet LT + 0 to 22 feet RT (Site 17) – The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05 (a)(1). COC Sampling parameters: benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and pH.

##### **Site #20: CTL Industrial Property, 1201 7th Street, East Moline, Illinois 61244**

Station 32+04 to 33+11 (Westbound + Eastbound 12th Avenue), 0 to 28 feet LT + 0 to 20 feet RT (Site 20) – The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05 (a)(3). COC sampling parameter: benzo(a)pyrene.

Station 33+11 to 34+06 (Westbound + Eastbound 12th Avenue), 0 to 28 feet LT + 0 to 20 feet RT (Site 20) – The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05 (a)(1). COC sampling parameters: arsenic, iron, manganese, and pH.

Station 35+03 to 36+00 (Westbound + Eastbound 12th Avenue), 0 to 28 feet LT + 0 to 22 feet RT (Site 20) – The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05 (a)(5). COC sampling parameters: iron, manganese, and PID.

Station 37+04 to 37+89 (Westbound + Eastbound 12th Avenue), 0 to 21 feet LT + 0 to 21 feet RT (Site 20) – 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.



Station 37+89 to 38+93 (Westbound + Eastbound 12th Avenue), 0 to 20 feet LT + 0 to 36 feet RT (Site 20) – The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05 (a)(5). COC sampling parameters: manganese, and PID.

Station 42+00 to 43+11 (Westbound + Eastbound 12th Avenue), 0 to 31 feet LT + 0 to 36 feet RT (Site 20) – 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 #27: R&S Transportation/Cell Tower, 707 12th Avenue, East Moline, Illinois 61244**

Station 704+78 to 705+74 (Southbound + Northbound 7th Street), 0 to 27 feet LT + 0 to 40 feet RT (Site 27) – 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.

Station 44+50 to 44+76 (Westbound + Eastbound 12th Avenue), 0 to 34 feet LT + 0 to 61 feet RT (Site 27) – 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.

Station 44+76 to 45+45 (Westbound + Eastbound 12th Avenue), 0 to 31 feet LT + 0 to 31 feet RT (Site 27) – 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.

Station 45+45 to 45+45 (Westbound + Eastbound 12th Avenue), 0 to 32 feet LT + 0 to 22 feet RT (Site 27) – The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05 (a)(1). COC sampling parameters: mercury and 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**

**Special Waste may be managed on site as uncontaminated soil or managed off site.**

Additional information on the above sites collected and documented in the Preliminary Site Investigation (PSI) available through Crawford, Murphy and Tilly (CMT).

**MANHOLES TO BE ADJUSTED WITH NEW FRAME, CLOSED LID, BOLTED**

Description: This work shall consist of adjusting manholes with new frames and bolted, closed lids as shown in the plans. This work shall be constructed in accordance with applicable portions of Section 602 of the Standard Specifications. Frame and lid shall meet the dimensions of IDOT Highway Standard 604001 - Frame and Lids, Type 1.

Basis of Payment: This work shall be paid for at the contract unit price Each for MANHOLES TO BE ADJUSTED WITH NEW FRAME, CLOSED LID, BOLTED which price shall include the cost of all materials, labor, and equipment needed for removal and disposal of existing manholes material as well as the adjustment and reconstruction of manholes.

Route	Marked Route	Section Number
FAU 5755 / FAU 5851	12th Avenue / 7th Street	22-00159-03-PV / 22-00159-00-PV
Project Number	County	Contract Number
VI5U(891)	Rock Island	85780

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: 2025.09.22 13:53:32  
-05'00'

### **SWPPP Notes**

#### Preparing BDE 2342 (Storm Water Pollution Prevention 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.

12th Avenue from 1st St. to East of 7th Street / 7th Street from alley south of 12th Ave. to north of 12th Avenue, City of East-Moline, Latitude -41.51699 and Longitude -90.4551, Section 25, Township 18N, and Range 1W

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

The project involves reconstruction with new pavement including storm drainage and traffic signals, and construction of a new shared use path. ADA ramps, roadway lighting, wayfinding signage, landscaping, and site amenities of benches and trash receptacles are included.

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).

This project will be staged for construction with the south portion constructed first followed by the north section. Soil disturbing activities will include: excavation, pavement removal, PCC pavement, PCC shared used path, storm sewer replacement, traffic signal replacement and other collateral works. Proposed landscaping areas will be constructed.

4. The total area of the construction site is estimated to be 10.5 acres.

5. The total area of the site estimated to be disturbed by excavation, grading or other activities is 10.0 acres.

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

Proposed: C = 0.90

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

Area is mostly impervious surfaces with pervious surfaces stabilized by established grass. No known erosive areas.

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.

clayey sand, silty sand, crushed limestone, lean clay with variable silt and sand content, lean to fat clay and fat clay. Per geotechnical report, slopes down towards west with approximate elevations ranging from 576 to 580 feet mean sea level (MSL). and Erosivity information is unknown.

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.

Mississippi River by way of storm sewer

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

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

### 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) PCC Pavement Joint Sealer

☒ Other (Specify) Wastewater form cleaning equipment

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)

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

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

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

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

## **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):

- |   |   |
|---|---|
| <input type="checkbox"/> Mulch<br><input checked="" type="checkbox"/> Erosion Control Blanket<br><input type="checkbox"/> Turf Reinforcement Mat<br><input type="checkbox"/> Sodding<br><input checked="" type="checkbox"/> Geotextile fabric | <input checked="" type="checkbox"/> Preservation of existing vegetation<br><input checked="" type="checkbox"/> Temporary Turf Cover Mixture (Class 7)<br><input checked="" type="checkbox"/> Permanent seeding (Class 1-6)<br><input checked="" type="checkbox"/> Other (Specify) <u>Landscaped areas with mulching</u><br><input type="checkbox"/> Other (Specify) _____<br><input type="checkbox"/> Other (Specify) _____ |
|---|---|

### 2. Sediment Control:

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

- |   |  |
|---|--|
| <input type="checkbox"/> Ditch Checks<br><input checked="" type="checkbox"/> Inlet and Pipe protection<br><input type="checkbox"/> Hay or Straw bales | <input checked="" type="checkbox"/> Perimeter Erosion Barrier<br><input type="checkbox"/> Rolled Excelsior<br><input type="checkbox"/> 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:

- |  |  |
|--|--|
| <input type="checkbox"/> Aggregate Ditch                 | <input type="checkbox"/> Stabilized Construction Exits           |
| <input type="checkbox"/> Articulated Block Revetment Mat | <input type="checkbox"/> Stabilized Trench Flow                  |
| <input type="checkbox"/> Barrier (Permanent)             | <input type="checkbox"/> Sediment Basin                          |
| <input type="checkbox"/> Concrete Revetment Mats         | <input checked="" type="checkbox"/> Retaining Walls              |
| <input type="checkbox"/> Dewatering Filtering            | <input type="checkbox"/> Riprap                                  |
| <input type="checkbox"/> Gabions                         | <input checked="" type="checkbox"/> Storm Drain Inlet Protection |
| <input type="checkbox"/> In-Stream or Wetland Work       | <input type="checkbox"/> Slope Walls                             |
| <input type="checkbox"/> Level Spreaders                 | <input type="checkbox"/> Sediment Trap                           |
| <input type="checkbox"/> Paved Ditch                     | <input checked="" type="checkbox"/> Other (Specify) _____        |
| <input type="checkbox"/> Permanent Check Dams            | <input type="checkbox"/> Other (Specify) _____                   |
| <input type="checkbox"/> Precast Block Revetment Mat     | <input type="checkbox"/> Other (Specify) _____                   |
| <input type="checkbox"/> Rock Outlet Protection          | <input type="checkbox"/> Other (Specify) _____                   |

Underdrain

### 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

Perforated underdrains in aggregate trenches are an integrated part of the new storm sewer and will promote infiltration to reduce runoff volumes and velocities. Vegetated areas with trees, planting and sodding will reduce 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 contractor. No concrete truck washouts will be allowed to occur into 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

All temporary erosion and sediment control items shall be cleaned and maintained according to IDOT and manufacture BMPs.

## **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.



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
12th Avenue Reconstruction	1st Street - 7th Street	22-00159-03-PV
Project Number	County	Contract Number
VI5U(891)	Rock Island	85780

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		
<div></div>	<div></div>		
Print Name	Title		
<div></div>	<div></div>		
Name of Firm	Phone		
<div></div>	<div></div>		
Street Address	City	State	Zip Code
<div></div>	<div></div>	<div></div>	<div></div>

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

## **SPECIAL PROVISIONS FOR PROTECTION OF BNSF RAILWAY COMPANY INTEREST**

To Report an Emergency on the railroad call: (800) 832-5452

15<sup>th</sup> Avenue and 7<sup>th</sup> 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, 3<sup>rd</sup> Floor  
Kansas City, KS 66106  
913-551-4257  
[Jacob.Rzewnicki@BNSF.com](mailto: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](http://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'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 contractor 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](mailto: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](mailto:BNSF@certfocus.com)

[www.certfocus.com](http://www.certfocus.com)

City of East Moline:

Mr. Tim Kammler

Director of Engineering

City of East Moline

1200 -13<sup>th</sup> 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:
  - 7<sup>th</sup> Street, US DOT #605937E of the Barstow-Rock Island Sub in East Moline, IL; Roadway and Shared-Use Path Grade Crossing Improvements & 12<sup>th</sup>/7<sup>th</sup> Signal Reconstruction
  - 3<sup>rd</sup> Street, USDOT #605935R of the Barstow-Rock Island Sub in East Moline, IL; Roadway and Sidewalk Grade Crossing Improvements & 12<sup>th</sup>/3<sup>rd</sup> Signal Reconstruction

**14.2.12** The contractor must notify BNSF Manager of Public Projects at [Jacob.Rzewnicki@BNSF.com](mailto: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 25 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. LIABILITY 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 CONTRACTOR 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 CONTRACTOR'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.

## **RAILROAD GRADE CROSSING EQUIPMENT INSTALLATION**

The contractor shall be responsible for all necessary coordination with the Iowa Interstate Railway, LLC (IAIS) and BNSF Railway, Inc. (BNSF) for the duration of construction. The contractor shall provide both IAIS and BNSF representatives with an anticipated construction schedule on or before the contract issued Notice to Proceed, indicating anticipated timeline for construction within limits of railroad grade crossings and anticipated timeframe for equipment changeover.

### **3<sup>RD</sup> STREET – 605935R**

The contractor shall coordinate the installation of grade crossing surface panels with BNSF a minimum of 90 days in advance of anticipated installation.

The contractor shall coordinate with IAIS for preemption connection and circuitry equipment changeover of the 12<sup>th</sup>/3<sup>rd</sup> street signalized intersection, including inspection of all timings and equipment. The contractor shall provide IAIS a minimum of 7 calendar days' notice.

### **7<sup>th</sup> STREET – 605937E**

The contractor shall coordinate the installation of grade crossing surface panels with BNSF and IAIS a minimum of 90 days in advance of anticipated installation. The contractor shall coordinate with IAIS for removal of existing railroad signals and the installation of new railroad signals a minimum of 120 days in advance of anticipated installation.

The contractor shall coordinate with IAIS for preemption connection and circuitry equipment changeover of the 12<sup>th</sup>/3<sup>rd</sup> street signalized intersection, including inspection of all timings and equipment. The contractor shall provide IAIS a minimum of 7 calendar days' notice.

## **MODIFICATION TO MAINTENANCE OF TRAFFIC**

If the contractor proposes any Maintenance of Traffic plan that differs or conflicts with the contract plans, the contractor shall be responsible for coordinating with the respective railroad(s) for approval of MOT devices placed within their respective right of way.

## **BASIS OF PAYMENT**

No payment will be made for coordination with BNSF and IAIS for constructing staging, scheduling, and equipment changeover coordination.

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:

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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  
PORTLAND CEMENT CONCRETE PAVEMENT (SPECIAL)

Effective May 12, 1964  
Revised January 2, 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.

All work shall be according to Section 420 and applicable provisions of Section 606 except as follows:

420.01 Description. Revise Article 420.01 to read:

"Description. This work shall consist of a pavement with an integral concrete curb composed of portland cement concrete with or without reinforcement, constructed on a prepared subgrade, or subbase, with or without forms."

420.03 Equipment. The following equipment will not be required:

- (c) Mechanical Concrete Spreader
- (e) Mechanical Longitudinal Float

Add the following paragraph to this Article:

"The integral concrete curb shall be formed with a moving finishing template or "mule" of a design approved by the Engineer. The template may be either a part of or separate from the pavement finishing machine and shall be designed so as to produce uniform curb of the exact dimensions required by the plans. It shall incorporate a means of consolidation of the concrete in the curb either by hand spreading or other method approved by the Engineer. If separate from the pavement finishing machine, the template shall be so designed as to cause a minimum displacement of the plastic pavement concrete.

The subgrade template shall be of a design approved by the Engineer and shall be capable of accurately indicating high and low spots in the subgrade with relation to the side forms."

420.04 Preparation of Subgrade or Subbase. Revise the third paragraph of Article 301.06 to read:

"The subgrade shall be brought to true shape by means of a subgrade planer, subgrade machine, and/or other methods approved by the Engineer according to the following:"

Add the following subparagraph (c) to Article 301.07:

"(c) Other methods when approved by the Engineer."

420.06 Forms and Form Setting. Add the following paragraph to Article 420.06:

"Forms for the integral concrete curb with a base width less than the height may be used provided they are stable while the finishing equipment is operated upon them and do not settle under the weight of the finishing machine. If additional form height is added to accommodate the curb template after the passage of the pavement finishing equipment, the form arrangement shall meet with the approval of the Engineer.

420.07 Placing. Add the following paragraphs to Article 420.07:

"An integral concrete curb shall be cast monolithically with the pavement. It shall be formed either as a part of, or immediately following, the placing of the concrete pavement or by other methods approved by the Department.

When the curb is formed in a separate operation from the pavement, it shall be placed immediately following the longitudinal floating operation. Curb concrete shall be thoroughly rodded or spaded into the surface of the pavement concrete while the latter is still in a completely plastic state."

420.05 Joints. Add the following to subparagraph (a) and (b) of Article 420.05:

"Longitudinal construction joints conforming to the details shown on the plans will be permitted at any longitudinal joint location."

Add the following paragraph to subparagraph (c)(2) of this Article:

"The requirement for load transfer assemblies will be as shown on the plans."

Revise subparagraph (e) of this Article to read:

"Transverse Construction Joints. Transverse construction joints shall be constructed in accordance with the details shown on the plans. Transverse construction joints that occur at regular construction joints shall be keyed but not tied, and the thickness of the pavement for a distance of 600 mm (2 feet) in each direction from the joint shall be not less than 200 mm (8 inch). Joints that the contractor makes within the limits of a contraction panel shall be tied with deformed tiebars."

Add the following subparagraph (f) to this Article:

"Integral Concrete Curb Contraction Joint. Contraction joints shall be constructed in the curb in prolongation of the joints in the pavement and shall be constructed in accordance with the plans or as directed by the Engineer."

420.09 Strike Off, Consolidation, and Finishing, Longitudinal Floating, Straitedging, Edging, and Final Finish.

Revise the first sentence of subparagraph (b)(3) of this Article to read:

"This method may be used when approved by the Engineer."

420.19 Method of Measurement. Revise the first paragraph of subparagraph (b) of Article 420.19 to read:

"Portland cement concrete pavement (special) will be measured in place and the area computed in square meters (square yards) completed and accepted. The width for measurement shall be the width from the outsides of the completed pavement, including integral curb when required, as shown on the plans or as directed by the Engineer."

420.20 Basis of Payment. Revise the first paragraph of Article 420.23 to read:

"This work will be paid for at the contract unit prices per square meter (square yard) for PORTLAND CEMENT CONCRETE PAVEMENT (SPECIAL), PORTLAND CEMENT CONCRETE PAVEMENT (SPECIAL) WITH INTEGRAL CURB, HIGH EARLY STRENGTH PORTLAND CEMENT CONCRETE PAVEMENT (SPECIAL), HIGH EARLY STRENGTH PORTLAND CEMENT CONCRETE PAVEMENT (SPECIAL), WITH INTEGRAL CURB of the thickness specified; and at the contract unit price per square meter (square yard) for PAVEMENT FABRIC."

Article 1103.13 Finishing Machine. Revise Article 1103.13 to read:

"The finishing machine shall be of a type approved by the Engineer, shall be self-propelled and shall be capable of striking off, consolidating and finishing concrete of the consistency required by the specifications to the proper crown and grade."

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.

State of Illinois  
DEPARTMENT OF TRANSPORTATION  
Bureau of Local Roads & Streets  
SPECIAL PROVISION  
FOR  
LOCAL QUALITY ASSURANCE/ QUALITY MANAGEMENT QC/QA  
Effective: January 1, 2022

Replace the first five paragraphs of Article 1030.06 of the Standard Specifications with the following:

**“1030.06 Quality Management Program.** The Quality Management Program (QMP) will be Quality Control / Quality Assurance (QC/QA) according to the following.”

Delete Article 1030.06(d)(1) of the Standard Specifications.

Revise Article 1030.09(g)(3) of the Standard Specifications to read:

“(3) If core testing is the density verification method, the Contractor shall provide personnel and equipment to collect density verification cores for the Engineer. Core locations will be determined by the Engineer following the document “Hot-Mix Asphalt QC/QA Procedure for Determining Random Density Locations” at density verification intervals defined in Article 1030.09(b). After the Engineer identifies a density verification location and prior to opening to traffic, the Contractor shall cut a 4 in. (100 mm) diameter core. With the approval of the Engineer, the cores may be cut at a later time.”

Revise Article 1030.09(h)(2) of the Standard Specifications to read:

“(2) After final rolling and prior to paving subsequent lifts, the Engineer will identify the random density verification test locations. Cores or nuclear density gauge testing will be used for density verification. The method used for density verification will be as selected below.

Density Verification Method	
<input type="checkbox"/>	Cores
<input checked="" type="checkbox"/>	Nuclear Density Gauge (Correlated when paving ≥ 3,000 tons per mixture)

Density verification test locations will be determined according to the document “Hot-Mix Asphalt QC/QA Procedure for Determining Random Density Locations”. The density testing interval for paving wider than or equal to 3 ft (1 m) will be 0.5 miles (800 m) for lift thicknesses of 3 in. (75 mm) or less and 0.2 miles (320 m) for lift thicknesses greater than 3 in. (75 mm). The density testing interval for paving less than 3 ft (1 m) wide will be 1 mile (1,600 m). If a day’s paving will be less than the prescribed density testing interval, the length of the day’s paving will be the interval for that day. The density testing interval for mixtures used for patching will be 50 patches with a minimum of one test per mixture per project.

If core testing is the density verification method, the Engineer will witness the Contractor coring, and secure and take possession of all density samples at the

density verification locations. The Engineer will test the cores collected by the Contractor for density according to Illinois Modified AASHTO T 166 or AASHTO T 275.

If nuclear density gauge testing is the density verification method, the Engineer will conduct nuclear density gauge tests. The Engineer will follow the density testing procedure detailed in the document "Illinois Modified ASTM D 2950, Standard Test Method for Density of Bituminous Concrete In-Place by Nuclear Method".

A density verification test will be the result of a single core or the average of the nuclear density tests at one location. The results of each density test must be within acceptable limits. The Engineer will promptly notify the Contractor of observed deficiencies."

Revise the seventh paragraph and all subsequent paragraphs in Section D. of the document "Hot-Mix Asphalt QC/QA Initial Daily Plant and Random Samples" to read:

"Mixtures shall be sampled from the truck at the plant by the Contractor following the same procedure used to collect QC mixture samples (Section A). This process will be witnessed by the Engineer who will take custody of the verification sample. Each sample bag with a verification mixture sample will be secured by the Engineer using a locking ID tag. Sample boxes containing the verification mixture sample will be sealed/taped by the Engineer using a security ID label."

## **PROJECT LABOR AGREEMENT (PENDING)**

**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](mailto: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 – 12<sup>th</sup> Avenue section

**LOCATION:** 12<sup>th</sup> Avenue from 1<sup>st</sup> Street to 7<sup>th</sup> Street

**BID DATE:** January 16, 2026

## **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. 85780, 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)

## 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  $\pm 2.0$  percent of the actual quantity of material delivered.”

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## CEMENT, FINELY DIVIDED MINERALS, ADMIXTURES, CONCRETE, AND MORTAR (BDE)

Effective: January 1, 2025

Revised: January 1, 2026

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 Article 606.02(h) of the Standard Specifications to read:

“(h) Fibers (Note 1) .....1014”

Revise Note 1 in Article 606.02(h) of the Standard Specifications to read:

“Note 1. Fibers, when required, shall only be used in the concrete mixture for slipform applications.”

Revise the third paragraph in Article 606.10 of the Standard Specifications to read:

“Welded wire fabric shall be 6 x 6 in. (150 x 150 mm) mesh, #4 gauge (5.74 mm), 58 lb (26 kg) per 100 sq ft (9 sq m).”

Revise Article 1001.01(d) of the Standard Specifications to read:

“(d) Rapid Hardening Cement. Rapid hardening cement shall be according to the Bureau of Materials Policy Memorandum “Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants”, and ASTM C 1600, Type URH, Type VRH, or Type RH-CAC. It shall be used according to Article 1020.04 or when approved by the Engineer. The Contractor shall submit a report from the manufacturer or an independent lab that contains results for testing according to ASTM C 1600 which shows the cement meets the requirements of either Type URH, Type VRH, or Type RH-CAC. Test data shall be less than 1 year old from the date of submittal.

Revise Article 1001.01(e) of the Standard Specifications to read:

“(e) Other Cements. Other cements shall be according to the Bureau of Materials Policy Memorandum “Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants”, and ASTM C 1157 or ASTM C 1600, as applicable. Other cements shall be used according to Article 1020.04 or when approved by the Engineer. For cements according to ASTM C 1157, the Contractor shall submit a report from the manufacturer or an independent lab that contains results of tests which shows the cement meets the requirements Type GU, HE, MS, MH, or LH. For cements according to ASTM C 1600, the Contractor shall submit a report from the manufacturer or an independent lab that contains results of tests which shows the cement meets the requirements Type MRH or GRH. Test data shall be less than 1 year old from the date of submittal.”

Revise Article 1002.02 of the Standard Specifications to read:

“**1002.02 Quality.** Water used with cement in concrete or mortar and water used for curing concrete shall be clean, clear, and free from sugar. In addition, water shall be tested and evaluated for acceptance according to one of the following options.

OPTION 1.

(a) Acceptable limits for acidity and alkalinity when tested according to ITP T 26.

- (1) Acidity -- 0.1 Normal NaOH ..... 2 ml max.\*
  - (2) Alkalinity -- 0.1 Normal HCl..... 10 ml max.\*
- \*To neutralize 200 ml sample.

(b) Acceptable limits for solids when tested according to the following.

- (1) Organic (ITP T 26) ..... 0.02% max.
- (2) Inorganic (ITP T 26)..... 0.30% max.
- (3) Sulfate (SO<sub>4</sub>) (ASTM D 516-82) ..... 0.05% max.
- (4) Chloride (ASTM D 512) ..... 0.06% max.

(c) The following tests shall be performed on the water sample and on deionized water. The same cement and sand shall be used for both tests.

- (1) Unsoundness (ASTM C 151).
- (2) Initial and Final Set Time (ASTM C 266).
- (3) Strength (ASTM C 109).

The test results for the water sample shall not deviate from the test results for the deionized water, except as allowed by the precision in the test method.

OPTION 2. Water shall meet the requirements ASTM C 1602 Tables 1 and 2 as outlined in Sections 5.1, 5.2, and 5.4.”

Revise Note 2/ in Article 1003.01(b) of the Standard Specifications to read:

“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<sub>2</sub>O + 0.658K<sub>2</sub>O) 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<sub>2</sub>O + 0.658K<sub>2</sub>O) 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 ( $\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$ ) of 0.90 percent or greater.”

Add the following Section to the Standard Specifications.

#### **“SECTION 1014. FIBERS FOR CONCRETE**

**1014.01 General.** Fibers used in concrete shall be Type II or Type III (polyolefin or carbon) according to ASTM C 1116. The testing required for Type II fibers or Type III polyolefin fibers shall be performed by an independent lab a minimum of once every five years, and the test results provided to the Department. Manufacturers of Type III carbon fibers shall provide materials certification documentation not more than 6 years old a minimum of once every 5 years to the Department. The Department will maintain a qualified product list. The method of inclusion of fibers into concrete mixtures shall be according to the manufacturer’s specifications.

At the discretion of the Engineer, the concrete mixture shall be evaluated in a field demonstration for fiber clumping, ease of placement, and ease of finishing. The field demonstration shall consist of a minimum 2 cu yd (1.5 cu m) trial batch placed in a 12 ft x 12 ft (3.6 m x 3.6 m) slab.

**1014.02 Concrete Gutter, Curb, Median and Paved Ditch.** Fibers shall be Type III. Fibers shall have a minimum length of 1/2 in. (13 mm) and a maximum length of 0.75 in. (19 mm). The maximum dosage rate in the concrete mixture shall not exceed 1.5 lb/cu yd (0.9 kg/cu m). The minimum dosage rate shall be per the manufacturer’s recommendation.

**1014.03 Concrete Inlay or Overlay.** Fibers shall be Type III. Fibers shall have a minimum length of 1.0 in. (25 mm), a maximum length of 2 1/2 in. (63 mm), and a maximum aspect ratio (length divided by the equivalent diameter of the fiber) of 150. The maximum dosage rate shall not exceed 5.0 lb/cu yd (3.0 kg/cu m). The minimum dosage rate shall be per the manufacturer’s recommendation.

**1014.04 Bridge Deck Fly Ash, Ground Granulated Blast Furnace (GGBF) Slag, High Reactivity Metakaolin, or Microsilica (Silica Fume) Concrete Overlay.** Fibers shall be Type III. The dosage rate shall be a minimum of 3.0 lb/cu yd (1.8 kg/cu m), unless a field demonstration according to Article 1014.01 indicates that a lower dosage rate is necessary. Based on the results of the field demonstration, the Department has the option to reduce the dosage rate of fibers, but the dosage will not be reduced to less than 2.0 lb / cu yd (1.2 kg/cu m).

**1014.05 Bridge Deck Latex Concrete Overlay.** Fibers shall be Type II or III. Fibers shall have a minimum length of 0.75 in. (19 mm), a maximum length of 1.75 in. (45 mm), and an aspect ratio (length divided by the equivalent diameter of the fiber) of between 70 and 100. The dosage rate shall be a minimum of 3.0 lb/cu yd (1.8 kg/cu m), unless a field demonstration according to Article 1014.01 indicates that a lower dosage rate is necessary. Based on the results of the field

demonstration, the Department has the option to reduce the dosage rate of fibers, but the dosage will not be reduced to less than 2.0 lb/cu yd (1.2 kg/cu m)."

Add the following Section to the Standard Specifications:

#### **"SECTION 1015. HIGH PERFORMANCE SHOTCRETE**

**1015.01 Packaged Shotcrete With Aggregate.** The packaged shotcrete with aggregate shall be a pre-blended dry combination of materials for the wet-mix shotcrete method according to ASTM C 1480, Type FA or CA, Grade FR, Class I. The fibers shall be Type III according to Article 1014.01. The cement and finely divided minerals in the mixture shall be a minimum 6.65 cwt/cu yd (395 kg/cu m), and the portland cement shall not be below 4.70 cwt/cu yd (279 kg/cu m). Microsilica is required in the mixture and shall be a minimum of 5 percent by weight (mass) of cementitious material, and a maximum of 10 percent. Strength requirements shall be according to ASTM C 1480 except that the strength at 28 days shall be at least 4000 psi (27,500 kPa). Strength testing shall be according to ASTM C 1140. The air content as shot shall be 4.0 – 8.0 percent when tested according to AASHTO T 152, and the coarse aggregate shall be a maximum size of 1/2 in. (12.5 mm).

The packaged shotcrete shall have a water soluble chloride ion content of less than 0.15% by weight of cementitious material when tested according to ASTM C 1218 or AASHTO T 260.

The testing according to ASTM C 1480, ASTM C 1140, AASHTO 152, and ASTM C 1218 or AASHTO T 260 shall be performed by an independent lab a minimum of once every 5 years, and the test results shall be provided to the Department. The Department will maintain a qualified product list. Batching and mixing shall be per the manufacturer's recommendations.

**1015.02 Packaged Shotcrete Without Aggregate.** The packaged shotcrete that does not include pre-blended aggregate shall be according to Article 1015.01, except the added aggregate shall be according to Articles 1003.02 and 1004.02. The aggregate gradation shall be according to the manufacturer. The Department will maintain a qualified product list. Batching and mixing shall be per the manufacturer's recommendations."

Revise Section 1017 of the Standard Specifications to read:

#### **"SECTION 1017. PACKAGED, DRY, COMBINED MATERIALS FOR MORTAR AND CONCRETE**

**1017.01 Mortar.** 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 according to AASHTO T 161. For prestressed concrete applications, the mortar shall have a water-soluble chloride ion content of less than 0.06 percent by weight of cementitious material when tested according to ASTM C 1218 or AASHTO T 260; and for non-prestressed concrete applications, the water soluble chloride content shall be less than 0.15 percent by weight of cementitious material. The testing according to ASTM C 387, AASHTO T 161, and either ASTM C 1218 or AASHTO T 260 shall be performed by an independent lab a minimum of once every five years, and the test results



shall be provided to the Department. The Department will maintain a qualified product list. Mixing of the high-strength mortar shall be according to the manufacturer's specifications.

**1017.02 Concrete.** The materials, testing, and preparation of aggregate for the "high slump" packaged concrete mixture shall be according to ASTM C 387. The mixture shall be air entrained, the slump shall be 5-10 in. (125-250 mm), and the coarse aggregate shall be a maximum size of 1/2 in. (12.5 mm). Strength requirements shall be according to ASTM C 387 except that the strength at 28 days shall be at least 4000 psi (27,500 kPa). The "high slump" packaged concrete mixture shall have a water soluble chloride ion content of less than 0.15% by weight of cementitious material when tested according to ASTM C 1218 or AASHTO T 260. The testing according to ASTM C 387, and either ASTM C 1218 or AASHTO T 260 shall be performed by an independent lab a minimum of once every 5 years, and the test results shall be provided to the Department. The Department will maintain a qualified product list. Mixing shall be per the manufacturer's recommendations.

**1017.02 Self-Consolidating Concrete.** The materials, testing, and preparation of aggregate for the "self-consolidating concrete" packaged concrete mixture shall be according to ASTM C 387. The mixture shall be air entrained, it should be uniformly graded, and the coarse aggregate shall be a maximum size of 1/2 in. (12.5 mm). Strength requirements shall be according to ASTM C 387 except that the strength at 28 days shall be at least 4000 psi (27,500 Pa). Slump flow range shall be 22 in. (550 mm) minimum to 28 in. (700 mm) maximum when tested according to AASHTO T 347. The visual stability index shall be a maximum of 1 when tested according to AASHTO T 351. At the option of the manufacturer, either the J-Ring value shall be a maximum of 2 in. (50 mm) when tested according to AASHTO T 347 or the L-Box blocking ratio shall be a minimum of 80 percent when tested according AASHTO T 419. The hardened visual stability index shall be a maximum of 1 when tested according to AASHTO R 81.

The "self -consolidating concrete" packaged concrete mixture shall have a water soluble chloride ion content of less than 0.15 percent by weight of cementitious material when tested according to ASTM C 1218 or AASHTO T 260.

The testing according to ASTM C 387, AASHTO T 347, AASHTO T 351, AASHTO T 419, AASHTO R 81, ASTM C 1218 and AASHTO T 260 shall be performed by an independent lab a minimum of once every 5 years, and the test results shall be provided to the Department. The Department will maintain a qualified product list. Mixing shall be per the manufacturer's recommendations."

Revise Article 1018.01 of the Standard Specifications to read:

**"1018.01 Requirements.** The rapid hardening mortar or concrete shall be according to ASTM C 928 and shall have successfully completed and remain current with the AASHTO Product Eval and Audit Rapid Hardening Concrete Patching Materials (RHCP) testing program. R1, R2, or R3 concrete shall be air entrained, the slump shall be 5-10 in. (125-250 mm), and the coarse aggregate shall be a maximum size of 1/2 in. (12.5 mm). For prestressed concrete applications, the mortar or concrete shall have a water-soluble chloride ion content of less than 0.06 percent by weight of cementitious material when tested according to ASTM C 1218 or AASHTO T 260;

and for non-prestressed concrete applications, the water soluble chloride content shall be less than 0.15 percent by weight of cementitious material. The Department will maintain a qualified product list. Mixing of the mortar or concrete shall be according to the manufacturer's specifications..”

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. The air content produced by the admixture shall be 15-25 percent when incorporated into Mix 2 or an equivalent mixture as determined by the Department and tested according to AASHTO T 121 or AASHTO T 152. The testing according to AASHTO T 121 or AASHTO T 152 shall be performed by an independent lab a minimum of once every five years, and the test results shall be provided to the Department. The Department will maintain a qualified product list.”

Revise the third paragraph of Article 1019.04 of the Standard Specifications to read:

“The Engineer will instruct the Contractor to adjust the proportions of the mix design in the field as needed to meet the design criteria, provide adequate flowability, maintain proper solid suspension, or other criteria established by the Engineer.”

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 °F, 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 °C, the Type III portland cement may be replaced with Type I, IL, or II portland cement.”

Revise Note 9 of Table 1 of Article 1020.04 of the Standard Specifications to read:

“(9) The cement shall be a rapid hardening according to Article 1001.01(d). Minimum or maximum cement factor may be adjusted when approved by the Engineer.”

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 Article 1020.05(b)(5) of the Standard Specifications to read:

“(5) For Class PP-4 concrete, a high range water-reducing admixture, retarder, and/or hydration stabilizer may be used in addition to the air-entraining admixture. The Contractor also has the option to use a water-reducing admixture with the high range water-reducing admixture. An accelerator shall not be used. A mobile portland cement concrete plant shall be used to produce the patching mixture.

For PP-5 concrete, a non-chloride accelerator, high range water-reducing admixture, retarder, hydration stabilizer, and/or air-entraining admixture may be used. The accelerator, high range water-reducing admixture, retarder, hydration stabilizer, and/or air-entraining admixture shall be per the Contractor’s recommendation and dosage. The qualified product list of concrete admixtures shall not apply. A mobile portland cement concrete plant shall be used to produce the patching mixture.”

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.”

Add Article 1021.09 of the Standard Specifications as follows:

**“1021.09 Latex Admixtures.** The latex admixture shall be a uniform, homogeneous, non-toxic, film-forming, polymeric emulsion in water to which all stabilizers have been added at the point of manufacture. The latex admixture shall not contain any chlorides and shall contain 46-49 percent solids.

In lieu of meeting the requirements of Article 1021.01, the Contractor shall submit a manufacturer's certification that the latex emulsion meets the requirements of FHWA Research Report RD-78-35, Chapter VI. The certificate shall include the date of manufacture of the latex admixture, batch or lot number, quantity represented, manufacturer's name, and the location of the manufacturing plant. The latex emulsion shall be sampled and tested in accordance with RD-78-35, Chapter VII, Certification Program.

The latex admixture shall be packaged and stored in containers and storage facilities which will protect the material from freezing and from temperatures above 85°F (30°C). Additionally, the material shall not be stored in direct sunlight and shall be shaded when stored outside of buildings during moderate temperatures.”

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 ASTM C 1107.

For prestressed concrete applications, the nonshrink grout shall have a water soluble chloride ion content of less than 0.06 percent by weight of cementitious material when tested according to ASTM C 1218 or AASHTO T 260; and for non-prestressed concrete applications, the water soluble chloride ion content shall be less than 0.15 percent by weight of cementitious material. The testing according to ASTM 1107, and either ASTM C 1218 or AASHTO T 260 shall be performed by an independent lab a minimum of once every five years, and the test results shall be provided to the Department. The Department will maintain a qualified product list. Mixing of the nonshrink grout shall be according to the manufacturer’s specifications.”

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 Article 1103.04 of the Standard Specifications to read:

**"1103.04 Mobile Portland Cement Concrete Plants.** The mobile concrete plant shall be according to AASHTO M 241 and the Bureau of Materials Policy Memorandum "Approval of Volumetric Mobile Mixers for Concrete". The mixer shall be capable of carrying sufficient unmixed materials to produce not less than 6 cu yd (4.6 cu m) of concrete."

Revise the first two sections of Check Sheet #11 "Subsealing of Concrete Pavements" of the 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/Sections 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 Materials section of Check Sheet #28 "Portland Cement Concrete Inlay or Overlay" of the Recurring Special Provisions to read:

"Materials. Materials shall be according to the following Articles/Sections of the Standard Specifications.

Item	Article/Section
(a) Portland Cement Concrete (Note 1) .....	1020
(b) Fibers for Concrete.....	1014
(c) Protective Coat.....	1023.01

Note 1. Class PV concrete shall be used, except the cement factor for central mixed concrete shall be 6.05 cwt/cu yd (360 kg/cu m). A cement factor reduction according to Article 1020.05(b)(8) of the Standard Specifications will be permitted. CA 5 shall not be used and CA 7 may only be used for overlays that are a minimum of 4.5 in. (113 mm) thick. The Class PV concrete shall have a minimum flexural strength of 550 psi (3800 kPa) or a minimum compressive strength of 3000 psi (20,700 kPa) at 14 days.”

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

## EROSION CONTROL BLANKET (BDE)

Effective: August 1, 2025

Revise Article 251.02 of the Standard Specifications to read:

**“251.02 Materials.** Materials shall be according to the following.

Item	Article/Section
(a) Compost .....	1081.05(b)
(b) Mulch .....	1081.06(a)
(c) Chemical Mulch Binder .....	1081.06(a)(3)
(d) Chemical Compost Binder .....	1081.06(a)(4)
(e) Erosion Control Blanket .....	1081.10(a)
(f) Wildlife Friendly Erosion Control Blanket .....	1081.10(b)
(g) Wire Staples .....	1081.10(c)
(h) Wood Stakes .....	1081.10(d)
(i) Turf Reinforcement Mat .....	1081.10(e)”

Revise the first and second sentences of Article 251.04 of the Standard Specifications to read:

**“251.04 Erosion Control Blanket.** All erosion control blanket materials shall be placed on the areas specified within 24 hours of seed placement.”

Revise the second paragraph of Article 251.04 of the Standard Specifications to read:

“After the area has been properly shaped, fertilized (when applicable), and seeded, the blanket shall be laid out flat, evenly, and smoothly, without stretching the material. The erosion control blanket shall be placed according to the manufacture’s recommendations.”

Revise the second sentence of Article 251.06(b) of the Standard Specifications to read:

“Erosion control blanket, wildlife friendly erosion control blanket, and turf reinforcement mat will be measured for payment in square yards (square meters).”

Revise Article 251.07 of the Standard Specifications to read:

**“251.07 Basis of Payment.** This work will be paid for at the contract unit price per acre (hectare) for MULCH, of the method specified; and at the contract unit price per square yard (square meter) for EROSION CONTROL BLANKET, WILDLIFE FRIENDLY EROSION CONTROL BLANKET, or TURF REINFORCEMENT MAT.”

Revise first sentence of Article 280.04(h) of the Standard Specifications to read:

“This system consists of temporarily installing erosion control blanket or wildlife friendly erosion control blanket over areas that are to be reworked during a later construction phase.”

Revise Article 280.08(g) of the Standard Specifications to read:

“(g) Temporary Erosion Control Blanket. Temporary erosion control blanket will be paid for at the contract unit price per square yard (square meter) for TEMPORARY EROSION CONTROL BLANKET or TEMPORARY WILDLIFE FRIENDLY EROSION CONTROL BLANKET.

The work of removing, storing, and reinstalling the blanket over areas to be reworked more than once will not be paid for separately but shall be included in the cost of the temporary erosion control blanket or temporary wildlife friendly erosion control blanket.”

Revise Article 1081.10 of the Standard Specifications to read:

“**1081.10 Erosion Control Blankets.** The manufacturer shall furnish a certificate with each shipment stating the amount of product furnished and that the material complies with these requirements.

(a) Erosion Control Blanket. Erosion control blanket shall be covered on top and bottom, also known as double net, with a 100 percent biodegradable woven, natural fiber or jute net meeting the following.

Material	Minimum Value
Excelsior	80%
Straw	100%
Coconut or Coir	100% Coconut or Coir
Straw/Coconut or Coir	70% Straw / 30% Coconut or Coir

(b) Wildlife Friendly Erosion Control Blanket. Wildlife friendly erosion control blanket shall be according to Article 1081.10(a) except the netting shall be loose weave, also known as leno weave or gauze weave, with a moveable joint.

(c) Wire Staples. Staples shall be made from No. 11 gauge or heavier uncoated black carbon steel wire, a minimum of 1 in. (25 mm) wide at the top and a minimum overall length of 8 in. (200 mm).

(d) Wood Stakes. Hardwood blanket anchors shall be nominally 7 in. (180 mm) long from neck of hook to tip of anchor. The anchor shall have a minimum 1/2 in. (13 mm) curving hook to hold the blanket in place.

(e) Turf Reinforcement Mat (TRM). The TRM shall be comprised of non-degradable, ultraviolet stabilized synthetic fibers, filaments, netting, and/or wire mesh processed into



a three-dimensional reinforced mat. The mats may include degradable material to assist with vegetation establishment. Soil filled mats will not be allowed.

The TRM shall meet the following physical and performance properties:

Property	Value	Test Method
Tensile Strength, lb/ft (kN/m)	150 (2.19) min.	ASTM D 6818
UV Stability, (% Tensile Retained)	80 min.	ASTM D 4355 (1000 Hour Exposure)
Resiliency, (% Thickness Retained)	80 min.	ASTM D 6524
Allowable Shear Stress, lb/sq ft (Pa) <sup>1/</sup>	8 (384)	ECTC approved test method and independent laboratory

1/ Minimum shear stress the TRM (fully vegetated) can sustain without physical damage or excess erosion (> 1/2 in. (13 mm) soil loss) during a 30 minute flow event in large scale testing.

For TRMs containing degradable components, all property values shall be obtained on the non-degradable portion of the matting alone.”

80467

## **HOT-MIX ASPHALT (BDE)**

Effective: January 1, 2024

Revised: January 1, 2026

Add the following to the end of Article 406.06(c) of the Standard Specifications:

“The amount of HMA binder course placed shall be limited to that which can be surfaced during the same construction season.”

Revise the fifteenth through eighteenth paragraphs of Article 406.14 of the Standard Specifications to read:

“The mixture used in constructing acceptable HMA test strips will be paid for at the contract unit price. Unacceptable HMA test strips shall be removed and replaced at no additional cost to the Department.”

Revise the first and second paragraphs of Articles 1030.06(c)(2) of the Standard Specifications to read:

“(2) Personnel. The Contractor shall provide a QC Manager who shall have overall responsibility and authority for quality control. This individual shall maintain active certification as a Hot-Mix Asphalt Level II technician.

In addition to the QC Manager, the Contractor shall provide sufficient personnel to perform the required visual inspections, sampling, testing, and documentation in a timely manner. Mix designs shall be developed by personnel with an active certification as a Hot-Mix Asphalt Level III technician. Technicians performing mix design testing and plant sampling/testing shall maintain active certification as a Hot-Mix Asphalt Level I technician. The Contractor may provide a technician trainee who has successfully completed the Department's “Hot-Mix Asphalt Trainee Course” to assist in the activities completed by a Hot-Mix Asphalt Level I technician for a period of one year after the course completion date. The Contractor may also provide a Gradation Technician who has successfully completed the Department's “Gradation Technician Course” to run gradation tests only under the supervision of a Hot-Mix Asphalt Level II Technician. The Contractor shall provide a Hot-Mix Asphalt Density Tester who has successfully completed the Department's “Nuclear Density Testing” course to run all nuclear density tests on the job site.”

Add Article 1030.06(d)(3) to the Standard Specifications as follows:

“(3) The Contractor shall take possession of any Department HMA mixture samples or density specimens upon notification by the Engineer. The Contractor shall collect the HMA mixture samples or density specimens from the location designated by the Engineer and may add these materials to RAP stockpiles according to Section 1031.”

Revise the second paragraph of Articles 1030.07(a)(11) and 1030.08(a)(9) of the Standard Specifications to read:

“When establishing the target density, the HMA maximum theoretical specific gravity ( $G_{mm}$ ) will be based on the running average of four available Department test results for that project. If less than four  $G_{mm}$  test results are available, an average of all available Department test results for that project will be used. The initial  $G_{mm}$  will be the last available Department test result from a QMP project. If there is no available Department test result from a QMP project, the Department mix design verification test result will be used as the initial  $G_{mm}$ .”

Revise the Quality Control Limits table in Article 1030.09(c) to read:

“CONTROL LIMITS						
Parameter	IL-19.0, IL-9.5, IL-9.5FG, IL-19.0L, IL-9.5L		SMA-12.5, SMA-9.5		IL-4.75	
	Individual Test	Moving Avg. of 4	Individual Test	Moving Avg. of 4	Individual Test	Moving Avg. of 4
% Passing: <sup>1/</sup>						
1/2 in. (12.5 mm)	± 6 %	± 4 %	± 6 %	± 4 %		
3/8 in. (9.5mm)			± 4 %	± 3 %		
# 4 (4.75 mm)	± 5 %	± 4 %	± 5 %	± 4 %		
# 8 (2.36 mm)	± 5 %	± 3 %	± 4 %	± 2 %		
# 16 (1.18 mm)			± 4 %	± 2 %	± 4 %	± 3 %
# 30 (600 µm)	± 4 %	± 2.5 %	± 4 %	± 2.5 %		
Total Dust Content # 200 (75 µm)	± 1.5 %	± 1.0 %			± 1.5 %	± 1.0 %
Asphalt Binder Content	± 0.3 %	± 0.2 %	± 0.2 %	± 0.1 %	± 0.3 %	± 0.2 %
Air Voids <sup>2/</sup>	± 1.2 %	± 1.0 %	± 1.2 %	± 1.0 %	± 1.2 %	± 1.0 %
Field VMA <sup>3/</sup>	-0.7 %	-0.5 %	-0.7 %	-0.5 %	-0.7 %	-0.5 %

1/ Based on washed ignition oven or solvent extraction gradation.

2/ The air voids target value shall be 3.2 to 4.8 percent.

3/ Allowable limit below minimum design VMA requirement.”

Revise Article 1030.09(g)(2) of the Standard Specifications to read:

“(2) The Contractor shall complete split verification sample tests listed in the Limits of Precision table in Article 1030.09(h)(1).”

In the Supplemental Specifications, replace the revision for the end of the third paragraph of Article 1030.09(h)(2) with the following:

“When establishing the target density, the HMA maximum theoretical specific gravity ( $G_{mm}$ ) will be the Department mix design verification test result.”

Replace the last sentence of the fourth paragraph of Article 1030.10 of the Standard Specifications with the following:

“The mixture test results shall meet the requirements of Article 1030.05(d), except tensile strength and TSR testing will only be conducted on the first use of a mix design for the year and Hamburg wheel tests will only be conducted on High ESAL mixtures. To be considered acceptable to remain in place, the Department’s mixture test results shall meet the acceptable limits stated in Article 1030.09(i)(1). In addition, no visible pavement distress such as, but not limited to, segregation, excessive coarse aggregate fracturing outside of growth curves, excessive dust balls, or flushing shall be present as determined by the Engineer.”

Revise the tenth paragraph of Article 1030.10 of the Standard Specifications to read:

“Production is not required to stop after a test strip has been constructed.”

Replace the eleventh paragraph of Article 1030.10 of the Standard Specifications with the following:

“If an initial Hamburg wheel or I-FIT test fails to meet the requirements of Article 1030.05(d), the Department will verify the results by testing the retained gyratory cylinders. Upon notification by the Engineer of a Hamburg wheel or I-FIT test failure on the retained gyratory cylinders, the Contractor shall substitute an approved mix design, submit a new mix design for mix verification testing according to Article 1030.05(d), or pave 250 tons with or without an adjustment and resample for Department Hamburg wheel and I-FIT testing as directed by the Engineer. Paving may continue as long as all other mixture criteria is being met. If Hamburg wheel or I-FIT tests on the resampled HMA fail, production of the affected mixture shall cease and the Contractor shall substitute an approved mix design or submit a new mix design for mix verification testing according to Article 1030.05(d).”

80456

## **LONGITUDINAL TINING (BDE)**

Effective: January 1, 2026

Revise the first three paragraphs of Article 420.09(e)(1) of the Standard Specifications to read:

- “(1) Type A. Type A final finish shall be obtained by the use of a carpet drag composed of an artificial turf followed immediately by a mechanically operated metal comb longitudinal tining device.

The artificial turf shall be made of molded polyethylene with synthetic turf blades approximately 0.85 in. (20 mm) long and contain approximately 7,200 individual blades per 1 sq ft (0.1 sq m). The artificial turf shall be attached to a device that will permit control of the time and rate of texturing. The artificial turf carpet shall be full pavement width and of sufficient size that during the finishing operation, approximately 2 ft (600 mm) of carpet in the direction of drag (i.e., parallel to the pavement centerline) will be in contact with the pavement surface over the entire pavement width. The drag shall be operated in a longitudinal direction to produce a uniform appearing finish. If necessary for maintaining contact with the pavement surface, the carpet may be weighted.

The metal comb shall consist of a single line of tempered spring steel tines uniformly spaced at 3/4 in. (19 mm). The tines shall be flat and of a size and stiffness sufficient to produce a groove of the specified dimensions in the plastic concrete without tearing of the pavement surface. The mechanically operated metal comb shall be either an exclusive piece of equipment which is mechanically self-propelled or shall be combined with the curing equipment. The artificial turf carpet drag may be attached to this piece of equipment provided a surface texture is produced satisfactory to the Engineer. The tining device shall be operated to produce a pattern of grooves, 1/8 to 3/16 in. (3 to 5 mm) deep and 1/10 to 1/8 in. (2.5 to 3 mm) wide along the pavement in a single pass. The tining shall be operated parallel to the longitudinal joint or edge of pavement and shall not deviate more than 1 in. (25 mm) in 25 ft (8 m). Tining shall be withheld 1 to 1 1/2 in. (25 to 38 mm) from a longitudinal joint or pavement edge.

Hand tining or tining with a mechanically operated comb combined with the curing equipment specified in Article 1101.09 will be permitted where the specifications permit hand finishing or screeds, one lane construction up to 16 ft (5 m) wide, gaps, projects with a net length of 1/2 mile (800 m) or less, and where the production rate on any paving day will be less than 1,500 cu yd (1200 cu m) per day. A foot bridge shall be provided for the hand tining operation for all pavement over 12 ft (3.6 m) wide, unless it can be demonstrated that an alternate texturing operation produces satisfactory results.”

80477

## **PAVEMENT MARKING (BDE)**

Effective: April 1, 2025

Revised: November 1, 2025

Revise the fourth sentence of the fourth paragraph of Article 780.05 of the Standard Specifications to read:

“Grooves for letters and symbols shall be cut in a rectangular shape or in the shape of the proposed marking so the entire marking will fit within the limits of the grooved area.”

Revise the last sentence of the third paragraph of Article 780.08 of the Standard Specifications to read:

“The Contractor shall install the preformed plastic pavement markings according to the manufacturer’s recommendations.”

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.”

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## PERFORMANCE GRADED ASPHALT BINDER (BDE)

Effective: January 1, 2023

Revise Article 1032.05 of the Standard Specifications to read:

**“1032.05 Performance Graded Asphalt Binder.** These materials will be accepted according to the Bureau of Materials Policy Memorandum, “Performance Graded Asphalt Binder Qualification Procedure.” The Department will maintain a qualified producer list. These materials shall be free from water and shall not foam when heated to any temperature below the actual flash point. Air blown asphalt, recycle engine oil bottoms (ReOB), and polyphosphoric acid (PPA) modification shall not be used.

When requested, producers shall provide the Engineer with viscosity/temperature relationships for the performance graded asphalt binders delivered and incorporated in the work.

- (a) Performance Graded (PG) Asphalt Binder. The asphalt binder shall meet the requirements of AASHTO M 320, Table 1 “Standard Specification for Performance Graded Asphalt Binder” for the grade shown on the plans and the following.

Test	Parameter
Small Strain Parameter (AASHTO PP 113) BBR, $\Delta T_c$ , 40 hrs PAV (40 hrs continuous or 2 PAV at 20 hrs)	-5 °C min.

- (b) Modified Performance Graded (PG) Asphalt Binder. The asphalt binder shall meet the requirements of AASHTO M 320, Table 1 “Standard Specification for Performance Graded Asphalt Binder” for the grade shown on the plans.

Asphalt binder modification shall be performed at the source, as defined in the Bureau of Materials Policy Memorandum, “Performance Graded Asphalt Binder Qualification Procedure.”

Modified asphalt binder shall be safe to handle at asphalt binder production and storage temperatures or HMA construction temperatures. Safety Data Sheets (SDS) shall be provided for all asphalt modifiers.

- (1) Polymer Modification (SB/SBS or SBR). Elastomers shall be added to the base asphalt binder to achieve the specified performance grade and shall be either a styrene-butadiene diblock, triblock copolymer without oil extension, or a styrene-butadiene rubber. The polymer modified asphalt binder shall be smooth, homogeneous, and be according to the requirements shown in Table 1 or 2 for the grade shown on the plans.

Table 1 - Requirements for Styrene-Butadiene Copolymer (SB/SBS) Modified Asphalt Binders		
Test	Asphalt Grade SB/SBS PG 64-28 SB/SBS PG 70-22	Asphalt Grade SB/SBS PG 64-34 SB/SBS PG 70-28 SB/SBS PG 76-22 SB/SBS PG 76-28
Separation of Polymer ITP, "Separation of Polymer from Asphalt Binder" Difference in °F (°C) of the softening point between top and bottom portions	4 (2) max.	4 (2) max.
TESTS ON RESIDUE FROM ROLLING THIN FILM OVEN TEST (AASHTO T 240)		
Elastic Recovery ASTM D 6084, Procedure A, 77 °F (25 °C), 100 mm elongation, %	60 min.	70 min.

Table 2 - Requirements for Styrene-Butadiene Rubber (SBR) Modified Asphalt Binders		
Test	Asphalt Grade SBR PG 64-28 SBR PG 70-22	Asphalt Grade SB/SBS PG 64-34 SB/SBS PG 70-28 SBR PG 76-22 SBR PG 76-28
Separation of Polymer ITP, "Separation of Polymer from Asphalt Binder" Difference in °F (°C) of the softening point between top and bottom portions	4 (2) max.	4 (2) max.
Toughness ASTM D 5801, 77 °F (25 °C), 20 in./min. (500 mm/min.), in.-lbs (N-m)	110 (12.5) min.	110 (12.5) min.
Tenacity ASTM D 5801, 77 °F (25 °C), 20 in./min. (500 mm/min.), in.-lbs (N-m)	75 (8.5) min.	75 (8.5) min.
TESTS ON RESIDUE FROM ROLLING THIN FILM OVEN TEST (AASHTO T 240)		
Elastic Recovery ASTM D 6084, Procedure A, 77 °F (25 °C), 100 mm elongation, %	40 min.	50 min.

- (2) Ground Tire Rubber (GTR) Modification. GTR modification is the addition of recycled ground tire rubber to liquid asphalt binder to achieve the specified performance grade. GTR shall be produced from processing automobile and/or truck tires by the ambient



grinding method or micronizing through a cryogenic process. GTR shall not exceed 1/16 in. (2 mm) in any dimension and shall not contain free metal particles, moisture that would cause foaming of the asphalt, or other foreign materials. A mineral powder (such as talc) meeting the requirements of AASHTO M 17 may be added, up to a maximum of four percent by weight of GTR to reduce sticking and caking of the GTR particles. When tested in accordance with Illinois Modified AASHTO T 27 “Standard Method of Test for Sieve Analysis of Fine and Coarse Aggregates” or AASHTO PP 74 “Standard Practice for Determination of Size and Shape of Glass Beads Used in Traffic Markings by Means of Computerized Optical Method”, a 50 g sample of the GTR shall conform to the following gradation requirements.

Sieve Size	Percent Passing
No. 16 (1.18 mm)	100
No. 30 (600 $\mu$ m)	95 $\pm$ 5
No. 50 (300 $\mu$ m)	> 20

GTR modified asphalt binder shall be tested for rotational viscosity according to AASHTO T 316 using spindle S27. GTR modified asphalt binder shall be tested for original dynamic shear and RTFO dynamic shear according to AASHTO T 315 using a gap of 2 mm.

The GTR modified asphalt binder shall meet the requirements of Table 3.

Table 3 - Requirements for Ground Tire Rubber (GTR) Modified Asphalt Binders		
Test	Asphalt Grade GTR PG 64-28 GTR PG 70-22	Asphalt Grade GTR PG 76-22 GTR PG 76-28 GTR PG 70-28
TESTS ON RESIDUE FROM ROLLING THIN FILM OVEN TEST (AASHTO T 240)		
Elastic Recovery ASTM D 6084, Procedure A, 77 °F (25 °C), 100 mm elongation, %	60 min.	70 min.

- (3) Softener Modification (SM). Softener modification is the addition of organic compounds, such as engineered flux, bio-oil blends, modified vegetable oils, glycol amines, and fatty acid derivatives, to the base asphalt binder to achieve the specified performance grade. Softeners shall be dissolved, dispersed, or reacted in the asphalt binder to enhance its performance and shall remain compatible with the asphalt binder with no separation. Softeners shall not be added to modified PG asphalt binder as defined in Articles 1032.05(b)(1) or 1032.05(b)(2).

An Attenuated Total Reflectance-Fourier Transform Infrared spectrum (ATR-FTIR) shall be collected for both the softening compound as well as the softener modified

asphalt binder at the dose intended for qualification. The ATR-FTIR spectra shall be collected on unaged softener modified binder, 20-hour Pressurized Aging Vessel (PAV) aged softener modified binder, and 40-hour PAV aged softener modified binder. The ATR-FTIR shall be collected in accordance with Illinois Test Procedure 601. The electronic files spectral files (in one of the following extensions or equivalent: \*.SPA, \*.SPG, \*.IRD, \*.IFG, \*.CSV, \*.SP, \*.IRS, \*.GAML, \*. [0-9], \*.IGM, \*.ABS, \*.DRT, \*.SBM, \*.RAS) shall be submitted to the Central Bureau of Materials.

Softener modified asphalt binders shall meet the requirements in Table 4.

Table 4 - Requirements for Softener Modified Asphalt Binders		
Test	Asphalt Grade	
	SM PG 46-28	SM PG 46-34
	SM PG 52-28	SM PG 52-34
	SM PG 58-22	SM PG 58-28
	SM PG 64-22	
Small Strain Parameter (AASHTO PP 113) BBR, $\Delta T_c$ , 40 hrs PAV (40 hrs continuous or 2 PAV at 20 hrs)	-5°C min.	
Large Strain Parameter (Illinois Modified AASHTO T 391) DSR/LAS Fatigue Property, $\Delta G^* _{peak}$ , 40 hrs PAV (40 hrs continuous or 2 PAV at 20 hrs)	$\geq 54$ %	

The following grades may be specified as tack coats.

Asphalt Grade	Use
PG 58-22, PG 58-28, PG 64-22	Tack Coat"

Revise Article 1031.06(c)(1) and 1031.06(c)(2) of the Standard Specifications to read:

“(1) RAP/RAS. When RAP is used alone or RAP is used in conjunction with RAS, the percentage of virgin ABR shall not exceed the amounts listed in the following table.

HMA Mixtures - RAP/RAS Maximum ABR % <sup>1/ 2/</sup>			
Ndesign	Binder	Surface	Polymer Modified Binder or Surface <sup>3/</sup>
30	30	30	10
50	25	15	10
70	15	10	10
90	10	10	10

1/ For Low ESAL HMA shoulder and stabilized subbase, the RAP/RAS ABR shall not exceed 50 percent of the mixture.

- 2/ When RAP/RAS ABR exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28).
- 3/ The maximum ABR percentages for ground tire rubber (GTR) modified mixes shall be equivalent to the percentages specified for SBS/SBR polymer modified mixes.
- (2) FRAP/RAS. When FRAP is used alone or FRAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the following table.

HMA Mixtures - FRAP/RAS Maximum ABR % <sup>1/ 2/</sup>			
Ndesign	Binder	Surface	Polymer Modified Binder or Surface <sup>3/</sup>
30	55	45	15
50	45	40	15
70	45	35	15
90	45	35	15
SMA	- -	- -	25
IL-4.75	- -	- -	35

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the FRAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When FRAP/RAS ABR exceeds 20 percent for all mixes, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28).
- 3/ The maximum ABR percentages for GTR modified mixes shall be equivalent to the percentages specified for SBS/SBR polymer modified mixes.”

Add the following to the end of Note 2 of Article 1030.03 of the Standard Specifications.

“A dedicated storage tank for the ground tire rubber (GTR) modified asphalt binder shall be provided. This tank shall be capable of providing continuous mechanical mixing throughout and/or recirculation of the asphalt binder to provide a uniform mixture. The tank shall be heated and capable of maintaining the temperature of the asphalt binder at 300 °F to 350 °F (149 °C to 177 °C). The asphalt binder metering systems of dryer drum plants shall be calibrated with the actual GTR modified asphalt binder material with an accuracy of ±0.40 percent.”

## 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: 3rd Street, US DOT # 605935R of the Barstow-Rock Island Sub in East Moline, IL; Reconstruction of the 12<sup>th</sup> Ave/3<sup>rd</sup> Street Signalized Intersection

Class 1 RR (Y or N): Y

DOT/AAR No.: 605935R

RR Division: Chicago

RR Mile Post: 246.21

RR Sub-Division: Barstow-Rock Island

Description and Designation: 7<sup>th</sup> Street, US DOT #605937E of the Barstow-Rock Island Sub in East Moline, IL; Reconstruction of the 12<sup>th</sup> Ave/7<sup>th</sup> 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](mailto:Jacob.Rzewnicki@BNSF.com)

Phone: 913-551-4257

For Insurance Information Contact: Jacob Rzewnicki, [Jacob.Rzewnicki@BNSF.com](mailto:Jacob.Rzewnicki@BNSF.com)

Phone: 913-551-4257

Iowa Interstate Railroad, LLC. 203 2 <sup>nd</sup> Street SE, Suite 500 Cedar Rapids, Iowa 52401-1405	None	13 / 10 MPH
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Class 1 RR (Y or N): Y

DOT/AAR No.: 605935R

RR Division: Illinois

RR Mile Post: 175.76

RR Sub-Division: Blue Island

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](mailto:gdmitchell@iaisrr.com)

Phone: 319-298-5424

For Insurance Information Contact: Greg Mitchell, [gdmitchell@iaisrr.com](mailto: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.

## 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."

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## **SEEDING (BDE)**

Effective: November 1, 2022

Revise Article 250.07 of the Standard Specifications to read:

**“250.07 Seeding Mixtures.** The classes of seeding mixtures and combinations of mixtures will be designated in the plans.

When an area is to be seeded with two or more seeding classes, those mixtures shall be applied separately on the designated area within a seven day period. Seeding shall occur prior to placement of mulch cover. A Class 7 mixture can be applied at any time prior to applying any seeding class or added to them and applied at the same time.

TABLE 1 - SEEDING MIXTURES		
Class - Type	Seeds	lb/acre (kg/hectare)
1 Lawn Mixture 1/	Kentucky Bluegrass Perennial Ryegrass <i>Festuca rubra</i> ssp. <i>rubra</i> (Creeping Red Fescue)	100 (110) 60 (70) 40 (50)
1A Salt Tolerant Lawn Mixture 1/	Kentucky Bluegrass Perennial Ryegrass <i>Festuca rubra</i> ssp. <i>rubra</i> (Creeping Red Fescue) <i>Festuca brevipila</i> (Hard Fescue) <i>Puccinellia distans</i> (Fults Saltgrass or Salty Alkaligrass)	60 (70) 20 (20) 20 (20) 20 (20) 60 (70)
1B Low Maintenance Lawn Mixture 1/	Turf-Type Fine Fescue 3/ Perennial Ryegrass Red Top <i>Festuca rubra</i> ssp. <i>rubra</i> (Creeping Red Fescue)	150 (170) 20 (20) 10 (10) 20 (20)
2 Roadside Mixture 1/	<i>Lolium arundinaceum</i> (Tall Fescue) Perennial Ryegrass <i>Festuca rubra</i> ssp. <i>rubra</i> (Creeping Red Fescue) Red Top	100 (110) 50 (55) 40 (50) 10 (10)
2A Salt Tolerant Roadside Mixture 1/	<i>Lolium arundinaceum</i> (Tall Fescue) Perennial Ryegrass <i>Festuca rubra</i> ssp. <i>rubra</i> (Creeping Red Fescue) <i>Festuca brevipila</i> (Hard Fescue) <i>Puccinellia distans</i> (Fults Saltgrass or Salty Alkaligrass)	60 (70) 20 (20) 30 (20) 30 (20) 60 (70)
3 Northern Illinois Slope Mixture 1/	<i>Elymus canadensis</i> (Canada Wild Rye) 5/ Perennial Ryegrass Alsike Clover 4/ <i>Desmanthus illinoensis</i> (Illinois Bundleflower) 4/ 5/ <i>Schizachyrium scoparium</i> (Little Bluestem) 5/ <i>Bouteloua curtipendula</i> (Side-Oats Grama) 5/ <i>Puccinellia distans</i> (Fults Saltgrass or Salty Alkaligrass) Oats, Spring Slender Wheat Grass 5/ Buffalo Grass 5/ 7/	5 (5)  20 (20) 5 (5) 2 (2)  12 (12)  10 (10)  30 (35) 50 (55) 15 (15) 5 (5)
3A Southern Illinois Slope Mixture 1/	Perennial Ryegrass <i>Elymus canadensis</i> (Canada Wild Rye) 5/ <i>Panicum virgatum</i> (Switchgrass) 5/ <i>Schizachyrium scoparium</i> (Little Blue Stem) 5/ <i>Bouteloua curtipendula</i> (Side-Oats Grama) 5/ <i>Dalea candida</i> (White Prairie Clover) 4/ 5/ <i>Rudbeckia hirta</i> (Black-Eyed Susan) 5/ Oats, Spring	20 (20) 20 (20)  10 (10) 12 (12)  10 (10)  5 (5)  5 (5) 50 (55)



Class – Type		Seeds	lb/acre (kg/hectare)
4	Native Grass 2/ 6/	<i>Andropogon gerardi</i>	4 (4)
		(Big Blue Stem) 5/	
		<i>Schizachyrium scoparium</i>	5 (5)
		(Little Blue Stem) 5/	
		<i>Bouteloua curtipendula</i>	5 (5)
		(Side-Oats Grama) 5/	
		<i>Elymus canadensis</i>	1 (1)
		(Canada Wild Rye) 5/	
		<i>Panicum virgatum</i> (Switch Grass) 5/	1 (1)
		<i>Sorghastrum nutans</i> (Indian Grass) 5/	2 (2)
4A	Low Profile Native Grass 2/ 6/	Annual Ryegrass	25 (25)
		Oats, Spring	25 (25)
		Perennial Ryegrass	15 (15)
		<i>Schizachyrium scoparium</i>	5 (5)
		(Little Blue Stem) 5/	
		<i>Bouteloua curtipendula</i>	5 (5)
		(Side-Oats Grama) 5/	
		<i>Elymus canadensis</i>	1 (1)
		(Canada Wild Rye) 5/	
		<i>Sporobolus heterolepis</i>	0.5 (0.5)
4B	Wetland Grass and Sedge Mixture 2/ 6/	Annual Ryegrass	25 (25)
		Oats, Spring	25 (25)
		Wetland Grasses (species below) 5/	6 (6)
		<u>Species:</u>	<u>% By Weight</u>
		<i>Calamagrostis canadensis</i> (Blue Joint Grass)	12
		<i>Carex lacustris</i> (Lake-Bank Sedge)	6
		<i>Carex slipata</i> (Awl-Fruited Sedge)	6
		<i>Carex stricta</i> (Tussock Sedge)	6
		<i>Carex vulpinoidea</i> (Fox Sedge)	6
		<i>Eleocharis acicularis</i> (Needle Spike Rush)	3
		<i>Eleocharis obtusa</i> (Blunt Spike Rush)	3
		<i>Glyceria striata</i> (Fowl Manna Grass)	14
		<i>Juncus effusus</i> (Common Rush)	6
		<i>Juncus tenuis</i> (Slender Rush)	6
		<i>Juncus torreyi</i> (Torrey's Rush)	6
		<i>Leersia oryzoides</i> (Rice Cut Grass)	10
		<i>Scirpus acutus</i> (Hard-Stemmed Bulrush)	3
		<i>Scirpus atrovirens</i> (Dark Green Rush)	3
		<i>Bolboschoenus fluviatilis</i> (River Bulrush)	3
		<i>Schoenoplectus tabernaemontani</i> (Softstem Bulrush)	3
		<i>Spartina pectinata</i> (Cord Grass)	4

Class – Type	Seeds	lb/acre (kg/hectare)
5	Forb with Annuals Mixture 2/ 5/ 6/	Annuals Mixture (Below) Forb Mixture (Below)
		1 (1) 10 (10)
	Annuals Mixture - Mixture not exceeding 25 % by weight of any one species, of the following:	
	<i>Coreopsis lanceolata</i> (Sand Coreopsis) <i>Leucanthemum maximum</i> (Shasta Daisy) <i>Gaillardia pulchella</i> (Blanket Flower) <i>Ratibida columnifera</i> (Prairie Coneflower) <i>Rudbeckia hirta</i> (Black-Eyed Susan)	
	Forb Mixture - Mixture not exceeding 5 % by weight PLS of any one species, of the following:	
	<i>Amorpha canescens</i> (Lead Plant) 4/ <i>Anemone cylindrica</i> (Thimble Weed) <i>Asclepias tuberosa</i> (Butterfly Weed) <i>Aster azureus</i> (Sky Blue Aster) <i>Symphyotrichum leave</i> (Smooth Aster) <i>Aster novae-angliae</i> (New England Aster) <i>Baptisia leucantha</i> (White Wild Indigo) 4/ <i>Coreopsis palmata</i> (Prairie Coreopsis) <i>Echinacea pallida</i> (Pale Purple Coneflower) <i>Eryngium yuccifolium</i> (Rattlesnake Master) <i>Helianthus mollis</i> (Downy Sunflower) <i>Heliopsis helianthoides</i> (Ox-Eye) <i>Liatris aspera</i> (Rough Blazing Star) <i>Liatris pycnostachya</i> (Prairie Blazing Star) <i>Monarda fistulosa</i> (Prairie Bergamot) <i>Parthenium integrifolium</i> (Wild Quinine) <i>Dalea candida</i> (White Prairie Clover) 4/ <i>Dalea purpurea</i> (Purple Prairie Clover) 4/ <i>Physostegia virginiana</i> (False Dragonhead) <i>Potentilla arguta</i> (Prairie Cinquefoil) <i>Ratibida pinnata</i> (Yellow Coneflower) <i>Rudbeckia subtomentosa</i> (Fragrant Coneflower) <i>Silphium laciniatum</i> (Compass Plant) <i>Silphium terebinthinaceum</i> (Prairie Dock) <i>Oligoneuron rigidum</i> (Rigid Goldenrod) <i>Tradescantia ohiensis</i> (Spiderwort) <i>Veronicastrum virginicum</i> (Culver's Root)	

Class – Type		Seeds	lb/acre (kg/hectare)
5A	Large Flower Native Forb Mixture 2/ 5/ 6/	Forb Mixture (see below)	5 (5)
	<u>Species:</u>	<u>% By Weight</u>	
	<i>Aster novae-angliae</i> (New England Aster)	5	
	<i>Echinacea pallida</i> (Pale Purple Coneflower)	10	
	<i>Helianthus mollis</i> (Downy Sunflower)	10	
	<i>Heliopsis helianthoides</i> (Ox-Eye)	10	
	<i>Liatris pycnostachya</i> (Prairie Blazing Star)	10	
	<i>Ratibida pinnata</i> (Yellow Coneflower)	5	
	<i>Rudbeckia hirta</i> (Black-Eyed Susan)	10	
	<i>Silphium laciniatum</i> (Compass Plant)	10	
	<i>Silphium terebinthinaceum</i> (Prairie Dock)	20	
	<i>Oligoneuron rigidum</i> (Rigid Goldenrod)	10	
5B	Wetland Forb 2/ 5/ 6/	Forb Mixture (see below)	2 (2)
	<u>Species:</u>	<u>% By Weight</u>	
	<i>Acorus calamus</i> (Sweet Flag)	3	
	<i>Angelica atropurpurea</i> (Angelica)	6	
	<i>Asclepias incarnata</i> (Swamp Milkweed)	2	
	<i>Aster puniceus</i> (Purple Stemmed Aster)	10	
	<i>Bidens cernua</i> (Beggarticks)	7	
	<i>Eutrochium maculatum</i> (Spotted Joe Pye Weed)	7	
	<i>Eupatorium perfoliatum</i> (Boneset)	7	
	<i>Helenium autumnale</i> (Autumn Sneezeweed)	2	
	<i>Iris virginica shrevei</i> (Blue Flag Iris)	2	
	<i>Lobelia cardinalis</i> (Cardinal Flower)	5	
	<i>Lobelia siphilitica</i> (Great Blue Lobelia)	5	
	<i>Lythrum alatum</i> (Winged Loosestrife)	2	
	<i>Physostegia virginiana</i> (False Dragonhead)	5	
	<i>Persicaria pensylvanica</i> (Pennsylvania Smartweed)	10	
	<i>Persicaria lapathifolia</i> (Curlytop Knotweed)	10	
	<i>Pycnanthemum virginianum</i> (Mountain Mint)	5	
	<i>Rudbeckia laciniata</i> (Cut-leaf Coneflower)	5	
	<i>Oligoneuron riddellii</i> (Riddell Goldenrod)	2	
	<i>Sparganium eurycarpum</i> (Giant Burreed)	5	
6	Conservation Mixture 2/ 6/	<i>Schizachyrium scoparium</i> (Little Blue Stem) 5/ <i>Elymus canadensis</i> (Canada Wild Rye) 5/ Buffalo Grass 5/ 7/ Vernal Alfalfa 4/ Oats, Spring	5 (5)  2 (2)  5 (5) 15 (15) 48 (55)
6A	Salt Tolerant Conservation Mixture 2/ 6/	<i>Schizachyrium scoparium</i> (Little Blue Stem) 5/ <i>Elymus canadensis</i> (Canada Wild Rye) 5/ Buffalo Grass 5/ 7/ Vernal Alfalfa 4/ Oats, Spring <i>Puccinellia distans</i> (Fulfs Saltgrass or Salty Alkaligrass)	5 (5)  2 (2)  5 (5) 15 (15) 48 (55) 20 (20)
7	Temporary Turf Cover Mixture	Perennial Ryegrass Oats, Spring	50 (55) 64 (70)

Notes:

- 1/ Seeding shall be performed when the ambient temperature has been between 45 °F (7 °C) and 80 °F (27 °C) for a minimum of seven (7) consecutive days and is forecasted to be the same for the next five (5) days according to the National Weather Service.
- 2/ Seeding shall be performed in late fall through spring beginning when the ambient temperature has been below 45 °F (7 °C) for a minimum of seven (7) consecutive days and ending when the ambient temperature exceeds 80 °F (27 °C) according to the National Weather Service.
- 3/ Specific variety as shown in the plans or approved by the Engineer.
- 4/ Inoculation required.
- 5/ Pure Live Seed (PLS) shall be used.
- 6/ Fertilizer shall not be used.
- 7/ Seed shall be primed with  $\text{KNO}_3$  to break dormancy and dyed to indicate such.

Seeding will be inspected after a period of establishment. The period of establishment shall be six (6) months minimum, but not to exceed nine (9) months. After the period of establishment, areas not exhibiting 75 percent uniform growth shall be interseeded or reseeded, as determined by the Engineer, at no additional cost to the Department."

80445

## SHORT TERM AND TEMPORARY PAVEMENT MARKINGS (BDE)

Effective: April 1, 2024

Revised: April 2, 2024

Revise Article 701.02(d) of the Standard Specifications to read:

“(d) Pavement Marking Tapes (Note 3) ..... 1095.06”

Add the following Note to the end of Article 701.02 of the Standard Specifications:

“Note 3. White or yellow pavement marking tape that is to remain in place longer than 14 days shall be Type IV tape.”

Revise Article 703.02(c) of the Standard Specifications to read:

“(c) Pavement Marking Tapes (Note 1) ..... 1095.06”

Add the following Note to the end of Article 703.02 of the Standard Specifications:

“Note 1. White or yellow pavement marking tape that is to remain in place longer than 14 days shall be Type IV tape.”

Revise Article 1095.06 of the Standard Specifications to read:

**“1095.06 Pavement Marking Tapes.** Type I white or yellow marking tape shall consist of glass spheres embedded into a binder on a foil backing that is precoated with a pressure sensitive adhesive. The spheres shall be of uniform gradation and distributed evenly over the surface of the tape.

Type IV tape shall consist of white or yellow tape with wet reflective media incorporated to provide immediate and continuing retroreflection in wet and dry conditions. The wet retroreflective media shall be bonded to a durable polyurethane surface. The patterned surface shall have approximately  $40 \pm 10$  percent of the surface area raised and presenting a near vertical face to traffic from any direction. The channels between the raised areas shall be substantially free of exposed reflective elements or particles.

Blackout tape shall consist of a matte black, non-reflective, patterned surface that is precoated with a pressure sensitive adhesive.

- (a) Color. The white and yellow markings shall meet the following requirements for daylight reflectance and color, when tested, using a color spectrophotometer with 45 degrees circumferential/zero degree geometry, illuminant D65, and two degree observer angle. The color instrument shall measure the visible spectrum from 380 to 720 nm with a wavelength measurement interval and spectral bandpass of 10 nm.

Color	Daylight Reflectance %Y
White	65 min.
Yellow *	36 - 59

\*Shall match Aerospace Material Specification Standard 595 33538 (Orange Yellow) and the chromaticity limits as follows.

x	0.490	0.475	0.485	0.530
y	0.470	0.438	0.425	0.456

- (b) Retroreflectivity. The white and yellow markings shall be retroreflective. Reflective values measured in accordance with the photometric testing procedure of ASTM D 4061 shall not be less than those listed in the table below. The coefficient of retroreflected luminance,  $R_L$ , shall be expressed as average millicandelas/footcandle/sq ft (millicandelas/lux/sq m), measured on a 3.0 x 0.5 ft (900 mm x 150 mm) panel at 86 degree entrance angle.

Coefficient of Retroreflected Luminance, $R_L$ , Dry					
Type I			Type IV		
Observation Angle	White	Yellow	Observation Angle	White	Yellow
0.2°	2700	2400	0.2°	1300	1200
0.5°	2250	2000	0.5°	1100	1000

Wet retroreflectance shall be measured for Type IV under wet conditions according to ASTM E 2177 and meet the following.

Wet Retroreflectance, Initial $R_L$	
Color	$R_L$ 1.05/88.76
White	300
Yellow	200

- (c) Skid Resistance. The surface of Type IV and blackout markings shall provide a minimum skid resistance of 45 BPN when tested according to ASTM E 303.
- (d) Application. The pavement marking tape shall have a precoated pressure sensitive adhesive and shall require no activation procedures. Test pieces of the tape shall be applied according to the manufacturer's instructions and tested according to ASTM D 1000, Method A, except that a stiff, short bristle roller brush and heavy hand pressure will be substituted for the weighted rubber roller in applying the test pieces to the metal test panel. Material tested as directed above shall show a minimum adhesion value of 750 g/in. (30 g/mm) width at the temperatures specified in ASTM D 1000. The adhesive shall be resistant to oils, acids, solvents, and water, and shall not leave objectionable stains or residue after removal. The material shall be flexible and conformable to the texture of the pavement.

(e) Durability. Type IV and blackout tape shall be capable of performing for the duration of a normal construction season and shall then be capable of being removed intact or in large sections at pavement temperatures above 40 °F (4 °C) either manually or with a roll-up device without the use of sandblasting, solvents, or grinding. The Contractor shall provide a manufacturer's certification that the material meets the requirements for being removed after the following minimum traffic exposure based on transverse test decks with rolling traffic.

- (1) Time in place - 400 days
- (2) ADT per lane - 9,000 (28 percent trucks)
- (3) Axle hits - 10,000,000 minimum

Samples of the material applied to standard specimen plates will be measured for thickness and tested for durability in accordance with ASTM D 4060, using a CS-17 wheel and 1000-gram load, and shall meet the following criteria showing no significant change in color after being tested for the number of cycles indicated.

Test	Type I	Type IV	Blackout
Minimum Initial Thickness, mils (mm)	20 (0.51)	65 (1.65) <sup>1/</sup> 20 (0.51) <sup>2/</sup>	65 (1.65) <sup>1/</sup> 20 (0.51) <sup>2/</sup>
Durability (cycles)	5,000	1,500	1,500

1/ Measured at the thickest point of the patterned surface.

2/ Measured at the thinnest point of the patterned surface.

The pavement marking tape, when applied according to the manufacturer's recommended procedures, shall be weather resistant and shall show no appreciable fading, lifting, or shrinkage during the useful life of the marking. The tape, as applied, shall be of good appearance, free of cracks, and edges shall be true, straight, and unbroken.

(f) Sampling and Inspection.

(1) Sample. Prior to approval and use of Type IV pavement marking tape, the manufacturer shall submit a notarized certification from an independent laboratory, together with the results of all tests, stating that the material meets the requirements as set forth herein. The independent laboratory test report shall state the lot tested, the manufacturer's name, and the date of manufacture.

After initial approval by the Department, samples and certification by the manufacturer shall be submitted for each subsequent batch of Type IV tape used. The manufacturer shall submit a certification stating that the material meets the requirements as set forth herein and is essentially identical to the material sent for qualification. The certification shall state the lot tested, the manufacturer's name, and the date of manufacture.

- (2) Inspection. The Contractor shall provide a manufacturer's certification to the Engineer stating the material meets all requirements of this specification. All material samples for acceptance tests shall be taken or witnessed by a representative of the Bureau of Materials and shall be submitted to the Engineer of Materials, 126 East Ash Street, Springfield, Illinois 62704-4766 at least 30 days in advance of the pavement marking operations."

80457



## **SIGN PANELS AND APPURTENANCES (BDE)**

Effective: January 1, 2025

Revised: January 1, 2026

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.”

Revise the first sentence of the tenth paragraph of Article 720.03 of the Standard Specifications to read:

“The backs of all sign panels shall be marked in a manner designed to last as long as the sign face material, in letters and numerals at least 3/8 in. (9.5 mm) but no more than 3/4 in. (19 mm) in height with the month and year of manufacture, the name of the sign manufacturer, the name of the sign sheeting manufacturer, the method of manufacture (“screened”, “EC film”, “direct applied”, or “digital print”), and the initials IDOT.”

Revise the first sentence of the fourth paragraph of Article 1091.03(a)(10) of the Standard Specifications to read:

“Transparent colors screened, or transparent acrylic electronic cutting films, or digital printing on white sheeting, shall meet the minimum initial coefficient of retroreflection values of the 0.2 degree observation angle, -4.0 degree entrance angle values as listed in the previous tables for the color being applied.”

Add the following after the fourth paragraph of Article 1091.03(a)(10) of the Standard Specifications:

“Digitally printed signs shall be produced using digital print technologies and ink systems, products and processes that comply with the sheeting manufacturer’s recommendation. The digitally printed signs shall be fabricated with a full sign protective overlay film designed to provide a smooth surface needed for retroreflectivity, and to protect the sign from fading and UV degradation. The overlamine shall comply with the sheeting manufacturer’s recommendations to ensure proper adhesion and transparency.”

Add the following after the third paragraph of Article 1106.01 of the Standard Specifications:

“Digitally printed signs may omit protective overlay film.”

80462

## **SOURCE OF SUPPLY AND QUALITY REQUIREMENTS (BDE)**

Effective: January 2, 2023

Revised: January 1, 2026

Revise the third through ninth paragraphs of Article 106.01 of the Standard Specifications to read:

“Articles, materials, and supplies shall be classified into only one of the following categories.

- (a) Iron and Steel. All iron and steel products, which are to be incorporated into the work, shall be domestically manufactured or produced and fabricated, unless an exception is expressly permitted under Federal and/or State law and written permission is given by the Department. The Contractor shall obtain from the iron or steel producer and/or fabricator, in addition to the mill analysis, a certification that all iron or steel materials meet these domestic source requirements.

The applications of all coatings, epoxy, galvanizing, painting, etc. to iron and steel products shall be domestically applied.

- (b) Manufactured Products. Manufactured products shall include articles, materials or supplies that have been processed into a specific form or shape; or have been combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies. Manufactured products incorporated into the work shall have the final assembly for the manufacturing process occur domestically.

A manufactured product may include components that are construction materials, iron or steel products, or exempt materials.

Precast concrete products and intelligent transportation systems (ITS) or other electronic hardware systems shall comply with the requirements of Article 106.01(a) in addition to the requirements of manufactured products.

- (c) Construction Materials. All manufacturing processes for construction materials shall occur within the United States. Construction materials shall include an article, material, or supply consisting of only one of the following.

- (1) Non-ferrous metals;
- (2) Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- (3) Glass (including optic glass);
- (4) Fiber optic cable (including drop cable);
- (5) Optical fiber;

(6) Lumber;

(7) Drywall;

(8) Engineered wood.

Minor additions of articles, materials, supplies, or binding agents to a construction material do not change the categorization of the construction material.

- (d) Exempt Materials. Materials exempt from domestic production requirements are cement or cementitious materials, aggregates, aggregate binding agents or additives, or items not permanently incorporated into the work. Exempt materials may be combined with other materials into a final form to produce a manufactured product.”

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 15<sup>th</sup> 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

## **TRAFFIC SIGNAL BACKPLATE (BDE)**

Effective: August 1, 2025

Revise the second sentence of the third paragraph of Article 1078.03 of the Standard Specifications to read:

“Retroreflective sheeting shall be Type AZ or Type ZZ according to Article 1091.03 and applied in the preferred orientation for the maximum angularity according to the manufacturer’s recommendations.”

80470

## **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

## WORK ZONE TRAFFIC CONTROL DEVICES (BDE)

Effective: March 2, 2020

Revised: January 1, 2026

Add the following to Article 701.03 of the Standard Specifications:

“(q) Temporary Sign Supports ..... 1106.02”

Revise Article 701.03(p) of the Standard Specifications to read:

“(p) Detectable Pedestrian Channelizing Barricades ..... 1106.02(m)”

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 the first paragraph of Section 1106.02(a) of the Standard Specifications to read:

- “(a) Lights. Lights shall meet the requirements of Chapter 13 of the “Equipment and Materials Standards of the Institute of Transportation Engineers,” 1998, Institute of Transportation Engineers, and shall be visible on a clear night from a distance of 3000 ft (900 m). Lights are classified as follows.”

Revise Articles 1106.02(g), 1106.02(k), 1106.02(l), and 1106.02(m) of the Standard Specifications 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.

- (m) Detectable Pedestrian Channelizing Barricades. The top panel or handrail shall be continuous and there should be at least a 2 in. (50 mm) gap between the hand trailing edge and its support. When visible to vehicular traffic, the top rail shall have alternating white and orange retroreflective stripes sloping at 45 degrees. The bottom panel shall be continuous and have alternating white and orange retroreflective stripes sloping at 45 degrees. Barricade stripes shall be 6 in. (150 mm) in width. The predominant color for other barricade components shall be white, orange, or silver.”

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**REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

**ATTACHMENTS**

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

**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 situations 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](mailto: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](mailto: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 procurement 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/WHDL/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 journeymen 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 journeymen 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 journeymen 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 procurement 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.

\* \* \* \* \*



## **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.

\* \* \* \* \*

## **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 contractor). "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.

\* \* \* \* \*

#### **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.