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Letting January 17, 2025

Notice to Bidders, Specifications and Proposal



Contract No. 70A55
VERMILION County
Section 92(12,12-1)RS-2
Route FAI 74,FAP 729,FAU 7029
Project NHPP-GFGL(994)
District 5 Construction Funds

Prepared by

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Illinois Department of Transportation

NOTICE TO BIDDERS

- 1. **TIME AND PLACE OF OPENING BIDS.** Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. January 17, 2025 at which time the bids will be publicly opened from the iCX SecureVault.
- **2. DESCRIPTION OF WORK**. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

Contract No. 70A55
VERMILION County
Section 92(12,12-1)RS-2
Project NHPP-GFGL(994)
Route FAI 74,FAP 729,FAU 7029
District 5 Construction Funds

5.312 miles of pavement rehab - designed overlay resurfacing and underdrains, ramp repair 0.4 mile east of US 150-IL 1 at Tilton to the Indiana State Line.

- 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

Omer Osman, Secretary

INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2025

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS and frequently used RECURRING SPECIAL PROVISIONS.

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

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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 FAI Route 74 (I-74) FAP Route 729 & FAU Route 7029 (Lynch Rd.), Project NHPP-GFGL(994), Section 92(12,12-1)RS-2, Vermilion County, Contract No. 70A55 and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

INTENT OF PROJECT

The intent of the project is to resurface FAI 74, replace pipe underdrains, and resurface ramps from 0.4 miles east of US 150 / ILL 1 at Tilton to the Indiana State Line.

This work shall be completed utilizing a combination of road closures and lane closures in accordance with the applicable Highway Standards. Appropriate measures shall be taken by the Contractor to preserve and protection the surrounding environment.

DESCRIPTION OF WORK

- 1. Establish Traffic Control on FAI 74
- 2. Lynch Road Lighting Repairs
- 3. Mainline Patching (Class A Special)
- 4. Ramp Patching (Class D)
- 5. Lynch Road Patching (Class B)
- 6. Pipe Underdrain Installation
- 7. Mainline Pavement Rehabilitation
- 8. Shoulder Resurfacing
- 9. Mainline Resurfacing
- 10. Ramp Resurfacing
- 11. Lynch Road Median Removal
- 12. Crash Wall and Slope Wall Repairs
- 13. Lynch Road Median Installation
- 14. Lynch Road Resurfacing
- 15. Guardrail Removal and Replacement
- 16. Seeding and Mulch
- 17. Install Raised Reflective Pavement Markings
- 18. Replace Pavement Markings
- 19. All Other Items Necessary to Complete the Project
- 20. Clean Up

TRAFFIC CONTROL PLAN

Eff. 09-11-1990 Rev. 01-01-2014

Traffic control shall be in accordance with the applicable sections of the Standard Specifications for Road and Bridge Construction, the applicable guidelines contained in the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways, these Special Provisions and any special details and highway standards contained herein and in the plans.

Special attention is called to Articles 107.09 and 107.14 of the Standard Specifications, the following Highway Standards relating to Traffic Control, and the listed Supplemental Specifications and Recurring Special Provisions.

Highway Standards:	701001	701006	701011	701101
	701106	701201	701301	701306
	701311	701400	701401	701402
	701411	701426	701428	701451
	701456	701501	701901	

Special Provisions:

CONTRACTOR ACCESS

COOPERATION BETWEEN CONTRACTORS

DETOUR SIGNING

FLAGGER RESTRICTIONS

GUARDRAIL INSTALLATION TIME

GUARDRAIL REMOVAL AND INSTALLATION

INDOT COORDINATION

NOTIFICATION PRIOR TO LANE CLOSURES

PUBLIC INFORMATION PLAN

REAL-TIME TRAFFIC CONTROL SYSTEM

SECURING SHOULDER INLETS AND GRATES FOR STAGE CONSTRUCTION TRAFFIC

STAGE CONSTRUCTION TIME RESTRICTION

TEMPORARY TRAFFIC SIGNALS

TEMPORARY RUMBLE STRIPS (SPECIAL)

TEMPORARY TRAFFIC CONTROL DEVICE DEPLOYMENT AND REMOVAL

TMP MONITORING

TRAFFIC CONTROL AND PROTECTION, (SPECIAL)

TRAFFIC CONTROL AND PROTECTION, STANDARD 701401

TRAFFIC CONTROL AND PROTECTION, STANDARD 701402

TRAFFIC CONTROL REMOVAL

UNEVEN LANES

WIDTH RESTRICTIONS

Plan Details:

TEMPORARY RUBMLE STRIP (SPECIAL) DETAIL
REAL-TIME TRAFFIC CONTROL SYSTEM DETAIL
WIDTH RESTRICTION MAP DETAILS
DISTRICT 5 DETAIL NO. X032AAAA - REAL-TIME TRAFFIC CONTROL SYSTEM
DISTRICT 5 DETAIL NO. X7010805 - TRAFFIC CONTROL AND PROTECTION,
STANDARD 701401
DISTRICT 5 DETAIL NO. X7200201 - WIDTH RESTRICTION SIGNING

Limits of Construction: The Contractor shall coordinate the items of work in order to keep hazards and traffic inconveniences to a minimum, as specified below.

- 1. The contractor shall provide, erect, and maintain all the necessary barricades, cones, drums, flags, and lights for warning and protection of traffic, as required by Sections 107 and 701 through 703 of the Standard Specifications.
- 2. Work shall not be performed that will reduce the existing vertical clearances on I 74.
- 3. "TRUCKS ENTERING AND LEAVING ROAD" signs shall be displayed as directed by the Engineer during periods when material or equipment is being hauled to or from the project site. This work shall be included in the cost of various traffic control pay items in the plans.
- 4. Dual display "ROAD CONSTRUCTION AHEAD" signs and "BE PREPARED TO STOP" signs shall be placed along the eastbound and westbound I 74 lanes approaching the work zones as directed by the Engineer and shall be included in the cost of various traffic control pay items in the contract plans.
- 5. In addition to the flaggers required by the various standards, additional flaggers shall be provided if required by the Engineer, and they will be paid in accordance with Article 109.04 of the Standard Specifications.
- 6. The Contractor shall have responsibility for all Traffic Control Devices throughout the entire project. Any additional work or material shall be considered included in the contract unit price for the various control pay items in the contract plans.
- 7. Any inconveniences or delays caused by the Contractor in complying with this Special Provision will be considered as included in the contract unit price of the various traffic control pay items in the contract plans and no additional compensation will be allowed.
- 8. At any particular location, the Contractor shall work on only one side of the pavement at a time and shall keep all equipment, materials, and vehicles off the pavement, the shoulder, and the right-of-way on the side of the pavement open to traffic.
- 9. The Contractor shall be required to turn off strobes/flashers on all vehicles and equipment once it has entered the closed lane and is behind traffic control with the exception of moving equipment performing the current operation.
- 10. Only one on-ramp at the Bowman Ave. interchange may be closed at a time to allow a detour during the I 74 interstate pavement rehabilitation operations.
- 11. During Bowman Ave. ramp closures for the I 74 interstate pavement rehabilitation operations, all ramp resurfacing, pipe underdrain, and other work required on the ramps shall be completed to avoid any additional ramp closures.

Traffic: It is the intention of the Department that FAI 74, Greenwood Cemetery Rd., Brewer Rd., and Lynch Rd. be kept open to traffic at all times during the construction of this section. Ramp closures will be allowed at the Bowman Ave. and Lynch Rd. Interchanges only at night (10:00 PM to 6:00 AM) to permit patching, surface removal, pipe underdrain removal and installation, and HMA placement.

The following traffic control standards shall be utilized during, but no limited to, the listed construction operations:

TRAFFIC CONTROL AND PROTECTION, STANDARD 701001

Traffic Control and Protection, Standard 701001 shall be utilized for off-road operations that will take place more than 15' the edge of pavement. Applications may include, but not limited to utility operations, side slope changes, landscaping operations, and minor cleanup operations.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701006

Traffic Control and Protection, Standard 701006 shall be utilized for off-road operations that will take place 15' to 24" from the edge of pavement. Applications may include, but not limited to utility operations, side slope changes, landscaping operations, and minor cleanup operations.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701011

Traffic Control and Protection, Standard 701011 shall be utilized during any off-road moving operation located within 15 ft from the pavement edge. Applications may include, but not limited to utility operations, side slope changes, landscaping operations, and minor cleanup operations.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701101

Traffic Control and Protection, Standard 701011 shall be utilized for multilane off-road operations 15 ft to 24 in from the edge of the pavement. Applications may include, but limited to side slope changes, landscaping operations, and minor cleanup operations.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701106

Traffic Control and Protection, Standard 701106 shall be utilized for multilane off-road operations more than 15 ft away from the edge of pavement. Applications may include, but limited to side slope changes, landscaping operations, and minor cleanup operations.

TRAFFIC CONTROL AND PROTECTION. STANDARD 701201

Traffic Control and Protection, Standard 701201 shall be utilized for operations that require a lane closure. Applications may include, but not limited to guardrail replacement on Greenwood Cemetery Rd. and Brewer Rd.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701301

Traffic Control and Protection, Standard 701301 shall be utilized for any vehicles, equipment, workers or their activities require lane closure for no longer than 60 minutes in duration. A typical application may include minor cleanup operations.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701306

Traffic Control and Protection, Standard 701306 shall be utilized for any time, any vehicle, equipment, workers or their activities require an intermittent or continuous moving operation on the pavement where the average speed of movement is greater than 1 mph and less than 4 mph.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701311

Traffic Control and Protection, Standard 701311 shall be utilized for all construction operations will require a continuous moving operation where the average speed is greater than 3 mph. Typical applications may include pavement marking.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701400

Traffic Control and Protection, Standard 701400 shall be utilized for approaches to lane closures on freeways / expressways.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701401

Traffic Control and Protection, Standard 701401 shall be utilized for lane closures on freeways / expressways. Applications may include, but not limited to pavement patching, HMA surface removal, HMA resurfacing, HMA shoulders. This standard shall always be used in conjunction with Traffic Control and Protection, Standard 701400.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701402

Traffic Control and Protection, Standard 701402 shall be utilized for lane closures on freeways / expressways utilizing barrier. Applications may include, but not limited to removal and replacement of pavement and large pavement patching areas. This standard shall always be used in conjunction with Traffic Control and Protection, Standard 701400.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701411

Traffic Control and Protection, Standard 701411 shall be utilized for multilane lane closures at entrance or exit ramps for speeds greater than or equal to 45 mph. Applications may include, but not limited to pavement patching, HMA surface removal, HMA resurfacing, and HMA shoulders.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701426

Traffic Control and Protection, Standard 701426 shall be utilized multilane lane closures with intermittent or moving operations for speeds greater than or equal to 45 mph.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701428

Traffic Control and Protection, Standard 701428 shall be utilized for traffic control setup and removal on freeways / expressways.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701451

Traffic Control and Protection, Standard 701451 shall be utilized for traffic control setup and removal on freeways / expressways.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701456

Traffic Control and Protection, Standard 701456 shall be utilized during surface removal operations, HMA resurfacing, aggregate wedge shoulders, pipe underdrain removal and installation, and any other slow moving operations which require a partial ramp closure. Special attention is called to Section 701 where reference is made to the protection of unattended obstacles or excavations in the work area.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701501

Traffic Control and Protection, Standard 701501 shall be utilized during pavement patching operations, surface removal operations, HMA resurfacing, aggregate wedge shoulders, pipe underdrain removal and installation, and any other slow moving operations which require a lane closure. Special attention is called to Section 701 where reference is made to the protection of unattended obstacles or excavations in the work area.

TRAFFIC CONTROL - ADDITIONAL SIGNING ON ENTRANCE RAMPS

The Contractor shall install Dual Displayed "Road Construction Ahead" & "Be Prepared to Stop" signs at all entrance ramps located within the project limits.

These signs shall be in place and in operation continuously from the first closure, until no further lane closures are needed.

CONTRACTOR ACCESS

Eff. 09-11-1990 Rev. 01-01-2014

At road closure locations, where Type III barricades are installed in a manner that will not allow contractor access to the project without relocation of one or more of the barricades, the arrangement of the barricades at the beginning of each workday may be relocated, when approved by the Engineer, in the manner shown on Highway Standard 701901 for Road Closed to Through Traffic. 'Road Closed' signs (RII-2), supplemented by 'Except Authorized Vehicles' signs (R3-II0I), shall be mounted on both the near-right and the far-left barricade(s). At the end of each workday the barricades shall be returned to their in-line positions. This work will be considered to be included in the cost of the various traffic control items and no extra compensation will be allowed.

COOPERATION BETWEEN CONTRACTORS

Eff. 01-01-2024

There is a possibility that other Contractor's operations may be ongoing within the proposed project limit at the same time as the work included in this contract is being performed. The Contractor for this section shall cooperate with any other Contractors performing work adjacent to this project in accordance with Article 105.08 of the Standard Specifications. Any inconveniences or delays caused the Contractor in complying with this requirement shall be considered incidental to the contract and no additional compensation will be allowed.

DETOUR SIGNING

Eff. 02-18-2005 Rev. 04-01-2016

The work within this contract will cause a Road closure. All signing shall be furnished by the Contractor, erected at the locations shown within the contract plans, maintained, and removed by the Contractor unless otherwise noted in the plans.

All detour signs shall be in new or like-new condition at the start of the project. If an advanced warning or detour sign is damaged or becomes unreadable, this sign shall be replaced by a new or like new sign, as directed by the Engineer. All signs shall meet current IDOT policy for retro-reflectivity requirements. Sizes of signs not specified in the plans shall be as required by the Manual on Uniform Traffic Control Devices (MUTCD) and the Illinois Supplement to the MUTCD.

The District will require a minimum notification of 21 days prior to the actual Road Closure to ensure specific route over-width permitted loads are not sent to the restriction site. In their notification, the Contractor shall include the location and scheduled Road Closure start date. The Contractor is advised they will not be allowed to close the road without the 21 day notice and failure to provide proper notice will delay the road closure. The notice of road closure is considered a part of the Contractor's approved work schedule and it is the Contractor's responsibility to provide proper notice. Delays caused by failure to provide notice shall not be considered justification for workday additions.

All work associated with the furnishing, erecting, maintaining, and removal of Detour Signing will be paid for as DETOUR SIGNING – L SUM.

FLAGGER RESTRICTIONS

Eff. 01-01-2014 Rev. 04-08-2014

Operations with frequent encroachment into the open lane of traffic, along an interstate or multilane highway, requiring the use of a flagger will not be allowed after 3:30 p.m., Monday through Thursday or after 3:00 p.m. on Friday. These operations may include, but not be limited to, saw cutting, pouring, and finishing of patches. Other operations without workers adjacent to the open lane may proceed as normal, or as directed by the Engineer.

Any inconveniences or delays caused due to the Contractor complying with this Special Provision will be considered to be included in the contract unit price for the various Traffic Control and Protection pay items and no additional compensation will be allowed.

GUARDRAIL INSTALLATION TIME

Eff. 01-29-1999 Rev. 01-01-2014

Add the following to the end of the third paragraph of Article 701.17(f):

"Should the guardrail reinstallation be delayed beyond 10 calendar days following any removal of the existing guardrail, the contractor will be required to protect the hazard with attenuator drums or other redirective devices acceptable to the Engineer.

When Standard 701401 is specified in the contract for other construction operations and lane closures are required in accordance with Article 701.18(e) of the Standard Specifications, or when the incomplete reinstallation is located behind temporary concrete barriers required for traffic control in accordance with the contract, attenuator drums or other redirective devices will not be required in addition to the lane closure for protection of the hazards created by incomplete guardrail installations."

GUARDRAIL REMOVAL AND INSTALLATION

Eff. 09-11-1990 Rev. 01-01-2014

This work shall be done in accordance with Sections 630, 631, 632, 633, and 701.17(f) of the Standard Specifications and as modified herein:

New or additional guard rail shall be completed within three days after the posts have been installed.

Any inconvenience or delays caused the Contractor in complying with this Special Provision will be at no additional cost to the Department.

INDOT COORDINATION

Prior to beginning traffic control layout in Indiana, the Contractor shall submit a request and receive approval through the Indiana Department of Transportation's Permit Department. The application shall not be submitted prior to January 2025. Questions for permit requirements shall be sent to Eric Fair, Special Project Manager, and Justin Patterson, Permits Manager at the emails listed below.

Any inconvenience or delays caused to the Contractor in complying with this Special Provision will be at no additional cost to the Department.

Eric Fair – <u>EFair@indot.IN.gov</u> Justin Patterson – <u>JPatterson1@indot.IN.gov</u>

NIGHTTIME WORK ZONE LIGHTING FOR RAMP CLOSURES

Work requiring a closure on the interchange ramps, outside those detours noted in the Maintenance of Traffic Details included in the plans, shall be restricted to nighttime. This includes, not limited to, resurfacing, removing pipe underdrains, and installing pipe underdrains. This work shall be limited to Sunday, Monday, Tuesday, Wednesday, or Thursday beginning at 9:00 p.m. and ending the next day at 6:00 a.m.

Notification of ramp closures requires a minimum of 21 days before the actual restriction is placed to ensure specific routed over-width permitted loads are not sent through the restriction site. The Contractor shall notify the Resident Engineer a minimum of 21 days prior to the closure. In the notification, the Contractor shall include the location, scheduled restriction start date, road restriction width(s)/closure, proposed posted width (i.e. Barrier to Barrier width minus 18 inches).

The Contractor is advised they will not be allowed to close ramps without the 21 day notice and failure to provide proper notice will delay the installation of the road closure.

The notice of ramp closure is considered a part of the Contractor's approved work schedule and is the Contractor's responsibility to provide proper notice. Delays caused by failure to provide notice shall not be considered justification for workday additions or completion date extensions.

Additionally, Changeable Message Signs will be required for three (3) days each prior to the beginning of ramp closures and during to inform the traveling public of the upcoming delays that may be caused by the project. The signs will be located as directed by the Engineer. Changeable message signs required for this work shall be included in the cost of NIGHTTIME WORK ZONE LIGHTING and no additional compensation shall be allowed.

NOTIFICATION PRIOR TO LANE CLOSURES

Eff. 01-01-2024

The Contractor shall notify the Department's Bureau of Operations and the individuals and organizations listed below at least two (2) weeks prior to the start of the project and two (2) weeks prior to any lane closures.

Name Organization		Phone Number
Gary Sims	IDOT Traffic Operations	(217)-251-4859
	Engineer	
Jodi Theirl	Operations Executive Secretary	(217)-466-7289
Adrian	Vermilion County Engineer	(217)-703-7851
Greenwell		
Patrick	Vermilion County Sheriff	(217)-442-4080
Hartshorn		
Russell Rudd	Vermilion County EMS	(217)-443-6011
	Illinois State Police (Troop 7)	(217)-867-2050
	Danville Police Department	(217)-431-2200
	Danville Fire Department	(217)-431-2350
Eric Childers	Danville City Engineer (Acting)	(217)-431-2384
A.J. Wright	Danville Township	(217)-442-3599
	Commissioner	
	East Central Illinois EMS	(217)-359-6619
	Arrow Ambulance	(217)-383-3311
	Advanced Medical Transport	(217)-337-2911
	Village of Tilton	(217)-477-0800
	Tilton Police Department	(217)-442-0153
Butch Fields	Tilton Emergency Services	(217)-477-0800
	Tilton Fire Department	(217)-447-0803
	INDOT	(855)-463-6848
Eric Fair	INDOT	(765)-361-5260
Justin Patterson	INDOT	(765)-376-6769
Craig Carpenter INDOT Permit Investigator		(765)-918-4295

The Contractor shall also notify David Burkybile, Traffic Signal System Engineer (District 5) two weeks prior to start of the project to allow time to give advance overhead sign warnings of the upcoming project.

These agencies, organizations, and individuals shall also be notified when the project is complete.

PUBLIC INFORMATION PLAN

Eff. 01-01-2024

Changeable Message Signs will be required for seven (7) days each prior to the beginning of construction operations to inform the traveling public of the upcoming delays that may be caused by the project. The signs will be located as follows or as directed by the Engineer:

Route	Direction	Location
FAI 74	EB	Beginning of the project
FAI 74	EB	West of the Lynch Interchange
FAI 74	WB	Beginning of the project
FAI 74	WB	West of the Lynch Interchange
Lynch Rd.	NB	Southern Lynch Road limit
Lynch Rd.	SB	Northern Lynch Road limit

REAL-TIME TRAFFIC CONTROL SYSTEM

Rev. 4-27-2021

Description: This item shall consist of furnishing, installing, maintaining, relocating, and removal of an automated Real-Time Traffic Control System (RTTCS) meeting the requirements noted herein and providing the maintenance of the system during the duration of the work.

The Contractor shall furnish said system for measuring and delivering condition-responsive alerts on the project.

The RTTCS components shall be installed at the locations shown in the plans. The RTTCS shall be installed and operational two weeks prior to any lane closures on the project and shall remain in place until directed by the Engineer to remove the system or a portion thereof.

The RTTCS shall consist of, at a minimum:

- A Real-Time Traffic Control Monitoring Sensor Unit. Each sensor shall be capable of communicating with other components of this system.
- A Real-Time Traffic Control Warning Sign. Each unit shall consist of:
 - Warning signs with sign legend as shown in the plans.
 - Each sign shall have amber wigwag LED flashing lights (two flashers per sign) attached, with a minimum lens size of 12 inches. The flash pattern and flash sequence shall comply with the Manual of Uniform Traffic Control devices (MUTCD), Chapter 4L.
 - Remote communication hardware and software and controllers capable of activating flashing beacons.
- One Real-Time Traffic Control Central Base Unit equipped with appropriate hardware, software and dedicated network connection. To maintain accurate and reliable communication between all components of the system.

The exact locations of all devices shall be determined as part of an on-site communications analysis with the Contractor.

The RTTCS shall meet the following specifications:

- The RTTCS shall be a proven system that has been successfully deployed and operated in actual work zone and congestion areas.
- The RTTCS shall be capable of identifying stopped / slowed traffic conditions. The system shall self-test for communication or sensor failures.
- The RTTCS shall operate continuously (24 hours, 7 days a week) when in place and visible to the motoring public.
- The traffic sensors shall be of a type whose accuracy is not degraded by inclement weather or degraded visibility conditions including, but not limited to precipitation, fog, darkness, excessive dust and road debris.

- The RTTCS shall be capable of acquiring traffic data for a minimum of two (2) lanes of traffic in the same direction.
- Traffic sensors shall sequentially activate the warning sign flashers as the queue extends and be capable of only activating specific warning sign flashers.
- The RTTCS shall be capable of activating a message board.
- The RTTCS shall utilize static signs with two wigwag flashing beacons that only activate when slowed or stop traffic is detected to convey real-time traffic condition information to motorists.
- The warning sign flashers shall activate whenever the average traffic speeds fall below 30 mph and turn off when the average speed returns to above 45 mph. These speed thresholds shall be capable of being changed based on actual field trials and the location of the traffic sensor.
- Warning signs expected to be in place for more than two (2) weeks shall be post mounted.
- The RTTCS shall have a reliable communication system and provide warnings to the system manager and the Resident Engineer when communication or device failures are detected.
- The RTTCS shall be capable of notifying the Resident Engineer and Communications Center when the flashing beacons are activated.
- The RTTCS and flashers shall have a reliable power source.
- The RTTCS shall allow authorized users remotely to manually override the system during apparent system failures.
- Critical system operator control functions shall be password protected.
- The RTTCS shall have reporting features to a secure website. The website shall, at a minimum, show the current speeds at each detector location and whether the warning flashers are activated. The website shall provide access to archival data for the duration of the project. This data shall be printable.
- The RTTCS shall provide data logging the system events and key detection data. The data is to include the dates and times that the system was activated, which signs were activated, duration of the activation, and average speeds at each detections device. The data shall be provided to the Resident Engineer at the close of the project in Microsoft Excel ®, latest format.
- If during the duration of the project, it is found that the distances or locations in relation to each other and/or to the taper, detectors or warning signs need to be relocated due to a change in the traffic conditions or queuing patterns, a one-time adjustment is included in the cost of the Real-Time Traffic Control Monitoring Sensor Unit.
- The RTTCS components may be relocated as deemed necessary by the Engineer
- During winter shut-down all trailers shall be removed from the right of way and the signs shall be removed as directed by the Engineer. All removal, storage, and reinstallation shall be included in the cost of the Real-time Traffic Control Monitoring Sensor Units.

<u>System Performance</u>: After the RTTCS is in place and operational, knowledgeable Contractor personnel shall be available for one work week (until Friday at 8:00 PM) after the lane closures are in place to ensure that the system is functioning properly. The responsible individual shall be capable of responding within 15 minutes during the first week and shall have sufficient resources to correct any issues with the RTTCS at that time.

To ensure a prompt response to incidents involving the integrity of the RTTCS devices, the Contractor shall provide a telephone number where a responsible individual can be contacted on a 24-hour-a-day basis. The Contractor shall dispatch sufficient resources within two hours of notification to make needed corrections of deficiencies. All deficiencies shall be corrected within 12 hours. If the Contractor fails to restore the RTTCS to full operation within the time limits specified above, the Resident Engineer will impose a daily monetary Traffic Control Deficiency Deduction for each calendar day (or portion thereof) the deficiency exists, as described in Article 105.03 of the Standard Specifications.

Additional Real-Time Traffic Control Sensor Units installed as directed by the Engineer after the initial deployment of the system shall be in operation and accepted by the Engineer within fourteen (14) calendar days after the Contractor receives written notification of changes from the Engineer. If the Contractor fails to update the RTTCS to full operation within the time limits specified above, the Engineer will impose a daily monetary Traffic Control Deficiency Deduction for each calendar day (or portion thereof) the deficiency exists, as described in Article 105.03 of the Standard Specifications.

A traffic control deficiency deduction will be made for each individual component of the RTTCS that is not functioning correctly. Individual components of the RTTCS are traffic sensors, central base station unit, and warning signs with flashers.

Method of Measurement: This work will be measured for payment as follows.

Real-Time Traffic Control Warning Sign will be measured on a calendar month basis per each unit, which each unit consists of one warning sign with two amber LED flashing lights attached and remote communication hardware and software and controllers capable of communicating with other components of this system.

Real-Time Traffic Control Monitoring Sensor Unit will be measured on a calendar month basis per each unit, which each unit includes, one traffic sensor, remote communication hardware and software, and controllers capable of communicating with other components of this system. Any additional sensors shown in the plans shall be included in the Real-Time Traffic Control Sensor Unit cost.

Real-Time Traffic Control Central Base Unit will be measured on a calendar month basis, which includes all hardware, software, website, and communications network necessary to run the Real-Time Traffic Control System.

Basis of Payment: This work will be paid for as follows.

Real-Time Traffic Control Warning Sign shall be paid for at the contract unit price per calendar month or fraction thereof for REAL-TIME TRAFFIC CONTROL WARNING SIGN.

Real-Time Traffic Monitoring Sensor Unit shall be paid for at the contract unit price per calendar month or fraction thereof for REAL-TIME TRAFFIC CONTROL MONITORING SENSOR UNIT.

Real-Time Traffic Control Central Base Unit shall be paid for at the contract unit price per calendar month or fraction thereof for REAL-TIME TRAFFIC CONTROL CENTRAL BASE UNIT.

SECURING SHOULDER INLETS AND GRATES FOR STAGE CONSTRUCTION TRAFFIC Eff. 07-01-2020

Prior to routing traffic onto the shoulders as shown in the staging plans, the Contractor shall ensure the shoulder inlets are secure for stage constructed traffic in a manner approved by the Engineer. This work will be paid for according to Article 109.04 of the standard specifications.

STAGE CONSTRUCTION TIME RESTRICTION

Eff. 10-22-1998 Rev. 01-01-2014

No traffic control using temporary concrete barriers, traffic signals, or other traffic control devices causing lane closures during non-working hours will be allowed in the time period from December 1 of one year to April 1 of the following year.

During that time, the only traffic control allowed will be for daytime operations when the Contractor's forces are working. Otherwise, all lanes shall remain open to traffic and unrestricted during that time.

This restriction shall be considered in the Contractor's bid and no additional compensation will be allowed.

TEMPORARY TRAFFIC SIGNALS

In addition to the use for various Traffic Control standards and staged construction included in these plans, Temporary Bridge Traffic Signals shall be used to assist the Indiana Department of Transportation, INDOT, during their detour using the Lynch Road Interchange. INDOT will be coordinated with prior to their detour to ensure the Temporary Bridge Traffic Signals are in use through the duration of the detour.

This work will be paid for at the contract unit price per each for TEMPORARY BRIDGE TRAFFIC SIGNALS.

TEMPORARY RUMBLE STRIPS (SPECIAL)

Eff. 01-01-2024

<u>Description</u>. This work shall consist of the furnishing, installation, maintenance, and removal of temporary rumble strips.

<u>Materials</u>. The rumble strips shall consist of six (6) layers of Preformed Plastic Pavement Marking, Type B - Inlaid - Line 6" meeting the requirements of Article 780.07 and placed as directed by the Engineer.

Construction Requirements

<u>General</u>. The temporary rumble strips shall be placed as shown on the Plans or as directed by the Engineer.

<u>Method of Measurement</u>. This work will be measured for payment as each, where each is defined as a set of three temporary rumble strips across a single lane of pavement; and each set of temporary rumble strips will be measured for payment once.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per each for TEMPORARY RUMBLE STRIPS (SPECIAL).

TEMPORARY TRAFFIC CONTROL DEVICE DEPLOYMENT AND REMOVAL

Eff. 01-01-2014

If the contractor's operations require them to have lane closures in either the driving or passing lanes, the Contractor shall deploy and pick up their traffic control devices (drums, barricades, etc.) from the closed lane side. Dragging devices across the open lanes of traffic will not be allowed. Failure to comply with this Special Provision will result in a traffic control deficiency deduction being assessed as specified in Article 105.03(b) of the Standard Specifications.

TMP MONITORING

Eff. 01-01-2024

The management strategies within the TMP shall be continuously monitored throughout the project to determine if they meet safety and mobility goals. If the safety and mobility conditions are unfavorable, adjustments shall be implemented. Details of the successes and failures of the TMP as well as implemented changes will be included in the Work Zone TMP Summary reports to be submitted by the Resident Engineer/Technician at the conclusion of the project.

If the Contractor fails to carry out the TMP Strategies as shown in the plans and contract documents, Traffic Control Deficiency Deductions will be administered according to Article 105.03(b) of the Standard Specifications for Road and Bridge Construction.

TRAFFIC CONTROL & PROTECTION, (SPECIAL)

This work shall consist of furnishing, erecting, maintaining, relocating, and removing all traffic control items as shown in the Maintenance of Traffic Plans, details, and in the traffic control standards listed in the TRAFFIC CONTROL PLAN special provision. Items shall include temporary and permanent signs, drums, barricades and all other equipment, hardware, and labor necessary to maintain the lane shifts and/or closures. The Contractor will be required to install, maintain, remove, and relocate traffic control items numerous times as shown on the Maintenance of Traffic Control Plan or as directed by the engineer. Items such as temporary pavement and concrete barrier, pavement marking, removal of pavement markings, and impact attenuators, will be paid for separately.

All traffic control devices used on this project shall conform to the Plans, Special Provisions, Traffic Control Standards, "Illinois Supplement to the National Manual on Uniform Traffic Control Devices", and "Manual on Uniform Traffic Control Devices." No modification of these requirements will be allowed without prior written approval of the Engineer.

Traffic Control Devices include signs and their supports, signals, barricades with sandbags, channelizing devices, warning lights, arrow boards, flaggers, or any other device used for the purpose of regulating, detouring, warning, or guiding traffic through or around the construction zone. Special attention shall be given to advance warning signs during construction operations to always keep lane assignment consistent with barricade placement. The Contractor shall immediately remove, cover, or turn from the view of the motorists, all traffic control devices which are inconsistent with detour or lane assignment patterns and conflicting conditions during the transition from one construction stage to another. When the Contractor elects to cover conflicting or inappropriate signing, materials used shall be opaque and cover the entire sign. The method used for covering the signing shall meet the approval of the Engineer.

The Contractor shall coordinate all traffic control work on this project with adjoining or overlapping projects, including barricade placement necessary to provide a uniform traffic detour pattern. Lane closures shall only be left in place if they are needed. At all other times, traffic control shall be removed unless directed by the Engineer. Failure to restore lanes to full width will result in a traffic control deficiency as specified in Article 105.03 or the liquidated damages in accordance with the special provisions included herein whichever results in the greater amount.

Items not included in the standards, details, or specifications including but not limited to Temporary Pavement Markings, Changeable Message Signs, and Temporary Concrete Barrier Wall will be measured for payment and paid for separately as outlined in the Standard Specifications for Road and Bridge Construction or in these Special Provisions.

At road closure locations, where Type III barricades are installed in a manner that will not allow contractor access to the project without relocation of one or more of the barricades, the arrangement of the barricades at the beginning of each workday may be relocated, when approved by the Engineer, in the manner shown on Highway Standard 701901 for Road Closed to Through Traffic. 'Road Closed' signs (RII-2), supplemented by 'Except Authorized Vehicles' sign (R3-II0I), shall be mounted on both the near-right and the far-left barricade(s). At the end of each workday the barricades shall be returned to their in-line positions. This work will be included in the cost of the various traffic control items and no extra compensation will be allowed.

All traffic control and protection standard items described and listed in the Traffic Control Plan included herein shall not be measured and paid for separately but instead shall be considered as included in the cost of Traffic Control and Protection (Special). All this work will be measured for payment on a lump sum basis and paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION (SPECIAL) with no additional compensation allowed.

Basis of Payment. Traffic Control and Protection will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

TRAFFIC CONTROL & PROTECTION, STANDARD 701401

Eff. 01-01-2014

This work shall consist of furnishing, installing, maintaining, and removing all traffic control devices in accordance with Highway Standard 701401 and as herein modified during the full depth milling and Hot-Mix Asphalt Binder Course replacement in the mainline lanes at locations shown in the plans.

Vertical barricades shall be used instead of barricades or non-lighted drums. The devices shall be equipped as shown on Highway Standard 701901

Spacing for the vertical barricades shall be in accordance with Highway Standard 701401. Barricades will be placed outside the work area, but will not encroach more than 18 inches (450 mm) into the open travel lane.

In addition to the signs shown on Highway Standard 701401, the Contractor shall erect two (2) 60 inch x 36 inch (1.5 m x 0.91 m) signs, as shown in the plans, to alert traffic to the drop-off on the edge of the open travel lane.

This work will be paid for at the contract unit price L SUM for TRAFFIC CONTROL AND PROTECTION(SPECIAL), which price shall include all labor and materials necessary to comply with this special provision. Temporary pavement marking required to shift traffic over will be paid for in accordance with Section 703 of the Standard Specifications. Removal of existing pavement markings in conflict with the proposed layout shall be according to Section 783. Removal of temporary striping, if required, shall be according to Section 703.

TRAFFIC CONTROL & PROTECTION, STANDARD 701402

Eff. 08-20-2004 Rev. 04-01-2009

HIGHWAY STANDARD 701402: The following sequence shall be followed for installation, relocation, and removal of the traffic control devices and the concrete barrier.

For installation, relocation, removal of barriers and work zone speed limit sign assemblies, 'Flagger Ahead' signs and a flagger shall be used as shown on Highway Standard 701401 until the barrier wall is set or relocated with each end properly secured to the pavement and protected with a completely installed impact attenuator and all workers and equipment are located behind the barrier wall. For removal operations, the flagger shall be used until all barriers; traffic control devices, workers and equipment are off the pavement.

INITIAL INSTALLATION OF CONCRETE BARRIER:

Step 1. All warning signs shall be erected beginning with the farthest sign from the work area. Arrowboards shall be placed and actuated prior to placement of plastic drums forming the taper.

Step 2. The initial lane closure shall be implemented by installing a taper of drums beginning at the edge of pavement and progressing toward centerline until the entire lane is closed.

Step 3. The concrete barrier shall be erected (see Highway Standard 704001) beginning with the last concrete barrier to be placed and proceed toward centerline at a ratio of 12:1 until the lane is closed. The tangent portion shall be placed to provide a minimum work area and a maximum travel lane width. All vertical panels shall be in place before the end of the work day.

RELOCATION OF CONCRETE BARRIER:

- **Step 1.** The tangent portion of the barrier shall be relocated beginning at the end farthest from the taper. Each section of concrete barrier shall be repositioned by relocating it onto the new surface. All operations shall be conducted within the area protected by the lane closure. Reflective drums at 20' (6 m') centers shall be used to temporarily protect any openings in between the new and old bridge decks until traffic is relocated.
- **Step 2.** This step should not begin until it appears that this Step and Step 3 can be completed without interruption. The tapered portion of the barrier shall be relocated in two stages. The first stage will line up the taper, as a straight-line extension of the tangent wall and the second stage will form the taper as described in Step 3. The arrowboards should be relocated as required but not actuated until the changeover is completed.
- **Step 3.** Relocate all drums to the centerline, alerting all workers to the possibility of motorists using both lanes. Flagger(s) shall direct motorists to the newly surfaced lane and the arrowboards shall be actuated. Install drums forming the new lane closure taper. Revise sign messages for the appropriate lane. Install the concrete wall taper by working behind the drums forming the lane closure, beginning at the previous lead end of the tangent wall and working toward the shoulder.

REMOVAL OF CONCRETE BARRIER:

- **Step 1.** The tangent portion shall be removed beginning at the end farthest from the taper.
- **Step 2.** This step should not begin until it appears that all the concrete barrier can be removed without interruption from the work site. The barriers shall be removed beginning at the downstream end of the tangent portion and continuing upstream to the taper. The taper portion shall be removed last, beginning at the end farthest from the shoulder. Removal of all other traffic control devices should be removed in the normal sequence.

BASIS OF PAYMENT: This work shall be considered as included in the pay item for TRAFFIC CONTROL AND PROTECTION, (SPECIAL), for TEMPORARY CONCRETE BARRIERS, and for other pay items as described in the Standard Specifications and these Special Provisions. Vertical Panels, if specified in the plans, shall not be paid for separately, but shall be considered to be included in the cost of TRAFIC CONTROL AND PROTECTION, (SPECIAL) and for TEMPORARY CONCRETE BARRIERS.

TRAFFIC CONTROL REMOVAL

Eff. 10/13/2011

Per the requirements of Article 701 of the Standard Specifications:

All lanes shall be open to traffic and all lane closure traffic control shall be removed during non-work hours, unless required by the Contractor's operation or authorized by the Engineer. Failure to open all lanes to traffic during non-work hours will result in a traffic control deficiency, per Article 105.03 of the Standard Specifications.

UNEVEN LANES

Eff. 12/11/2009 Rev. 04/25/2015

Where construction operations result in a temporary drop-off between two traffic lanes open to traffic, excluding patching, "UNEVEN LANES" (W8-11(0)48) signs shall be used. The Contractor shall place the signs at the beginning of the drop-off area, major intersections, and at as such other locations within the drop-off area as the Engineer may direct, including as shown below.

- 2 Mile spacing on Interstates
- 1 Mile spacing on rural 2-lane highways
- Spacing per the Traffic Control Plan in Urban sections

The signs shall be placed just prior to the work that will result in the drop-off and shall remain in place until the drop-off is eliminated. This work shall be considered as included in the contract unit prices for the construction items involved and no additional compensation will be allowed.

WIDTH RESTRICTIONS

Eff. 12-07-1999 Rev. 04-27-2021

The work within this contract will cause a width restriction requiring notification a minimum of 21 days prior to the actual width restriction and/or event requiring "Maximum Width" signing. All "Maximum Width" signing shall be furnished, erected, maintained and removed by the Contractor for placement at the locations shown within the contract plans.

Width restrictions shall be interpreted as any change in the existing horizontal clearance caused by the placement of physical barrier(s) that extend above the pavement surface. Width restrictions less than 17'-6" (Barrier to Barrier) shall be reported and signed on all roadways. Width restrictions of 17'-6" to 30'-0" on Interstate or multilane roadways shall be reported. Construction activities which close a lane with operating equipment, or with drums, barricades, or cones, will be considered as width restrictions.

Notification of width restriction requires a minimum of 21 days before the actual restriction is placed to ensure specific routed over-width permitted loads are not sent through the restriction site. The Contractor shall notify the Resident Engineer a minimum of 21 days prior to the width restriction. In the notification, the Contractor shall include the location, scheduled restriction start date, road restriction width(s)/closure, proposed posted width (i.e. Barrier to Barrier width minus 18 inches).

The Contractor is advised he will not be allowed to install the width restriction without the 21 day notice and failure to provide proper notice will delay the installation of the width restriction.

The notice of width restriction is considered a part of the Contractor's approved work schedule and is the Contractor's responsibility to provide proper notice. Delays caused by failure to provide notice shall not be considered justification for workday additions or completion date extensions.

All work associated with the furnishing, erecting, maintaining, and removal of Width Restriction Signing will be paid for at the contract Lump Sum Price for WIDTH RESTRICTION SIGNING.

CLASS A PATCHES (SPECIAL)

Eff. 01-01-24

<u>Description.</u> This work shall consist of the removal of the existing pavement, the necessary excavation and the replacement with the class and type of patch specified at designated locations.

This work shall be according to Section 442 of the Standard Specifications for Class A.

Materials. Materials shall be according to Article 442.02 of the Standard Specifications.

CONSTRUCTION REQUIREMENTS

<u>Pavement Removal.</u> Pavement removal shall be according to Article 442.05 of the Standard Specifications and as modified herein.

Revise Article 442.05(a) to read:

- (a) Class A Patches. Two transverse full depth saw cuts shall be made perpendicular to the centerline at each end of the patch, except that the saw cuts may be skewed slightly if necessary to maintain a minimum distance of 18 inches from the end of the patch to the nearest transverse crack in the pavement to remain in place. When approved by the Engineer, this minimum distance may be reduced to 6 inches in areas of close crack spacing where the pavement otherwise appears to be sound. The longitudinal edges of the patch shall be formed by full-depth saw cuts. Saw cut extensions into pavement which is to remain in place will not be permitted. All saw cuts shall be made with an approved concrete saw. After the transverse saw cuts have been made, intermediate cuts as shown on plan details may be made to make pressure relief cuts or to reduce the pavement length to a size that accommodates removal and hauling operations. The saw cutting operations shall be controlled to limit subbase penetration to a maximum of 1/2 inch.
- The shoulder between the full-depth saw cut and the pavement edge shall be removed using a hand held hammer and hand tools prior to pavement removal. If available, the Contractor may use an approved wheel saw to make the shoulder cut and removal.

When the patch is adjacent to a Portland cement concrete shoulder, a saw cut shall be made at the shoulder-pavement joint sufficiently deep to sever the tie bars. A second full-depth saw cut shall be made in the pavement a minimum of 4 inches from the edge of the shoulder. The pavement between the full-depth saw cut and the shoulder edge shall be removed using a hand held hammer and hand tools prior to the removal of the remaining pavement.

The pavement between the saw cuts shall be removed by lifting. Sufficient care shall be taken to minimize subbase disturbance and prevent spalling of the pavement that is to remain in place. Any subbase or stabilize subbase material disturbed during pavement removal operations or determined unsuitable by the Engineer shall be removed and replaced with patch material.

If the Engineer determines that the concrete has deteriorated to the extent that it is not practical to lift, the pavement may be broken into small pieces and removed. The breaking equipment shall not transfer impact energy than 3,000 foot-pound per blow to the pavement surface.

Should the Contractor's operation cause a spall having a width or depth greater than 1 inch in the pavement to remain in place or cause excessive shattering or underbreaking of the existing slab to remain in place or cause excessive shattering or underbreaking of the existing slab to remain in place, a new saw cut shall be made extending the patch to remove the spall or underbreaking. After pavement removal, the pavement structure will be inspected by the Engineer to determine if it is sufficiently sound. If determined unsound, the Contractor shall extend the patch as directed by the Engineer.

Revise Article 442.06(a) to read:

- (a) Reinforcement, Dowel Bars, and Joints. Reinforcement, dowel bars, joints shall be according to the following.
- (b)
- (1) Class A Patching. The reinforcement shall be constructed according to Articles 508.03 through 508.09.

Patch reinforcement (longitudinal) shall be tied to No. 6 epoxy coated tie bars, 33 inch long drilled and grouted into existing pavement at 12 inch centers.

Patches more than 20 feet in length shall be tied to the adjacent pavement, portland cement concrete shoulders, and curb and gutter with No. 6 transverse epoxy coated tie bars, 24 inches long, embedded 8 inch at 36 inch centers according to Article 420.05(b).

The Contractor shall tie the steel together, using at least two secure ties for each lap splice according to Article 508.08(a)(1).

Reinforcement steel shall be placed and supported on chairs according to Article 508.06, and the placement tolerance for individual reinforcement bars shall be +/- 1 inch horizontally and vertically.

Revise the first paragraph of Article 442.06(d) to read:

(d) Concrete Placement. The patch material shall match the elevation of the existing concrete pavement or hot-mix asphalt surface. Concrete shall be placed according to Article 420.07 of the Standard Specifications except a mechanical spreader will not be required. Placement shall be governed by the limitations set forth in Article 1020.14.

<u>Method of Measurement.</u> This work will be measured according to Article 442.10 and as modified herein.

Revise the table and the third paragraph of the article to read:

% change of thickness	% change of quantity	
0 to less than 15	0	
15 to less than 20	10	
20 to less than 30	15	
30 to less than 50	20	

If the thickness of the existing pavement varies by 50 percent or more from that shown on the plans, the character of the work will be considered significantly changed and an adjustment to the contract will be made according to Article 104.02.

Basis of payment. This work will be measured according to Article 442.11 and as modified herein.

Revise paragraph 2 to read:

Where the Department requires a specific class of patch used, this work will be paid for at the contract unit price per square yard (square meter) for CLASS A PATCHES (SPECIAL), of the type and thickness specified. When a patch is adjacent to a wide flange beam terminal joint, this work will be paid for at the contract unit price per square yard (square meter) for PAVEMENT PATCHING (SPECIAL).

COARSE AGGREGATE

This item shall consist of placing coarse aggregate within the trench limits as shown on the Median Drainage Remediation detail in the plans. The trench shall be backfilled with select material, meeting the approval of the Engineer, placed in 6 inch layers, loose measurement, and compacted to the Engineer's satisfaction.

The coarse aggregate shall meet the requirements of Articles 1004.01 and 1004.05 of the Standard Specifications.

This item will be paid for at the contract unit price per ton for COARSE AGGREGATE.

COARSE AGGREGATE BACKFILL (SPECIAL)

<u>Description:</u> This work shall consist of the labor, equipment, and materials required to remove and dispose of the existing concrete socket foundations for the line posts and to backfill the foundation void with a coarse aggregate backfill.

<u>General:</u> The concrete socket foundations shall be removed in a manner to minimize the damage to the existing mow strip and method shall be approved by the engineer. The existing foundation void shall be filled with a coarse aggregate and constructed in accordance with Section 207 and 1004.05 and compacted to the satisfaction of the engineer.

<u>Method of Measurement:</u> This work will be measured for payment in cubic yards compacted in place.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per cubic yard for COARSE AGGREGATE BACKFILL (SPECIAL).

CONCRETE MEDIAN REMOVAL (MEDIAN)

This work shall consist of the removal of the concrete median on Lynch Rd. under I-74 to the limits shown in the plans and as directed by the engineer. Removal shall be in accordance with the applicable portions of Section 440 of the Standard Specifications.

The existing median consists of a 6" thick concrete median doweled into full depth asphalt pavement. There is no curb and gutter to be removed, only the 6" median cap sitting on the full depth asphalt pavement. The existing median contains welded wire fabric. Details of the existing median are provided in the plans.

Care shall be taken as to not damage portions of the concrete median to remain in place. Full depth saw cuts shall be used at the removal limits. Care shall also be taken as to not damage the full depth asphalt pavement below the concrete median. The underlying pavement will be utilized for crossover traffic. Existing dowel bars shall be cut flush with the pavement or removed, and holes filled with mortar.

This work will be paid for at the contract unit price per square foot for CONCRETE MEDIAN REMOVAL.

CONCRETE MEDIAN REMOVAL (ISLAND)

This work shall consist of the removal and satisfactory disposal of the damaged portion of the existing concrete median island at Lynch Road Ramp D.

This work shall be performed in accordance with Section 440 of the Standard Specifications and shall be removed to the limits shown in the plans or as determined by the Engineer.

This work will be measured and paid for at the contract unit price per square foot for CONCRETE MEDIAN REMOVAL and no additional compensation will be allowed.

CONCRETE MEDIAN, TYPE SM (DOWELLED)

<u>Description:</u> This work shall consist of providing all labor, equipment and materials necessary for the installation of Concrete Median, Type SM (Dowelled) in accordance with Section 606 of the Standard Specifications, Highway Standard 606301, and plan details.

Method of Measurement: This work will be measured for payment by square foot.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per square foot for CONCRETE MEDIAN, TYPE SM (DOWELLED).

DETECTOR LOOPS

Detector loops shall be installed in accordance with Section 886 of the Standard Specifications for Traffic Control Items, Standard 886001, and the detail shown in the plans.

All proposed detector loops shall be installed prior to the final bituminous surface.

Per the detail shown in the plans, each detector loop shall be wired to an individual pair of the lead-in cable unless otherwise noted in the plans. The loops shall be wired in series at the controller cabinet detector panel via the multipair lead-in cable. If multipair lead-in cable is not available, the loops shall be wired in series in the handhole and brought back to the cabinet on the single pair cable.

Testing shall be in accordance with Article 801.13(b)(2) of the Standard Specifications. Testing shall be done on individual loops at the handhole or gulfbox junction. Testing shall also be done on the array of loops and the respective lead-in at the controller cabinet as they are grouped together on individual detector amplifiers.

If using existing lead-in, testing shall be done prior to adding the splice kit to ensure that the lead-in cable and splice is satisfactory for accurate operation. The contractor shall utilize the existing cable as long as a single pair passes the test. If all pairs fail the test the contractor shall notify the engineer and leave the loop open in the handhole.

Testing shall include measurements of resistance, resistance to ground, inductance, and Q values. Documentation of all test results shall be left in the controller cabinet.

The corners of all detector loops shall be diagonally saw cut.

This work will be considered as included in the contract unit price per FOOT for DETECTOR LOOP, TYPE 1 and no additional compensation will be allowed.

DETOUR SIGNING

Eff. 02-18-2005 Rev. 04-01-2016

The work within this contract will cause a Road closure. All signing shall be furnished by the Contractor, erected at the locations shown within the contract plans, maintained, and removed by the Contractor unless otherwise noted in the plans.

All detour signs shall be in new or like-new condition at the start of the project. If an advanced warning or detour sign is damaged or becomes unreadable, this sign shall be replaced by a new or like new sign, as directed by the Engineer. All signs shall meet current IDOT policy for retro-reflectivity requirements. Sizes of signs not specified in the plans shall be as required by the Manual on Uniform Traffic Control Devices (MUTCD) and the Illinois Supplement to the MUTCD.

The District will require a minimum notification of 21 days prior to the actual Road Closure to ensure specific route over-width permitted loads are not sent to the restriction site. In their notification, the Contractor shall include the location and scheduled Road Closure start date. The Contractor is advised they will not be allowed to close the road without the 21 day notice and failure to provide proper notice will delay the road closure. The notice of road closure is considered a part of the Contractor's approved work schedule and it is the Contractor's responsibility to provide proper notice. Delays caused by failure to provide notice shall not be considered justification for workday additions.

All work associated with the furnishing, erecting, maintaining, and removal of Detour Signing will be paid for as DETOUR SIGNING – L SUM.

DIRECTIONAL BORING

<u>Description:</u> This item shall consist of installing a 6" or 8" pipe drain at the locations shown in the plans. The Contractor shall install the conduit by using the directional boring method, installed to the depths as shown in the Median Drainage Remediation and Ditch Drainage Remediation details.

Materials shall be according to all applicable Sections of the Standard Specifications.

<u>Method of Measurement:</u> This Work will be measured for payment at the contract unit price per foot for DIRECTIONAL BORING.

<u>Basis of Payment:</u> This work shall be paid for at the contract unit price per foot installed for DIRECTIONAL BORING which shall be payment in full to complete this work as directed by the Engineer

EXISTING STATE-OWNED UTILITIES

Eff. 04-01-2020

Existing state-owned and maintained underground utilities exist with the right of way. The Department is not a member of JULIE and does not locate its own facilities. The Contractor shall be responsible for securing an approved locating firm to locate all existing Department underground facilities prior to commencing any excavation, per the requirements of Article 803 of the Standard Specifications. Utility locates may be also required outside the project limits for traffic control signing and other items. The Contractor may obtain, on request, plans of existing electrical facilities from the Department. For further information, the contractor may contact the District Traffic Operations Engineer, Gary Sims, at 217-251-4859.

This work shall not be paid for separately but shall be considered included in the various pay items for which JULIE locations are required.

GROOVING FOR RECESSED PAVEMENT MARKINGS

Effective: November 1, 2017 Revised: September 24, 2021

<u>Description</u>. This work shall consist of grooving the pavement surface in preparation for the application of recessed pavement markings.

Equipment. Equipment shall be according to the following.

- (a) Preformed Plastic Pavement Marking Installations: The grooving equipment shall have a free-floating saw blade cutting head equipped with gang-stacked diamond saw blades. The diamond saw blades shall be of uniform wear and shall produce a smooth textured surface. Any ridges in the groove shall have a maximum height of 15 mils (0.38 mm).
- (b) Paint, Epoxy, Polyurea, Modified Urethane, and Thermoplastic Pavement Marking Installations: The grooving equipment shall be equipped with either a free-floating saw blade cutting head or a free-floating grinder cutting head configuration with diamond or carbide tipped cutters and shall produce an irregular textured surface.

CONSTRUCTION REQUIREMENTS

<u>General</u>. The Contractor shall supply the Engineer with a copy of the pavement marking material manufacturer's recommendations for constructing a groove.

<u>Pavement Grooving Methods</u>. The grooves for recessed pavement markings shall be constructed using the following methods.

- (a) Wet Cutting Head Operation. When water is required or used to cool the cutting head, the groove shall be flushed with high pressure water immediately following the cut to avoid build up and hardening of slurry in the groove. The pavement surface shall be allowed to dry for a minimum of 24 hours prior to the final cleaning of the groove and application of the pavement marking material.
- (b) Dry Cutting Head Operation. When used on HMA pavements, the groove shall be vacuumed or cleaned by blasting with high-pressure air to remove loose aggregate, debris, and dust generated during the cutting operation. When used on PCC pavements, the groove shall be flushed with high pressure water or shot blasted to remove any PCC particles that may have become destabilized during the grooving process. If high pressure water is used, the pavement surface shall be allowed to dry for a minimum of 24 hours prior to the final cleaning of the groove and application of the pavement marking material.

<u>Pavement Grooving</u>. Grooving shall not cause ravels, aggregate fractures, spalling or disturbance of the joints to the underlying surface of the pavement. Grooves shall be cut into the pavement prior to the application of the pavement marking material. Grooves shall be cut such that the width is 1 in. (25 mm) greater than the width of the pavement marking line as specified on the plans. Grooves for letters and symbols shall be cut to the shape of the corresponding letters and/or symbols such that the letters and/or symbols shall fit entirely within the recessed shape. Overgrind is expected given the various shapes of letters and/or symbols. However, this overgrind shall be limited to 2 $\frac{1}{2}$ in. (62.5 mm) beyond the interior or exterior perimeters of the proposed marking. The position of the edge of the grooves shall be a minimum of 2 in. (50 mm)

from the edge of all longitudinal joints. The depth of the groove shall not be less than the manufacturer's recommendations for the pavement marking material specified, and according to the following.

- (a) Preformed Plastic and Thermoplastic Pavement Markings. Grooving shall be to a minimum depth of 110 mils (2.79 mm) and a maximum depth of 200 mils (5.08 mm).
- (b) Paint, Epoxy, Polyurea, and Modified Urethane Pavement Markings. Grooving shall be to a minimum depth of 40 mils (1.02 mm) and a maximum depth of 80 mils (2.03 mm).

The cutting head shall be operated at the appropriate speed in order to prevent undulation of the cutting head and grooving at an inconsistent depth.

At the start of grooving operations, a 50 ft (16.7 m) test section shall be installed, and depth measurements shall be made at 10 ft (3.3 m) intervals within the test section. The individual depth measurements shall be within the allowable ranges according to this Article. If it is determined the test section has not been grooved at the appropriate depth or texture, adjustments shall be made to the cutting head and another 50 ft (16.7 m) test section shall be installed and checked. This process shall continue until the test section meets the requirements of this Article.

For new HMA pavements, grooves shall not be installed within 10 days of the placement of the final course of pavement.

<u>Final Cleaning</u>. Immediately prior to the application of the pavement marking material or primer sealer, the groove shall be cleaned with high-pressure air blast.

<u>Method of Measurement</u>. Grooving for lines will be measured for payment in place, in feet (meter) for the groove width specified.

Grooving for letter, numbers and symbols will be measured in square feet (square meters). This measurement to be equal to the corresponding areas for the letters, numbers or symbols shown in TABLE 1 of Article 780.15 of the Standard Specifications.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per foot (meter) for GROOVING FOR RECESSED PAVEMENT MARKING of the groove width specified, and per square foot (square meter) for GROOVING FOR RECESSED PAVEMENT MARKING, LETTERS AND SYMBOLS.

HOT-MIX ASPHALT SURFACE REMOVAL

Eff. 10-01-09

This work shall be according to the applicable portions of Section 440 of the Standard Specifications, with the following additional requirements.

The Contractor shall have two options for the machine(s) used for Hot-Mix Asphalt Surface Removal on the through traffic lanes on this job.

1. The machine shall be capable of removing a layer of bituminous material at least the width of the lane of travel and 1-1/2 inches (40 mm) in depth in a single pass.

OR

2. Two machines shall be used. Each shall be capable of removing a layer of bituminous material at least one half the width of the lane of travel and 1-1/2 inches (40 mm) in depth in a single pass. If this option for two machines is used, they shall be operated in tandem with no more than 1/8-mile (200 m) separation. If areas of excessive cutting depth appear behind the second machine, then immediate adjustments to the operation of the first machine shall be made to correct the overcutting, and to provide the results shown above.

Any machine used for Hot-Mix Asphalt Surface Removal shall be equipped and operated with electronic grade control referenced to a traveling grade reference device not less than 30 ft. (9 m) in length, and according to Article 1101.16 of the Standard Specifications.

At locations where the milling operation does not fully mill and plane the pavement surface the requirements for checking tolerance with a 16 ft. (5 m) straightedge will not apply. These areas will include locations where the original pavement surface is untouched by the milling teeth. They shall also include areas where the milling teeth lightly touch the pavement, but the area between the cuts is not trimmed by the moldboard.

This work will be measured for payment according to the applicable portions of Article 440.07 of the Standard Specifications. No deduction will be made for areas traversed by the milling machine where the teeth do not touch the pavement surface as long as the work is performed as directed by the Engineer.

This work will be paid for according to the applicable portions of Article 440.08 of the Standard Specifications.

HOT-MIX ASPHALT SURFACE REMOVAL, SPECIAL

Eff. 06-06-1995 Rev. 01-01-2014

This work shall consist of partial removal of bituminous surfaces from existing entrances, mailbox turnouts, and/or sideroads. The work is intended to aid in matching the incidental hot-mix asphalt resurfacing to the new pavement resurfacing and to the existing entrance, mailbox turnout, or sideroad. The required depth(s) of cut may vary from one location to another, but shall be generally as shown in the plans.

This work shall be done in accordance with the applicable portions of Section 440 and Article 440.04 of the Standard Specifications, and as shown on the plans.

This work will be measured in square yards (square meters) of surface area, and will be paid for at the contract unit price per square yard (square meter) for HOT-MIX ASPHALT SURFACE REMOVAL (SPECIAL).

IMPACT ATTENUATORS

Eff. 10-15-2008 Rev. 01-01-2014

<u>Description</u>. This special provision amends the Supplemental Specification for Section 643 Impact Attenuators.

<u>643.04</u> **Installation**. Revise the second paragraph of this Article to read:

"The design for sand module impact attenuators (orientation and number of modules, sand weights, etc.) shall be as shown on the plans. Bases for sand module impact attenuators will be required. The bases shall be constructed of Portland cement concrete. Portland cement concrete bases shall be 6 in. (150 mm) thick and be according to the applicable requirements of Section 408. The surface of the base shall be slightly sloped or crowned to facilitate drainage. The perimeter of each module and the specified weight (mass) of sand in each module shall be painted on the surface of the base."

MAINTENANCE OF CROSSOVERS

Eff. 01-01-2024

The Contractor shall be responsible for the maintenance and/or repair of any median crossover used by construction traffic for the duration of the contract. Maintenance and/or repairs of the median crossovers damaged by the Contractor's operations shall be performed as directed by the Engineer at his/her discretion. The cost of equipment, labor, and materials involved shall be include in the various contract bid prices for Hot-Mix Asphalt, and no additional compensation will be allowed.

OUTLET PROTECTOR

The work included in this item consists of the construction of a reinforced concrete slab and the placement of a rodent shield as shown in the plan detail at the locations of the proposed underdrain outlets.

Rodent shields shall conform to Article 601.05 of the Standard Specifications.

Concrete shall meet Class SI requirements and conform to applicable portions of Section 503 of the Standard Specifications.

This work will be paid for at the contract unit price per CUBIC YARD for CLASS SI CONCRETE (MISCELLANEOUS), at the contract unit price per POUND for REINFORCEMENT BARS, and at the contract unit price per EACH for RODENT SHIELDS.

PAVEMENT PATCHING - CLASS D AND PARTIAL DEPTH

Eff. 05-01-2012 Rev. 03-09-2016

Revised Article 442.08(a) of the Standard Specifications to read:

The HMA shall be placed only when the temperature in the shade is at least 40°F (5°C), the forecast is for rising temperature, and the subgrade is not frozen. The HMA shall be placed in lifts based on the HMA mixture specified in the plans and as outlined as follows.

COMPACTED LIFT THICKNESS			
Mixture Composition	Minimum Thickness, in. (mm)	Maximum Thickness, in. (mm)	
IL-9.5, 9.5FG & 9.5L	1 ¼ (32)	3 (75)	
IL 19.0 & 19.0L	2 ¼ (57)	4 ½ (114)1/	

1/ If a vibratory roller is used the maximum compacted thickness may be increased excluding the top lift, to 6 in. (150 mm), provided the required density is obtained.

Each lift shall be compacted with a mechanical tamper, a vibrating tamper, or a self-propelled roller. Trucks may be used to supplement the tampers or rollers.

To facilitate possible extra compaction and consolidation by traffic, the surface of the completed patch may be finished up to $\frac{1}{2}$ in. (13 mm) above the existing pavement.

PRECAST CONCRETE BOX CULVERTS

Eff. 07-01-2020

The Contractor shall assemble, and match mark the precast box culvert sections and end sections prior to shipment of these components from the manufacturer, and as directed by the Engineer in order to secure a proper fit on each joint. Any sections or end sections which do not provide a proper fit at the joint shall be rejected by the Engineer and replaced by the Contractor with no additional compensation being allowed.

This work will not be paid for separately but shall be included in the contract unit price per foot for PRECAST BOX CULVERT of the size specified.

RAISED REFLECTIVE PAVEMENT MARKER REMOVAL

Eff. 10-22-1997 Rev. 09-24-2021

Replace Article 783.03(b) with the following:

"Where removal of raised reflective markers is indicated in the plans, this shall consist of complete removal of the castings, and reflectors from the pavement structure. Where cold milling is not proposed, or where the proposed depth of cold milling is less than 1½ inches (38 mm), the holes resulting from the removal of raised reflective markers shall immediately be cleaned out with compressed air, filled with a bituminous mixture meeting the requirements of Article 1030.11 and/or Materials "M" Specification 120 (Bituminous Premix for Maintenance Use – Proprietary Mixes), and compacted to the satisfaction of the Engineer. This work shall be completed prior to cold milling, or prior to hot-mix asphalt placement if cold milling is not specified."

Add the following at the end of Article 783.06:

"The payment for RAISED REFLECTIVE PAVEMENT MARKER REMOVAL shall include complete removal and disposal of the castings and reflectors, and furnishing, placing, and compacting the bituminous material in the holes as specified above."

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

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

<u>Contract Specific Work Areas</u>. For stationing, the lateral distance is measured from centerline and the farthest distance is the offset distance or construction limit, whichever is less.

The following contract specific work areas shall be monitored by the Environmental Firm for soil contamination and workers protection.

ISGS 3714 A/V-2 - I-74 ROW - M.M. 215 - M.M. 220, Danville, Vermillion County

- Station 1943+00 to Station 1946+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Iron, and Lead.
- Station 1946+00 to Station 1949+00, 0 to 150 feet LT. The Engineer has determined this
 material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of
 and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern
 sampling parameters include: Benzo(a)pyrene, Benzo(b)fluoranthene,
 Dibenz(a,h)anthracene, Lead.
- Station 1946+00 to Station 1949+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: Iron.

- Station 1949+00 to Station 1952+00, 0 to 150 feet LT. The Engineer has determined this
 material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of
 and shall be managed in accordance with Article 669.05(c). Contaminants of concern
 sampling parameters include: Iron.
- Station 1949+00 to Station 1952+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters include: Lead.
- Station 1952+00 to Station 1958+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Lead.
- Station 1955+00 to Station 1958+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Iron, Manganese.
- Station 1958+00 to Station 1961+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: Iron.
- Station 1958+00 to Station 1964+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Arsenic, Iron, Manganese, and Lead.
- Station 1961+00 to Station 1964+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Lead, Manganese.
- Station 1964+00 to Station 1967+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Lead.
- Station 1964+00 to Station 1967+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Iron, Lead, Manganese.
- Station 1967+00 to Station 1970+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Iron, and Lead.
- Station 1970+00 to Station 1973+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Iron, Manganese, and Lead.
- Station 1973+00 to Station 1976+00, 0 to 150 feet LT/RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Iron, Manganese, and Lead.

- Station 1976+00 to Station 1979+00, 0 to 150 feet LT. The Engineer has determined this
 material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of
 and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern
 sampling parameters include: Iron and Lead.
- Station 1976+00 to Station 1979+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Lead, Manganese.
- Station 1979+00 to Station 1982+00, 0 to 150 feet LT/RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Iron, Manganese, Lead, and pH.
- Station 1982+00 to Station 1985+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Iron, and Lead.
- Station 1982+00 to Station 1985+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Iron, Nickel, Manganese.
- Station 1985+00 to Station 1988+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters include: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Carbazole, Dibenz(a,h)anthracene, Indeno(1,2,3-cd)pyrene Chromium, Iron, Manganese, and Lead.
- Station 1985+00 to Station 1988+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: benzo(a)pyrene.
- Station 1988+00 to Station 1991+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Iron, Lead, Manganese.
- Station 1988+00 to Station 1991+00, 0 to 150 feet RT. The Engineer has determined this
 material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of
 and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern
 sampling parameters include: Benzo(a)pyrene, Lead.
- Station 1991+00 to Station 1994+00, 0 to 150 feet LT/RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Dibenz(a,h)anthracene, Chromium, Iron, Lead. Manganese.
- Station 1994+00 to Station 2000+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Manganese.

- Station 1997+00 to Station 2000+00, 0 to 150 feet RT. The Engineer has determined this
 material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of
 and shall be managed in accordance with Article 669.05(a)(2). Contaminants of concern
 sampling parameters include: Arsenic.
- Station 2000+00 to Station 2003+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: Manganese.
- Station 2000+00 to Station 2003+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters include: Dibenz(a,h)anthracene, Iron, Manganese, Lead.
- Station 2003+00 to Station 2009+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Iron, Manganese.
- Station 2003+00 to Station 2006+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: Manganese.
- Station 2012+00 to Station 2021+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters include: Benzo(a)pyrene and Lead.
- Station 2021+00 to Station 2027+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(2). Contaminants of concern sampling parameters include: Lead.
- Station 2024+00 to Station 2027+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene.
- Station 2027+00 to Station 2033+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Iron.
- Station 2027+00 to Station 2030+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: Manganese.
- Station 2033+00 to Station 2036+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene.
- Station 2033+00 to Station 2036+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Iron.

- Station 2036+00 to Station 2039+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: Manganese.
- Station 2036+00 to Station 2039+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(2). Contaminants of concern sampling parameters include: Lead.
- Station 2039+00 to Station 2042+00, 0 to 150 feet LT/RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene.
- Station 2042+00 to Station 2045+00, 0 to 150 feet LT/RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Chromium, Manganese, Thallium.
- Station 2045+00 to Station 2048+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene.
- Station 2048+00 to Station 2051+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters include: Lead.
- Station 2051+00 to Station 2054+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: Manganese.
- Station 2054+00 to Station 2057, 0 to 150 feet LT/RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Iron, Lead, Manganese, and Naphthalene.
- Station 2057+00 to Station 2060+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Iron, Manganese, Thallium.
- Station 2057+00 to Station 2060+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(2). Contaminants of concern sampling parameters include: Lead.
- Station 2060+00 to Station 2063+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(2). Contaminants of concern sampling parameters include: Chromium.
- Station 2063+00 to Station 2069+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Iron, Manganese.

- Station 2063+00 to Station 2069+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene.
- Station 2069+00 to Station 2078+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: Manganese.
- Station 2072+00 to Station 2075+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(2). Contaminants of concern sampling parameters include: Lead.
- Station 2078+00 to Station 2081+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Chromium and Iron.
- Station 2081+00 to Station 2084+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: Manganese.
- Station 2087+00 to Station 2090+00, 0 to 150 feet LT. The Engineer has determined this
 material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of
 and shall be managed in accordance with Article 669.05(c). Contaminants of concern
 sampling parameters include: Manganese.
- Station 2087+00 to Station 2090+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Manganese, Lead.
- Station 2090+00 to Station 2093+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene.
- Station 2093+00 to Station 2096+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene and Manganese.
- Station 2093+00 to Station 2096+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene.
- Station 2096+00 to Station 2108+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene and Lead.
- Station 2099+00 to Station 2102+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Iron, Lead.

- Station 2102+00 to Station 2111+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Manganese.
- Station 2108+00 to Station 2111+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: Manganese.
- Station 2111+00 to Station 2114+00, 0 to 150 feet RT/LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Lead, Manganese.
- Station 2114+00 to Station 2117+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene.
- Station 2117+00 to Station 2120+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene and Manganese.
- Station 2117+00 to Station 2120+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: Iron.
- Station 2120+00 to Station 2126+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Lead and Manganese.
- Station 2123+00 to Station 2126+00, 0 to 150 feet LT. The Engineer has determined this
 material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of
 and shall be managed in accordance with Article 669.05(a)(2). Contaminants of concern
 sampling parameters include: Lead.
- Station 2126+00 to Station 2132+00, 0 to 150 feet LT/RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Iron, Manganese, and Lead.
- Station 2132+00 to Station 2135+00, 0 to 150 feet LT/RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Iron, and Manganese.
- Station 2135+00 to Station 2138+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene.
- Station 2135+00 to Station 2138+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene and Manganese.

- Station 2138+00 to Station 2141+00, 0 to 150 feet LT. The Engineer has determined this
 material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of
 and shall be managed in accordance with Article 669.05(a)(2). Contaminants of concern
 sampling parameters include: Lead and Vanadium.
- Station 2138+00 to Station 2141+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene.
- Station 2141+00 to Station 2147+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Lead, Manganese, and Iron.
- Station 2141+00 to Station 2144+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene.
- Station 2144+00 to Station 2150+00, 0 to 150 feet RT. The Engineer has determined this
 material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of
 and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern
 sampling parameters include: Benzo(a)pyrene, Chromium, Iron, and Lead.
- Station 2147+00 to Station 2153+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene.
- Station 2150+00 to Station 2153+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: Manganese.
- Station 2153+00 to Station 2159+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Iron and Manganese.
- Station 2153+00 to Station 2156+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters include: Benzo(a)pyrene and Lead.
- Station 2159+00 to Station 2162+00, 0 to 150 feet LT/RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene and Chromium.
- Station 2162+00 to Station 2168+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene and Chromium.
- Station 2162+00 to Station 2165+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Iron, Lead, Manganese.

- Station 2165+00 to Station 2168+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene and Manganese.
- Station 2168+00 to Station 2171+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Manganese.
- Station 2168+00 to Station 2171+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Iron, Manganese, Lead.
- Station 2171+00 to Station 2177+00, 0 to 150 feet LT/RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Lead, Manganese, Thallium.
- Station 2177+00 to Station 2180+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene.
- Station 2177+00 to Station 2180+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Lead, Manganese, Thallium.
- Station 2180+00 to Station 2183+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(2). Contaminants of concern sampling parameters include: Lead.
- Station 2180+00 to Station 2183+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene and Manganese.
- Station 2183+00 to Station 2186+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene.
- Station 2183+00 to Station 2186+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Lead, Manganese.
- Station 2186+00 to Station 2189+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Iron, Lead.
- Station 2186+00 to Station 2192+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Manganese.

- Station 2192+00 to Station 2195+00, 0 to 150 feet LT/RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene.
- Station 2195+00 to Station 22201+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Dibenz(a,h)anthracene, Chromium, Lead, Manganese.
- Station 2198+00 to Station 2201+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium.
- Station 2204+00 to Station 2213+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene.
- Station 2204+00 to Station 2207+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene and Manganese.
- Station 2207+00 to Station 2210+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene and Chromium.
- Station 2210+00 to Station 2213+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: Manganese.
- Station 2213+00 to Station 2216+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Iron.
- Station 2217+50 to Station 2225+00, 0 to 150 feet LT. The Engineer has determined this
 material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of
 and shall be managed in accordance with Article 669.05(c). Contaminants of concern
 sampling parameters include: Manganese.
- Station 2219+00 to Station 2222+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benzo(a)pyrene.
- Station 2222+50 to Station 2228+00, 0 to 150 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene and Iron.
- Station 2228+00 to Station 2232+00, 0 to 150 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(2). Contaminants of concern sampling parameters include: Benzo(a)pyrene and Chromium.

- Station 2232+00 to Station 2234+25, 0 to 150 feet LT/RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Benzo(a)pyrene, Chromium, Iron, Manganese.
- Station 21+50 to Station 24+50, 0 to 50 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(b)(1). Contaminants of concern sampling parameters include: pH.
- Station 15+50 to Station 21+50, 0 to 50 feet RT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(2). Contaminants of concern sampling parameters include: Lead.
- Station 105+00 to Station 111+00, 0 to 50 feet LT. The Engineer has determined this material from 0 to 2.3 feet bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: Iron 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**

Additional information on the contract specific work areas listed above collected during the regulated substances due-diligence process is available through the District's Environmental Studies Unit (DESU).

REMOVE AND RE-ERECT EXISTING SIGN

This work shall conform to all applicable sections of Article 724 of the Standard Specifications. The Contractor shall remove the existing signs, entire post, and entire base along the project as shown on the plans and as directed by the Engineer and re-erect the entire unit as shown on the plans. This work shall not be done without first obtaining the approval of the Engineer. The Contractor shall stockpile in a secure location all signs and posts that are removed as directed by the Engineer, or because of construction. The Contractor shall replace at his or her expense any signs, posts, or bases damaged during removal or construction and not suitable for reinstallation as determined by the Engineer. The condition of the sign and/or post due to damage by the Contractor shall be judged solely by the Engineer. The Contractor shall replace at his or her expense any signs or posts as a result of theft. The Contractor shall reinstall these signs and posts at locations as directed by the Engineer. See Standard 720006 for sign erection details.

This work shall be paid for at the contract unit price EACH for REMOVE AND RE-ERECT EXISTING SIGN. This price shall include all labor, equipment and material needed to complete the work as specified above and as shown in the plans.

REMOVE AND RE-ERECT TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL TANGENT

This work shall be done in accordance with Sections 630, 631, 632, and 633 of the Standard Specifications and as modified herein:

The traffic barrier terminal shall be Traffic Barrier Terminal Type 1, Special (Tangent).

This work will be paid for at the contract unit price per each for REMOVE AND RE-ERECT TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL, TANGENT.

REMOVE AND RE-INSTALL PIPE CULVERTS

<u>Description:</u> This work consists of removing and relaying existing pipe culvert sections whenever the locations of the existing pipe culvert sections are within reconstruction limits of adjacent work.

<u>General:</u> This work shall be according to applicable portions of Sections 501, 542 of the Standard Specifications and as directed by the Engineer.

Removal: The Contractor, whenever necessary shall remove existing pipe culvert sections in a workmanlike manner which will cause no damage to the existing pipe culvert section. The pipe culvert section shall be stored at a location approved by the Engineer.

- a) If the pipe culvert section is damaged in removal "or" re-installing operations due to the Contractors operations, the pipe culvert section shall be replaced at the Contractors expense.
- b) If the pipe culvert section is damaged or deteriorated beyond re-use "not due" to the Contractors operations as determined by the Engineer, the pipe culvert section shall be replaced as directed by the Engineer at the Departments expense according to Article 109.04 of the Standard Specifications.

<u>Relaying:</u> The Contractor shall relay the pipe culvert section to the original line and grades established prior to removal operations.

Method of Measurement: This work will be measured for payment as follows:

- a) Contract Quantities. The requirement for use of contract quantities shall be according to Article 202.07(a) of the Standard Specifications.
- b) Measured Quantities. This work will be measured for payment per foot of each pipe culvert section removed.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per each for REMOVE AND RE-INSTALL PIPE CULVERTS which price shall be payment in full to complete this work.

REMOVE CONCRETE HEADWALLS FOR PIPE DRAINS

This work shall consist of removing and disposing of concrete headwalls for pipe drains at locations shown in the plans. All work shall be performed in accordance with Section 501 of the Standard Specifications, except as modified herein.

Any holes or depressions left after removing a concrete headwall that will be under or within two feet of proposed improvements as defined in Article 208.01 of the Standard Specifications, shall be filled with trench backfill as shown on the plans, which is considered incidental to REMOVE CONCRETE HEADWALLS FOR PIPE DRAINS and shall not be paid for separately. The remaining ground surface shall be graded, compacted, and leveled to the satisfaction of the Engineer.

The work required by this special provision will be measured and paid at the contract unit price per each for REMOVE CONCRETE HEADWALLS FOR PIPE DRAINS and no additional compensation will be allowed.

REMOVE IMPACT ATTENUATOR SAND MODULE

<u>Description:</u> This work shall be completed in accordance with the applicable portions of Section 440. The Contractor shall remove the existing sand module impact attenuators at the locations shown on the plans near the existing overpass bridges. This work and the necessary removals shall be coordinated with the traffic control plan for this project. Existing bases shall be cleaned and prepared for the installation of the new impact attenuators.

Method of Measurement: This work will be measured for payment in units of each.

Basis of Payment: This work will be paid for at the contract unit price per each for REMOVE IMPACT ATTENUATOR SAND MODULE, which price shall include removal of the sand module impact attenuators and the satisfactory disposal of all materials. The cleaning of existing bases shall be included with the removal work and no additional compensation will be allowed.

REPAIR HIGH TENSION CABLE (GIBRALTAR)

<u>Description:</u> This work shall consist of furnishing all labor, materials, and equipment necessary to repair the existing high tension cable median barrier systems.

The following is the contact information for the existing system: Type: Gibraltar 320 Southland Road Burnet, Texas 78611, (800) 495-8957

All existing high tension cable median barrier system line posts shall be removed per special provision COARSE AGGREGATE BACKFILL (SPECIAL).

New line posts shall be installed driving the posts directly into the soil/HMA mow strip per the manufacturer's recommendations at locations adjacent to the existing foundation locations. The soil/HMA mow strip area shall be clear of debris before and after placement of the new line posts.

<u>Equipment:</u> Equipment shall be according to the high-tension median cable barrier manufacturer's specifications.

Construction Requirements:

<u>General</u>: The HTC median barrier shall be a four-cable system. Work includes de-tensioning the existing system, removing line posts and their foundations and replacing the line posts. The new line posts will be driven directly into the soil at a location adjacent to the existing posts. Work also includes all other work required by the high-tension median cable barrier manufacturer to complete the barrier.

The existing system shall be inspected prior to de-tensioning the system and the sections of the high-tension cable median barrier considered damaged by the Resident Engineer shall be repaired by removing and replacing any damaged cable and/or hardware. The system shall be re-tensioned after all repair work is completed.

All work shall be in accordance with the manufacturer's installation and repair specifications.

<u>Line Post Foundations:</u> Line posts for the HTC median barrier shall consist of driving posts directly into the soil/HMA mow strip. Posts shall be placed at the spacing and depth recommended by the manufacturer. The maximum spacing for line posts in the cable barrier system shall be no more than shown in the specific document issued by FHWA, or 15ft. (4.6 m), whichever is less.

<u>Terminal Post Foundations:</u> Terminal posts for the HTC median barrier shall consist of driving posts in concrete as recommended by the manufacturer. Posts shall be placed at the spacing and depth recommended by the manufacturer.

<u>Tensioning:</u> Prior to acceptance of the work, the tension of the HTC median barrier shall be checked, and adjusted as necessary, according to the manufacturer's temperature/tension chart or relationship.

<u>Method of Measurement:</u> REPAIR HIGH TENSION CABLE (GIBRALTAR) will be measured for payment in feet (meters) along the top cable between the anchorage of the Terminals. Terminals shall be defined as the end anchorages and other components from the extreme ends of a run to a point 27'-6" into the run. This definition of the terminal applies regardless of the length of need point, transitions from anchorage to full height cable, or other features that may vary between systems.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per foot (meter) for REPAIR HIGH TENSION CABLE (GIBRALTAR).

REPAIR HIGH TENSION CABLE (TRINITY)

<u>Description:</u> This work shall consist of furnishing all labor, materials and equipment necessary to repair the existing high tension cable median barrier systems.

The following is the contact information for the existing system: Type: Trinity Trinity Highway Safety Products 2525 N. Stemmons Freeway Dallas, Texas 75207 (800) 527-6050

All existing high tension cable median barrier system line posts shall be removed per special provision COARSE AGGREGATE BACKFILL (SPECIAL).

New line posts shall be installed driving the posts directly into the soil/HMA mow strip per the manufacturer's recommendations at locations adjacent to the existing foundation locations. The soil/HMA mow strip area shall be clear of debris before and after placement of the new line posts.

<u>Equipment:</u> Equipment shall be according to the high-tension median cable barrier manufacturer's specifications.

Construction Requirements

<u>General:</u> The HTC median barrier shall be a four-cable system. Work includes de-tensioning the existing system, removing line posts and their foundations and replacing the line posts. The new line posts will be driven directly into the soil at a location adjacent to the existing posts. Work also includes all other work required by the high-tension median cable barrier manufacturer to complete the barrier.

The existing system shall be inspected prior to de-tensioning the system and the sections of the high-tension cable median barrier considered damaged by the Resident Engineer shall be repaired by removing and replacing any damaged cable and/or hardware. The system shall be re-tensioned after all repair work is completed.

All work shall be in accordance with the manufacturer's installation and repair specifications.

<u>Line Post Foundations:</u> Line posts for the HTC median barrier shall consist of driving posts directly into the soil/HMA mow strip. Posts shall be placed at the spacing and depth recommended by the manufacturer. The maximum spacing for line posts in the cable barrier system shall be no more than shown in the specific document issued by FHWA, or 15ft. (4.6 m), whichever is less.

<u>Terminal Post Foundations:</u> Terminal posts for the HTC median barrier shall consist of driving posts in concrete as recommended by the manufacturer. Posts shall be placed at the spacing and depth recommended by the manufacturer.

<u>Tensioning:</u> Prior to acceptance of the work, the tension of the HTC median barrier shall be checked, and adjusted as necessary, according to the manufacturer's temperature/tension chart or relationship.

Method of Measurement: REPAIR HIGH TENSION CABLE (TRINITY) will be measured for payment in feet (meters) along the top cable between the anchorage of the Terminals. Terminals shall be defined as the end anchorages and other components from the extreme ends of a run to a point 50ft (15.2 m) into the run. This definition of the terminal applies regardless of the length of need point, transitions from anchorage to full height cable, or other features that may vary between systems.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per foot (meter) for REPAIR HIGH TENSION CABLE (TRINITY).

RESETTING OF SECTION CORNERS

Eff. 01-17-2006 Rev. 04-01-2016

This work shall be according to Section 668, as shown in the plans, and as modified herein.

Land Survey Monuments

The District 5 Survey Unit will be responsible for locating and making recovery ties for all of the section corners before and after construction. After construction has been completed, the District 5 Survey Unit will be responsible for stamping the new section corner with the appropriate information and preparing the Monument Records. The Contractor shall be responsible for recording the new Monument Records with the appropriate County Recorder as required by law and furnishing a copy of the New Monument Records to the Chief of Survey.

Project Implementation (Construction) should submit a list of the upcoming pre-construction conferences to the Land Acquisition Engineer so that the work can be scheduled. The Chief of Survey shall be given a two (2) week notice by the Resident Engineer prior to any milling, paving, or excavation operations that may disturb a section corner. The Chief of Survey shall be contacted by the Resident Engineer after construction operations have been completed so that the new markers can be stamped by District 5 Survey Unit personnel and recorded by the Contractor.

Method of Measurement

The work of furnishing and installing the section corners will be paid for at the contract unit price each of the type of marker specified and no additional compensation will be allowed. The recording fees for the new Monument Records shall be paid for in accordance with Article 109.04 of the standard specifications. The Contractor will set the new markers and record the new Monument Records, and the District 5 Survey Unit will be responsible for the cross ties for the new markers, the stamping of the new markers, and preparing the new Monument Records.

SEEDING, AND EROSION CONTROL BLANKET, AT CONCRETE HEADWALLS FOR PIPE DRAINS

Eff. 09-11-1990

The area around the proposed concrete headwalls for the pipe drains shall be seeded with Seeding, Class2 and covered with Erosion Control Blanket. The slopes around the headwalls shall be graded in accordance with Section B-B shown on Standard 601001.

Seeding, Class 2 and the Erosion Control Blanket shall be placed 24 inches (600 mm) wide above, along each side of the headwall, and beyond the downstream end of the headwall. Each headwall requires approximately 4 square yards (3.5 square meters) of cover materials.

This work will be paid for at the contract unit price per square yard (square meter) for EROSION CONTROL BLANKET which price shall include the earth excavation required to grade the slopes and the required seeding, and no additional compensation will be allowed. The excavated material shall be disposed of on the sideslopes.

STRINGLINE

Eff. 11-27-1991 Rev. 08-01-2012

Some or all of the cold-milling, leveling binder, or hot-mix asphalt binder course on this section is intended as the first step toward establishing the proposed profile grade. The cold milling and leveling binder or hot-mix asphalt binder course will be controlled by stringline(s) erected, maintained, and removed and disposed of by the Contractor.

The cost of providing, erecting, maintaining, removing, disposing of and employing the stringline as the grade control will not be paid for separately but shall be considered as included in the COLD-MILLING, LEVELING BINDER (MACHINE METHOD) or HOT-MIX ASPHALT BINDER COURSE pay item involved.

SURVEY MARKER, TYPE 1 (SPECIAL)

<u>Description:</u> This work shall consist of furnishing all labor, equipment, and materials necessary to install a Survey Marker, Type 1 (Special) according to District 5 CADD Detail No. XZ193AAA as indicated in the plans and in this special provision.

Basis of Payment: This work will be paid for at the contract unit price per each for SURVEY MARKER, TYPE 1 (SPECIAL).

SURVEY MARKER, TYPE 2 (SPECIAL)

<u>Description:</u> This work shall consist of furnishing all labor, equipment, and materials necessary to install a Survey Marker, Type 2 (Special) according to District 5 CADD Detail No. XZ193AAA as indicated in the plans and in this special provision.

Basis of Payment: This work will be paid for at the contract unit price per each for SURVEY MARKER, TYPE 2 (SPECIAL).

TRAFFIC BARRIER TERMINAL, TYPE 6A (MODIFIED)

<u>Description:</u> This work shall consist of furnishing and erecting of a Traffic Barrier Terminal, Type 6A (Modified), the field adjustments of guardrail lengths, drilling of mounting holes, re-galvanizing of all exposed metal surfaces and any other items needed to complete the work as should in the plans. This work shall conform to the application portion of Section 631 of the Standard Specifications and Standard 631032-09 of the Highway Standards.

This work shall also include the shop manufacturing of the GUARDRAIL CONNECTION PLATE ASSEMBLY as shown in the plan details.

The terminal shall be installed according to the manufacturer's specifications and shall include all necessary transitions between the terminal and the items to which it is attached.

<u>Method of Measurement:</u> The method of measurement shall be in accordance with Article 631.12 of the Standard Specifications.

<u>Basis of Payment:</u> The basis of payment shall be the contract unit price each for TRAFFIC BARRIER TERMINAL TYPE 6A (MODIFIED). All bolts, nuts, block-outs, galvanizing, or any other items needed to complete this work shall be included, and no other compensation will be allowed.

TRAFFIC BARRIER TERMINAL, TYPE 6B (SPECIAL)

<u>Description</u>: This work shall consist of furnishing and installing a Traffic Barrier Terminal, Type 6B at the locations as specified by the Engineer in accordance with Section 631 of the Standard Specifications, the details in the plans, and this provision. The traffic barrier terminal shall be installed in accordance with IDOT Highway Standard 631033-09 except the thrie beam attached to the structure shall be continuous across the structure and connect to another Traffic Barrier Terminal, Type 6B (Special) on the other end of the structure. The thrie beam shall be attached to the structure with Wood Blockout A as shown on IDOT Highway Standard 631033-09 at the spacing called for in the Standard for the blockouts. The Traffic Barrier Terminal, Type B between the bridge structures will continue the thrie beam attached to steel posts at the 1-6 3/4" spacing, adjusted as required to meet field conditions.

<u>Method of Measurement</u>: This work will be measured for payment, complete in place, in units of each. The pay limit between adjacent Traffic Barrier Terminal, Type 6B (Special) units shall be at the midpoint of the structure to which the units are attached and the midpoint of the Traffic Barrier Terminal, Type 6B (Special) between structures. The pay limit between the Traffic Barrier Terminal, Type 6B (Special) and the adjacent guardrail shall be as shown on Standard 631033-08.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price per each for TRAFFIC BARRIER TERMINAL, TYPE 6B (SPECIAL), which price shall include all labor, equipment, and material necessary to satisfactorily complete the work as described herein.

TRAFFIC COUNTER - TIRTL SYSTEM

<u>Description.</u> This work consists of furnishing and installing two foundations, a concrete slab weed barrier, structural components and traffic counter system components at the location shown on the plans, as directed by the Engineer, and as herein specified to form one complete system.

The traffic counter system shall be installed on a LIGHT POLE FOUNDATION - METAL, BREAKAWAY DEVICE, TRANSFORMER BASE, and TRAFFIC SIGNAL POST, GALVANIZED STEEL according to Sections 836, 838, and 875 of the Standard Specifications. The installed components will complete the Traffic Counter system as herein specified. All hardware, bolts and conduits necessary to install the components will be provided by IDOT.

The components to be furnished under this item are as follows:

Data Collection System w/cables

Wireless Modem w/cables and 5' Antenna cable

Dual Band Cellular/PCS Antenna

TIRTL traffic Counter

TIRTL Cabinets

Solar Panels 60W 2 ea. With Mounts

Solar Charge Regulators 2 ea.

Batteries

Battery Box

Antenna and Modem Cables

Components to be furnished under this item shall conform to the following manufacturer's specification or approved equivalent:

COMPONENT

TIRTL ver. 2 Traffic Counter with Cellular Antenna and cable,

and external modem cable. Control Specialists.

Inc.

TIRTL Cabinets w/ir lenses. - Quantity 2 Control Specialists,

Inc.

External Battery cabinet BBA1M w/ #2 Police Lock Ameresco

Sierra Wireless RV-50 Mobile 4G XTLE Gateway EVDO-Verizon
Panorama Low Profile Antenna LGAM-BC3G-3SG-26-3SP
CDS Office Supply
SunSaver Solar Controller SS-10L-12V – Quantity 2

Morningstar

SunSaver Solar Controller SS-10L-12V – Quantity 2 SunExtender PVX340T12 Volt 34 AH absorbed electrolyte battery

SunExtender PVX340T12 Volt 34 AH absorbed electrolyte battery
SunExtender PVX-1040T 12 Volt 104 AH absorbed electrolyte battery
Concord Battery

60 Watt Solar Panel (#60J) – Quantity 2

Solar Panel Bracket 007985) – Quantity 2

Sunwize

The number of components necessary to complete each installation is shown on the plans. All components shall be sent to the Data Management Lab to be tested, configured, and installed by IDOT personnel.

The Office of Planning and Programming Data Management Lab shall be contacted 2 weeks prior to any work being done to ensure proper site selection and post placement. If this is not done any installation discrepancies determined by the Office of Planning and Programming Data Management Lab shall be rectified prior to the equipment installation.

A Portland cement concrete (PCC) slab shall be installed according to the plans and as directed by the Engineer. The PCC slab shall have a minimum thickness of 4" and extend 2 feet beyond the outside face of the light pole foundation. The width of the PCC slab shall be 10 feet. The finished grade of the PCC slab must be no higher than the edge of shoulder elevation and shall follow the existing side slopes.

Full manufacturer's specifications of the components to be furnished under this item shall be approved in writing prior to ordering of components. Warranty information shall be provided to the Engineer at the time of delivery of components.

Contact Information for the Office of Planning and Programming Data Management Lab: Mr. Rich Marx 126 E. Ash Street Springfield, IL Phone 217 782-2065 Richard.marx@illinois.gov

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per each for TRAFFIC COUNTER - TIRTL SYSTEM and shall include all components necessary to complete each installation as herein specified.

The PCC slab will be paid for separately as MISCELLANEOUS CONCRETE according to Section 611 of the Standard Specifications.

The LIGHT POLE FOUNDATION – METAL will be paid for separately according to Section 836 of the Standard Specifications.

The BREAKAWAY DEVICE, TRANSFORMER BASE will be paid for separately according to Section 838 of the Standard Specifications.

The TRAFFIC SIGNAL POST, GALVANIZED STEEL will be paid for separately according to Section 875 of the Standard Specifications.

TREATMENT OF EXISTING FIELD TILE SYSTEMS

Eff. 12-21-1998 Rev. 01-01-2014

This work shall be according to Section 611, as shown in the plans, and as modified herein.

Storm Sewers, Special and Storm Sewers, Protected

For use in replacing existing field tile, pipe diameters of 4 inches (100 mm), 6 inches (150 mm), 8 inches (200 mm), and 10 inches (250 mm) will be allowed. For storm sewers of these sizes used to replace existing field tile, Class B storm sewer pipe may be used where Class A storm sewer pipe would otherwise be required.

Connections between storm sewers smaller than 12 inches (300 mm) in diameter may be made using prefabricated, commercially available couplers, consisting of a casing pipe with flexible tubing bands at each end. The casing pipe shall completely cover the joint area, and the tubing shall be drawn tight around each pipe with corrosion and rust proof bands or hose clamps. Concrete collars, as shown in the plans, may also be used for these connections.

For pipe sizes of 12 inches (300 mm) and larger, concrete collars as shown on the plans will be required.

Field Tile Junction Vaults

If known, the locations and depths of field tile junction vaults are shown on the plans. Other junction vaults provided as plan pay items shall be constructed according to the following:

FIELD TILE JUNCTION VAULTS 2 FEET (600 MM) DIA. shall be constructed according to Highway Standard 602301, "Inlet, Type A", using a frame and closed lid as shown on Highway Standard 604001, "Frame and Lids, Type 1." The maximum depth of the junction vault shall be 6 feet (1.8 m) from the flowline to the top of masonry. One or more Storm Sewer or field tiles will enter each of these junction vaults, and there will be at least one outlet pipe.

FIELD TILE JUNCTION VAULTS 3 FEET (900 MM) DIA. shall be constructed according to Highway Standard 602306, "Inlet, Type B", using a frame and closed lid as shown on Highway Standard 604001, "Frame and Lids, Type 1." The maximum depth of the junction vault shall be 6 feet (1.8 m) from the flowline to the top of masonry. One or more storm sewer or field tiles will enter each of these junction vaults, and there will be at least one outlet pipe.

Where conditions found in the field require the use of flat slab tops for the junction vaults, this work will be according to Article 109.04.

Where conditions found in the field require depths in excess of 6 feet (1.8 m) for junction vaults, this work shall be according to Article 109.04.

<u>Method of Measurement</u>. Couplers for pipe sizes smaller than 12 inches (300 mm) will not be measured separately for payment.

Concrete collars will be measured in cubic yards (cubic meters), not to exceed the dimensions shown in the plans.

Field tile junction vaults will be measured on an each basis.

<u>Basis of Payment.</u> Concrete collars will be paid for at the contract unit price per cubic yard (cubic meter) for MISCELLANEOUS CONCRETE, which price shall include all excavation and backfill.

The risers, gratings, and pipe tees for inspection wells shall be considered as included in the payment for STORM SEWER of the type and diameter specified.

Pay items not included in the contract and not included in other items of the contract will be paid according to Article 109.04 of the Standard Specifications.

LUMINAIRE, LED, HORIZONTAL MOUNT, OF THE WATTAGE SPECIFIED

Description: This work consists of furnishing all materials, equipment, and labor necessary to install Light-Emitting Diode (LED) luminaires as shown on the plans, in accordance with the applicable requirements of Section 821 of the Standard Specifications for Road and Bridge Construction, and as specified herein.

General: The luminaire shall be assembled in the continental U.S.A. and shall be assembled by and manufactured by the same Manufacturer. Quick connect/disconnect plugs shall be supplied between the discrete electrical components within the luminaire such as the driver, surge protection device, and optical assembly for easy removal. The quick connect/disconnect plugs shall be operable without the use of tools and while wearing insulated gloves. The luminaire shall be in compliance with ANSI C136.37. LED light source(s) and driver(s) shall comply with the material requirements of the Restriction of Hazardous Substances (RoHS) Directive 2011/65/EU. Manufacturer Experience. The luminaire shall be designed to be incorporated into a lighting system with an expected 30-year lifetime. The luminaire Manufacturer shall have a minimum of 30 years' experience manufacturing High Intensity Discharge (HID) roadway luminaires and shall have a minimum of 5 years' experience manufacturing LED roadway luminaires. The Manufacturer shall have a minimum of 5,000 total LED roadway luminaires installed on a minimum of 30 separate installations, all within the continental U.S.A.

Housing: The housing shall be designed to ensure maximum heat dissipation and to prevent the accumulation of water, ice, dirt and debris. A passive cooling method with no moving or rotating parts shall be employed for heat management. The effective projected area of the luminaire shall not exceed 1.4 sq. ft. The total weight of the luminaire(s) and accessories shall not exceed 75 pounds. Wiring within the electrical enclosure shall be rated at 600 V, 221 °F (105 °C) or higher.

Finish. Painted or finished luminaire surfaces exposed to the environment, shall exceed a rating of six according to ASTM D1654 after 1000 hours of ASTM B117 testing. The coating shall exhibit no greater than 30 % reduction of gloss according to ASTM D523, after 500 hours of ASTM G154 Cycle 6 QUV® accelerated weathering testing.

Attachment. The luminaire shall slip-fit on a mounting arm with a 2 in (5 cm) diameter tenon (2.375 in (6 cm)) outer diameter) and shall have a barrier to limit the amount of insertion. The luminaire shall be provided with a leveling surface and shall be capable of being tilted ± 5 degrees from the axis of attachment in not more than 2.5-degree increments and rotated to any degree with respect to the supporting arm.

The luminaire in a single arrangement shall be mounted with a knuckle mount that allows for a horizontal positioning or a slipfitter mount to a 2 ft (0.6 m) horizontal bracket arm. The luminaire in a twin arrangement shall utilize a slipfitter mount to a twin 2 ft (0.6 m) horizontal bracket arm at 90 degrees.

The knuckle mount or bracket arm shall be mounted on the vertical tenon and attached with a ½" SS bolt inserted through the tenon. Hole shall be field drilled, deburred, and bolt shall have no threads on the inside of the pole so as not to damage conductor insulation. The pole tenon and any bare steel from field drilling shall be coated with cold galvanizing compound or better to prevent corrosion. Bolt shall have washers and lock nut to prevent loosening and anti-seize compound shall be applied to the threads.

Receptacle. The luminaire shall include a fully prewired, 7-pin twist lock ANSI C136.41 compliant receptacle. Unused pins shall be connected as directed by the Manufacturer and as approved by the Engineer. A shorting cap shall be provided with the luminaire.

Vibration Characteristics. All luminaires shall pass ANSI C136.31 requirements. Roadway luminaires mounted on a bridge and high mast luminaires shall be rated for "3G" peak acceleration. Vibration testing shall be run using the same luminaire in all three axes.

Labels and Decals. All luminaires shall have external labels in compliance with the latest version of ANSI C136.15 and internal labels in compliance with the latest version of ANSI C136.22.

The luminaire shall be listed for wet locations by a Nationally Recognized Testing Laboratory (NRTL) as defined by OSHA and shall be in compliance with UL 8750 and UL 1598. It shall be identified as such by the holographic UL tag/sticker on the inside of the luminaire.

Hardware. All external fasteners shall be stainless steel. All hardware shall have corrosion resistance.

Optical Assembly: The LED optical assembly, consisting of LED packages, shall have a minimum Ingress Protection rating of IP66 according to ANSI C136.25-2013. Circuiting shall be designed to minimize the impact of individual LED failures on the operation of the other LEDs.

The optical assembly shall utilize high brightness, long life, minimum 70 color rendering index (CRI), 4,000 K color temperature (+/-300 K) LEDs binned according to ANSI C78.377. Lenses shall be UV-stabilized acrylic or glass. Provisions for house-side shielding shall be provided when specified.

Lumen depreciation at 50,000 hours of operation shall not exceed 15% of initial lumen output at the specified LED drive current and an ambient temperature of 77 °F (25 °C).

The assembly shall have individual serial numbers or other means for Manufacturer tracking.

Photometric Performance: The classification of LED luminaires shall be as follows:

VLW – Wattages ≤ 100, minimum delivered lumens 5,000,

LW – Wattages 101 - 200, minimum delivered lumens 10,000, MW – Wattages 201 - 300, minimum delivered lumens 20,000,

HW – Wattages 301 - 400, minimum delivered lumens 30,000,

VHW – Wattages ≥ 401, minimum delivered lumens 40,000.

VLW= very low watt, LW = low watt, MW = medium watt, HW = high watt, and VHW = very high watt luminaire. Luminaires with lumens below the stated minimums will not be accepted.

Testing. Luminaires shall be tested according to IES LM-79. The laboratory performing this test shall hold accreditation from the National Voluntary Laboratory Accreditation Program (NVLAP) under NIST. Submitted reports shall have a backlight, up light, and glare (BUG) rating according to IESNA TM-15 including a luminaire classification system graph with both the recorded lumen value and percent lumens by zone.

Lumen maintenance shall be measured for the LEDs according to LM-80, or when available for the luminaires according to LM-84. The LM-80 report shall be based on a minimum of 6,000 hours, yet 10,000-hour reports shall be provided for luminaires where those tests have been completed.

Thermal testing shall be provided according to UL 1598. The luminaire shall start and operate in the ambient temperature range specified. The maximum rated case temperature of the driver, LEDs, and other internal components shall not be exceeded when the luminaire is operated in the ambient temperature range specified.

Mechanical design of protruding external surfaces such as heat sink fins shall facilitate hose down cleaning and discourage debris accumulation. Testing shall be submitted when available to show the maximum rated case temperature of the driver, LEDs, and other internal components are not exceeded when the luminaire is operated with the heat sink filled with debris.

Calculations. Complete point-by-point luminance and veiling luminance calculations as well as listings of all indicated averages and ratios as applicable shall be provided according to IES RP8 recommendations. Lighting calculations shall be performed using AGi32 software with calculations performed to two decimal places (i.e. x.xx cd/m2). Calculation results shall demonstrate that the submitted luminaire meets the lighting metrics specified in the project Luminaire Performance Tables (see exhibit B). Scotopic or mesopic factors will not be allowed.

Lumen Maintenance Projection. The LEDs shall have long term lumen maintenance documented according to IESNA TM-21, or when available for the luminaires according to IESNA TM-28. The submitted calculations shall incorporate an in-situ temperature measurement test (ISTMT) and LM-80 data with TM-21 inputs and reports according to the TM-21 calculator, or when available ISTMT and LM-84 data with TM-28 inputs and reports according to the TM-28 calculator. Ambient temperature shall be 77 °F (25 °C).

Driver: The driver for the luminaire shall be integral to the unit. It shall be mounted in the rear of the luminaire on the inside of a removable door or on a removable mounting pad. The removable door or pad shall be secure when fastened in place and all individual components shall be secured upon the removable element. Each component shall be readily removable from the removable door or pad for replacement.

Circuit Protection. Shall tolerate indefinitely open and short circuit output conditions without damage.

Ingress Protection. IP66 rating.

Input Voltage. Shall be suitable for operation over a range of 120 to 277 volts or 347 to 480 volts as required by the system operating voltage.

Operating Temperature. Operating ambient temperature range of -40 to 104 °F (-40 to 40 °C).

Driver Life. Lifetime of 100,000 hours at 77 °F (25 °C) ambient.

Safety/UL. Listed under UL 1310 or UL 1012.

Power Factor. Shall maintain a power factor of 0.9 or higher and total harmonic distortion of less than 20 % at 50% load across the full supply voltage range.

Driver efficiency. Minimum efficiency of 90% at maximum load and a minimum efficiency of 85% for the driver operating at 50% power with driver efficiency defined as output power divided by input power.

Electrical Interference. Shall meet the Electromagnetic Compatibility (EMC) requirements for Class A digital devices included in the FCC Rules and Regulations, Title 47, Part 15.

Thermal Fold Back. The driver shall reduce the current to the LED module if the driver is overheating due to abnormal conditions.

Dimming. 0-10 V dimming capability.

Leakage current. Compliance with safety standards according to IEC 61347-1 and UL 1012.

Surge Protection Device: SPD shall be labeled as Type 4 in accordance with UL 1449 and be an integral part of the luminaire. It shall provide a minimum system protection level of 10 kV, 10 kA. To protect for a 10 kV, 10 kA surge the required clamping voltage of the external Metal Oxide Varistor (MOV) or other SPD shall be lower than 1 kV at 8 kA {(10 kV-2 kV)/1 ohm=8 kA}.

The SPD shall comply with the following standards:

IEEE C62.41.1, IEEE Guide on the Surge Environment in Low-Voltage (1000 V and Less) AC Power Circuits, IEEE C62.41.2, IEEE Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and Less) AC Power Circuits, IEEE C62.45, IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000 V and Less) AC Power Circuits, and ANSI C136.2, American National Standard for Roadway and Area Lighting Equipment – Luminaire Voltage Classification.

The SPD and performance parameters shall be posted at www.UL.com under Category Code: VZCA2.

Warranty: The entire luminaire and all its component parts shall be covered by a 10 year warranty. Failure is when one or more of the following occur:

Negligible light output from more than 10 percent of the LED packages Condensed moisture inside the optical assembly driver that continues to operate at a reduced output below 15% of the rated nominal output.

The warranty period shall begin on the date of final acceptance of the lighting work as documented in the Resident Engineer's project notes.

Submittal Requirements: The Contractor shall submit, for approval, an electronic version of all associated luminaire IES files, AGi32 files and the TM-21 calculator spreadsheet with inputs and reports associated with the project luminaires. The Contractor shall also provide an electronic version of each of the following Manufacturer's product data for each type of luminaire.

Descriptive literature and catalogue cuts for luminaire, LED package, driver, and surge protection device.

LED drive current, total luminaire input wattage and total luminaire current at the system operating voltage or voltage range and ambient temperature of 77 °F (25 °C).

Luminaire efficacy expressed in lumens per watt (lpw) per luminaire.

Initial delivered lumens at the specified color temperature, drive current and ambient temperature.

Computer photometric calculation reports.

TM-15 BUG rating report.

Documentation of Manufacturers experience and certification that luminaires were assembled in the U.S.A.

Supporting documentation of compliance with ANSI standards as well as listing requirements.

Supporting documentation of laboratory accreditations and certifications for specified testing.

Thermal testing documents.

IES LM-79, LM-80 (or LM-84) and TM-21 (or TM-28) reports.

Salt spray (fog) test reports and certification

Vibration characteristics test reports and certification.

IP test reports.

Manufacturer written warranty.

Luminaire installation, maintenance, and washing instructions.

Luminaire Testing: When a contract has 30 or more luminaires of the same type, wattage and distribution, that luminaire shall be tested. The quantity of luminaires requiring testing shall be one luminaire for the first 30 plus one additional luminaire for each additional 50 luminaires of that type, wattage, and distribution. Testing is not required for temporary lighting luminaires. The Contractor shall coordinate the luminaire testing, propose a properly accredited laboratory and an independent witness, submit their qualifications for approval prior to any testing, and pay all associated costs including travel expenses for the independent witness. Delays caused by the luminaire testing process shall not be grounds for additional compensation or extension of time.

The independent witness shall be present when tests are performed by the luminaire manufacturer. A laboratory independent of the luminaire manufacturer, distributor, and Contractor may self-certify the test results, in which case the independent witness need not be present during the testing.

After all qualifications have been approved, the independent witness shall select from the project luminaires at the manufacturer's facility the luminaires for testing. In all cases, the selection of luminaires shall be a random selection from the entire completed lot of luminaires required for the contract. Selections from partial lots will not be allowed. The independent witness shall mark each sample luminaire's shipping carton with the IDOT contract number and a unique sample identifier.

At the time of random selection, the independent witness shall inspect the luminaire(s) for compliance with all physical, mechanical, and labeling requirements for luminaires according to Sections 821 and 1067 and as stated herein. If deficiencies are found during the physical inspection, the Contractor shall have all luminaires of that type, wattage, and distribution inspected for the identified deficiencies and shall correct the problem(s) where found. Random luminaire selection and physical inspection must then be repeated. When the physical inspection is successfully completed, the independent witness shall mark the project number and sample identifier on the interior housing and ballast of the luminaires and have them shipped to the laboratory.

The testing performed by the laboratory shall include photometric, colorimetric, and electrical testing. Colorimetric values shall be determined from total spectral radiant flux measurements using a spectroradiometer. Photometric testing shall be according to IES recommendations and as a minimum, shall yield an isofootcandle chart, with max candela point and half candela trace indicated, an isocandela diagram, maximum plane and maximum cone plots of candela, a candlepower table (house and street side), a coefficient of utilization chart, a luminous flux distribution table, BUG rating report, and complete calculations based on specified requirements and test results. All testing shall cover the full spherical light output at a maximum of 5-degree intervals on both the vertical planes and the cones. Tests that "mirror" results from one hemisphere or quadrant to another are not acceptable.

The results for each photometric and colorimetric test performed shall be presented in a standard LM-79 report that includes the IDOT contract number, sample identifier, and the outputs listed above. The calculated results for each sample luminaire shall meet or exceed the contract specified levels in the luminaire performance table(s). The laboratory shall mark its test identification number on the interior of each sample luminaire.

Electrical testing shall be in accordance with LM-79.

The summary test report shall consist of a narrative documenting the test process, highlight any deficiencies and corrective actions, and clearly state which luminaires have met or exceeded all test requirements and may be released for delivery to the jobsite. Photographs shall also be used as applicable to document luminaire deficiencies and shall be included in the test report. The summary test report shall include the Luminaire Physical Inspection Checklist (see exhibit A), photometric and electrical test reports, and point-by-point photometric calculations performed in AGi32 sorted by luminaire type, wattage, and distribution. All test reports shall be certified by the independent test laboratory's authorized representative or the independent witness, as applicable, by a dated signature on the first page of each report. The summary test reports shall be delivered to the Engineer and the Contractor as an electronic submittal. Hard copy reports shall be delivered to the Engineer for record retention.

Should any of the tested luminaires fail to satisfy the specifications and perform according to approved submittal information, all luminaires of that type, wattage, and distribution shall be deemed unacceptable and shall be replaced by alternate equipment meeting the specifications. The submittal and testing process shall then be repeated in its entirety. The Contractor may request in writing that unacceptable luminaires be corrected in lieu of replacement. The request shall identify the corrections to be made and upon approval of the request, the Contractor shall apply the corrections to the entire lot of unacceptable luminaires. Once the corrections are completed, the testing process shall be repeated, including selection of a new set of sample luminaires. The number of luminaires to be tested shall be the same quantity as originally tested.

The process of retesting corrected, or replacement luminaires shall be repeated until luminaires for each type, wattage, and distribution are approved for the project. Corrections and re-testing shall not be grounds for additional compensation or extension of time. No luminaires shall be shipped from the manufacturer to the jobsite until all luminaire testing is completed and approved in writing.

Submittal information shall include a statement of intent to provide the testing as well as a request for approval of the chosen independent witness laboratory. All summary test reports, written reports, and the qualifications of the independent witness and laboratory shall be submitted for approval to the Bureau of Design and Environment in Springfield.

Construction: Examine all luminaires delivered to the jobsite prior to installation to ensure all specification requirements and Shop Drawing comments have been incorporated by the Manufacturer. Deficient luminaires shall not be installed, and the Engineer shall be notified immediately.

Luminaires shall be adjusted with the use of a level placed along the fixture housing or other means approved by the manufacturer to make sure they are installed with their optics set to deliver optimum designed light levels on the roadway. Any dirt or film on LEDs and/or the optical assembly shall be thoroughly removed using cleaning methods approved by the manufacturer.

Basis of Payment: This work will be paid for at the contract unit price per each for Luminaire, LED, Horizontal Mount, of the wattage specified which shall be payment in full for all labor, equipment and material necessary to perform the work specified herein.

EXIBIT Illinois Department of Transportation **Luminaire Physical Inspection Checklist** IDOT Contract No: Date: Inspector: Luminaire Type: Wattage: Distribution: Packaging: Inspection Item Sample: Sample: Sample: Sample: Shipping carton properly labeled Packaging adequately secures and protects luminaire **Luminaire Housing** Inspection Item Sample: Sample: Sample: Sample: Paint and coatings even and reasonably unblemished Correct 7-pin receptacle in place and adequately sealed No dents, cracks, or other malformations present Correct seal of the housing and individual LEDs Internal and external labels correct Pole or bracket mounting hardware correct **Light Source Compartment** Inspection Item Sample: Sample: Sample: Sample: Lens properly secured to each LED or door or housing Lenses not cracked or scratched Correct number of LEDs and LED array assemblies LEDs correctly installed and oriented All fasteners are stainless steel Surfaces are smooth to prevent dirt accumulation **Electrical Compartment** Inspection Item Sample: Sample: Sample: Sample: Driver(s) is held securely in place Wiring is undamaged, protected from sharp edges, and neatly routed Terminations for incoming power wiring are clearly marked and correct for 10 AWG cables Driver has quick-disconnect plugs for power and lamp connections which cannot be mis-connected Photocell socket is securely mounted Photocell receptacle operates correctly All fasteners are stainless steel and captive Electrical components securely mounted on removable tray with quick-disconnect plugs for ease of maintenance

Describe any deficiencies found:

STATE OF ILLINOIS ILLINOIS DEPARTMENT OF TRANSPORTATION LUMINAIRE PERFORMANCE TABLE

Nominal Spacing County Highway 12

Nominal Spacing Co Given Conditions		
Roadway Data	Pavement Width (in one direction only)	12 ft.
	Pavement Width (in opposite direction)	12 ft.
	Number of Lanes (in one direction only)	1
	Number of Lanes (in opposite direction)	1
	Median width	N/A
	I.E.S. Surface Classification	R3
	Q-Zero Value	.07
Light Pole Data	Mounting Height	45 ft.
	Bracket Arm Length	2 ft.
	Pole Set-Back From Edge of Pavement	15 ft.
Luminaire Data	Luminaire Type	LED
	Luminaire Lumens	24, 000 - 35,000
	I.E.S. Vertical Distribution	
	I.E.S. Control Of Distribution	
	I.E.S. Lateral Distribution	Type I
	Lamp Lumen Depreciation Factor	0.9 min
	Dirt Depreciation Factor	0.80
	Equipment Factor	0.95
	Total Light Loss Factor	0.684 min
Layout Data	Spacing	290 ft.
	Configuration	One Sided
	Luminaire Overhang over edge of pavement	-13 ft.

NOTE: Variations from the above specified I.E.S. distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

Performance Requirements

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above. TM-21 and LM-80 reports must be attached and must support the Lamp Lumen Depreciation Factor given above.

Illumination	Average Horizontal Illumination, EAVE	6 Lux / 0.60 fc
	Uniformity Ratio, E _{AVE} /E _{MIN}	4.0:1
Luminance	Average Luminance, L _{AVE}	0.40 Cd/m ²
	Uniformity Ratio, LAVE/LMIN	4:1
	Uniformity Ratio, L _{MAX} /L _{MIN}	8.0 :1
	Max. Veiling Luminance Ratio, Ly/LAVE	0.40 :1

STATE OF ILLINOIS ILLINOIS DEPARTMENT OF TRANSPORTATION LUMINAIRE PERFORMANCE TABLE

Nominal Spacing I-74 Ramps

GIVEN CONDITIONS		
ROADWAY DATA	Pavement Width (in one direction only)	14 ft.
	Pavement Width (in opposite direction)	14 ft.
	Number of Lanes (in one direction only)	1
	Number of Lanes (in opposite direction)	1
	Median width	N/A
	I.E.S. Surface Classification	R3
	Q-Zero Value	.07
LIGHT POLE DATA	Mounting Height	45 ft.
	Mast Arm Length	2 ft.
	Pole Set-Back From Edge of Pavement	30 ft.
LUMINAIRE DATA	Luminaire Type	LED
	Luminaire Lumens	24, 000 – 35,000
	I.E.S. Vertical Distribution	
	I.E.S. Control Of Distribution	
	I.E.S. Lateral Distribution	Type I
	Lamp Lumen Depreciation Factor	0.9 min
	Dirt Depreciation Factor	0.80
	Equipment Factor	0.95
	Total Light Loss Factor	0.684 min
LAYOUT DATA	Spacing	225 ft.
	Configuration	One Sided
	Luminaire Overhang over edge of pavement	-28 ft.

NOTE: Variations from the above specified I.E.S. distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

PERFORMANCE REQUIREMENTS

PERFORMANCE REQUIREMENTS

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above. TM-21 and LM-80 reports must be attached and must support the Lamp Lumen Depreciation Factor given above.

ILLUMINATION Average Horizontal Illumination, E _{AVE}		6 Lux / 0.60 fc	
	Uniformity Ratio, E _{AVE} /E _{MIN}	3.0:1	_
LUMINANCE	Average Luminance, L _{AVE}	0.40 Cd/m ²	
	Uniformity Ratio, LAVE/LMIN	3.5 :1	
	Uniformity Ratio, L _{MAX} /L _{MIN}	6.0 :1	
	Max. Veiling Luminance Ratio, L _V /L _{AVE}	0.30 :1	

REMOVAL OF LIGHTING LIMINAIRE, SALVAGE

<u>Description</u>. This work shall consist of removing an existing light luminaire. The luminaire shall include all appurtenances that compromise the complete operating unit.

<u>Materials</u>. The existing luminaire shall be removed in accordance with applicable portions of Section 842 of the Standard Specifications and as directed by the Engineer. Luminaires and all associated hardware and appurtenances shall become property of the Department and shall be delivered to the Department. Luminaire shall be removed, packaged in a method to prevent damage and delivered to:

IDOT D5 Sign Shop 201 Eisner Rd. Champaign, IL 61822

<u>Method of Measurement</u>. Each lighting unit (luminaire and appurtenances) which is removed and delivered to the Department, shall be counted as a unit for payment.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per each for REMOVAL OF LIGHTING LUMINAIRE, SALVAGE which shall be payment in full for performing the work specified herein.

STATUS OF UTILITIES

The following utilities are involved in this project. The utility companies have provided the estimated dates.					
Name & Address Estimated Date Relocation					
of Utility	Type & Location	Completed			
*Ameren IL (electric)	Aerial electric lines crossing over I-74 on the following locations:	Not Required			
Tyler Rodeffer TRodeffer@ameren.com (217)-431-9726 Work (217) 778-0734 (cell) 1155 East Voorhees MC P-35 Danville, IL 61834 1-888-659-4540 (Ameren	1/2 mile west of Brewer Rd, on Brewer Rd, and east of Lynch Road,				
Construction Hotline)					
*Ameren IL (gas) Chris Rauch CRauch@ameren.com (217)-383-7219 Work (618)-562-5900 Cell 1112 West Anthony Drive Urbana, IL 61803	High pressure and distribution gas main crossing under I-74 just east of Brewer Rd, and west of Lynch Rd.	Not Required			
Joshua Harrell JHarrel@ameren.com 370 S Main S D-50 Decatur, IL 62523 (217) 424-8196 (217)-853-1029 Cell					
*AT&T Terry Castongia TC169@att.com 1501 E Washington Ave Urbana, IL 61802 (815) 768-7879	Communications line within the project limits	Not required			
*Aqua Illinois Tom Sechriest Field Supervisor RSechriest@aquaamerica.com 1300 W. Fairchild St. Danville, IL 61832 (217) 442-3063 x 58131 (ofc) (217) 799-2026 (cell)	Water main in the project limits, with some crossing under I-74 along Perrysville Rd, Griffin St, and two locations east of Brewer Rd.	Not required			

*City of Danville Eric Childers echilders@cityofdanville.org 1155 E Voorhees St Danville, IL (217) 431-2384	Electric, water, and sewer lines within the project limits.	Not required
*Comcast David Washenfeldt David_Washenfeldt@comcast.com 303 E. Fairlawn Ave. Urbana, IL 61801 (309) 261-2428	Communications line in the project limits	Not required
Illinois Department Transportation- District 5 David Burkybile David.Burkybile@illinois.gov 13473 IL Hwy 133 P.O. Box 610 Paris, IL 61944-0610 (217) 466-7383 Mob: (217) 264-6035	Interstate lighting on i-74 on the following locations—bridge over Vermillion River, between Perrysville Rd to Bowman Ave, and Lynch Rd.	Not required

The above represents the best information of the Department and is only included for the convenience of the bidder. The applicable provisions of Sections 102, 103, and Articles 105.07, 107.20, 107.37-.40, and 108.02 of the Standard Specifications for Road and Bridge Construction shall apply.

The estimated utility relocation dates should be part of the progress schedule submitted by the contractor. If any utility adjustments or relocations have not been completed by the above dates specified and when required by the contractor's operations after these dates, the contractor should notify the Engineer in writing. A request for an extension of time will be considered to the extent the Contractor's critical path schedule is affected.

Toll Free J.U.L.I.E. Telephone Number (800) 892-0123 or 811

* = J.U.L.I.E. Member

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
()	

- **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					
Grad No.	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			
Grad No.	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."

AUTOMATED FLAGGER ASSISTANCE DEVICES (BDE)

Effective: January 1, 2008 Revised: April 1, 2023

<u>Description</u>. This work shall consist of furnishing and operating automated flagger assistance devices (AFADs) as part of the work zone traffic control and protection for two-lane highways where two-way traffic is maintained over one lane of pavement in segments where no sideroads or entrances require deployment of additional flaggers. Use of these devices shall be at the option of the Contractor.

<u>Equipment</u>. AFADs shall be the STOP/SLOW or Red/Yellow Lens type mounted on a trailer or moveable cart meeting the requirements of the MUTCD and NCHRP 350 or MASH 2016, Category 4.

<u>General</u>. AFADs shall be placed at each end of the traffic control, where a flagger is shown on the plans. The AFAD shall be setup within five degrees of vertical.

Flagger symbol signs as shown on the plans shall be replaced with "BE PREPARED TO STOP" signs when the AFAD is in operation.

Personal communication devices shall not be used to operate the AFAD.

<u>Flagging Requirements</u>. Flaggers and flagging requirements shall be according to Article 701.13 of the Standard Specifications and the following.

Each AFAD shall be operated by a flagger trained to operate the specific AFAD to be deployed. A minimum of two flaggers shall be on site at all times during operation. Each flagger shall be positioned outside the lane of traffic and near each AFAD's location.

Flagging equipment required for traditional flagging shall be available near each AFAD location in the event of AFAD equipment malfunction/failure.

For nighttime flagging, the AFAD and flagger shall be illuminated according to Article 701.13 of the Standard Specifications.

When not in use, AFADs will be considered non-operating equipment and shall be stored according to Article 701.11 of the Standard Specifications.

<u>Basis of Payment</u>. This work will not be paid for separately but shall be considered as included in the cost of the various traffic control items included in the contract.

BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE)

Effective: November 2, 2006 Revised: August 1, 2017

Description. Bituminous material cost adjustments will be made to provide additional compensation to the Contractor, or credit to the Department, for fluctuations in the cost of bituminous materials when optioned by the Contractor. The bidder shall indicate with their bid whether or not this special provision will be part of the contract.

The adjustments shall apply to permanent and temporary hot-mix asphalt (HMA) mixtures, bituminous surface treatments (cover and seal coats), and preventative maintenance type surface treatments that are part of the original proposed construction, or added as extra work and paid for by agreed unit prices. The adjustments shall not apply to bituminous prime coats, tack coats, crack filling/sealing, joint filling/sealing, or extra work paid for at a lump sum price or by force account.

Method of Adjustment. Bituminous materials cost adjustments will be computed as follows.

 $CA = (BPI_P - BPI_L) \times (\%AC_V / 100) \times Q$

Where: CA = Cost Adjustment, \$.

BPI_P = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).

BPI_L = Bituminous Price Index, as published by the Department for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price, \$/ton (\$/metric ton).

 $^{\circ}$ AC $_{\vee}$ = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the $^{\circ}$ AC $_{\vee}$ will be determined from the adjusted job mix formula. For bituminous materials applied, a performance graded or cutback asphalt will be considered to be 100% AC $_{\vee}$ and undiluted emulsified asphalt will be considered to be 65% AC $_{\vee}$.

Q = Authorized construction Quantity, tons (metric tons) (see below).

For HMA mixtures measured in square yards: Q, tons = A x D x (G_{mb} x 46.8) / 2000. For HMA mixtures measured in square meters: Q, metric tons = A x D x (G_{mb} x 1) / 1000. When computing adjustments for full-depth HMA pavement, separate calculations will be made for the binder and surface courses to account for their different G_{mb} and % AC_{V} .

For bituminous materials measured in gallons: Q, tons = $V \times 8.33$ lb/gal x SG / 2000 For bituminous materials measured in liters: Q, metric tons = $V \times 1.0$ kg/L x SG / 1000

Where: A = Area of the HMA mixture, sq yd (sq m).

D = Depth of the HMA mixture, in. (mm).

G_{mb} = Average bulk specific gravity of the mixture, from the approved mix design.

V = Volume of the bituminous material, gal (L).

SG = Specific Gravity of bituminous material as shown on the bill of lading.

Basis of Payment. Bituminous materials cost adjustments may be positive or negative but will only be made when there is a difference between the BPI_L and BPI_P in excess of five percent, as calculated by:

Percent Difference = $\{(BPI_L - BPI_P) \div BPI_L\} \times 100$

Bituminous materials cost adjustments will be calculated for each calendar month in which applicable bituminous material is placed; and will be paid or deducted when all other contract requirements for the work placed during the month are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

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

Effective: January 1, 2025

Revise the first paragraph of Article 285.05 of the Standard Specifications to read:

"285.05 Fabric Formed Concrete Revetment Mat. The grout shall consist of a mixture of cement, fine aggregate, and water so proportioned and mixed as to provide a pumpable slurry. Fly ash or ground granulated blast furnace (GGBF) slag, and concrete admixtures may be used at the option of the Contractor. The grout shall have an air content of not less than 6.0 percent nor more than 9.0 percent of the volume of the grout. The mix shall obtain a compressive strength of 2500 psi (17,000 kPa) at 28 days according to Article 1020.09."

Revise Article 302.02 of the Standard Specifications to read:

"302.02 Materials. Materials shall be according to the following.

	Item	Article/Section
(a)	Cement	1001
(b)	Water	1002
(c)	Hydrated Lime	1012.01
(d)	By-Product, Hydrated Lime	1012.02
(e)	By-Product, Non-Hydrated Lime	
(f)	Lime Slurry	1012.04
(g)	Fly Ash	1010
(h)	Soil for Soil Modification (Note 1)	1009.01
(i)	Bituminous Materials (Note 2)	

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)	Cement1	00	1'	,,

Add Article 312.07(i) of the Standard Specifications to read:

"(i) Ground Granulated Blast Furnace (GGBF) Slag1010"

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
	1009.03
(c) Water	1002
	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)	
(f) Fiber Modified Joint Sealer	
(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	i1	00) ′	1

Revise the first paragraph of Article 583.03 of the Standard Specifications to read:

"583.03 General. This work shall only be performed when the air temperature is 45 °F (7 °C) and rising. The mixture for cement mortar shall consist of three parts sand to one part cement by volume. The amount of water shall be no more than that necessary to produce a workable, plastic mortar."

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

"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 (Na₂O + 0.658K₂O) 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 (Na₂O + 0.658K₂O) of 0.80 percent or greater."

Revise the second sentence of Article 1004.02(q)(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 (Na₂O + 0.658K₂O) of 0.90 percent or greater."

Revise Article 1017.01 of the Standard Specifications to read:

"1017.01 Requirements. The mortar shall be high-strength according to ASTM C 387 and shall have a minimum 80.0 percent relative dynamic modulus of elasticity when tested by the Department according to Illinois Modified AASHTO T 161 or AASHTO T 161 when tested by an independent lab. The high-strength mortar shall have a water-soluble chloride ion content of less than 0.40 lb/cu yd (0.24 kg/cu m). The test shall be performed according to ASTM C 1218, and the high-strength mortar shall have an age of 28 to 42 days at the time of test. The ASTM C 1218 test shall be performed by an independent lab a minimum of once every five years, and the test results shall be provided to the Department. Mixing of the high-strength mortar shall be according to the manufacturer's specifications. The Department will maintain a qualified product list."

Revise the fourth sentence of Article 1018.01 of the Standard Specifications to read:

"The ASTM C 1218 test shall be performed by an independent lab a minimum of once every five years, and the test results shall be provided to the Department."

Revise Article 1019.02 of the Standard Specifications to read:

"1019.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Water	
(c) Fine Aggregate for Controlled Low-Strength Material (CLSM)	1003.06
(d) Fly Ash	1010
(e) Ground Granulated Blast Furnace (GGBF) Slag	1010
(f) Admixtures (Note 1)	

Note 1. The air-entraining admixture may be in powder or liquid form. Prior to approval, a CLSM air-entraining admixture will be evaluated by the Department. The admixture shall be able to meet the air content requirements of Mix 2. The Department will maintain a qualified product list."

Revise Article 1019.05 of the Standard Specifications to read:

"1019.05 Department Mix Design. The Department mix design shall be Mix 1, 2, or 3 and shall be proportioned to yield approximately one cubic yard (cubic meter).

Mix 1	
Cement	50 lb (30 kg)
Fly Ash – Class C or F, and/or GGBF Slag	125 lb (74 kg)
Fine Aggregate – Saturated Surface Dry	2900 lb (1720 kg)
Water	50-65 gal (248-322 L)
Air Content	No air is entrained

Mix 2	
Cement	125 lb (74 kg)
Fine Aggregate – Saturated Surface Dry	2500 lb (1483 kg)
Water	35-50 gal (173-248 L)
Air Content	15-25 %

Mix 3	
Cement	40 lb (24 kg)
Fly Ash – Class C or F, and/or GGBF Slag	125 lb (74 kg)
Fine Aggregate – Saturated Surface Dry	2500 lb (1483 kg)
Water	35-50 gal (179-248 L)
Air Content	15-25 %"

Revise Article 1020.04, Table 1, Note (8) of the Standard Specifications to read:

"(8) In addition to the Type III portland cement, 100 lb/cu yd of ground granulated blast-furnace slag and 50 lb/cu yd of microsilica (silica fume) shall be used. For an air temperature greater than 85 °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 the second paragraph of Article 1020.05(a) of the Standard Specifications to read:

"For a mix design using a portland-pozzolan cement, portland blast-furnace slag cement, portland-limestone cement, or replacing portland cement with finely divided minerals per Articles 1020.05(c) and 1020.05(d), the Contractor may submit a mix design with a minimum portland cement content less than 400 lbs/cu yd (237 kg/cu m), but not less than 375 lbs/cu yd (222 kg/cu m), if the mix design is shown to have a minimum relative dynamic modulus of elasticity of 80 percent determined according to AASHTO T 161. Testing shall be performed by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete."

Revise the first sentence of the first paragraph of Article 1020.05(b) of the Standard Specifications to read:

"Corrosion inhibitors and concrete admixtures shall be according to the qualified product lists."

Delete the fourth and fifth sentences of the second paragraph of Article 1020.05(b) of the Standard Specifications.

Revise the third sentence of the second paragraph of Article 1020.05(b)(5) of the Standard Specifications to read:

"The qualified product lists of concrete admixtures shall not apply."

Revise second paragraph of Article 1020.05(b)(10) of the Standard Specifications to read:

"When calcium nitrite is used, it shall be added at the rate of 4 gal/cu yd (20 L/cu m) and shall be added to the mix immediately after all compatible admixtures have been introduced to the batch. Other corrosion inhibitors shall be added per the manufacturer's specifications."

Delete the third paragraph of Article 1020.05(b)(10) of the Standard Specifications.

Revise Article 1020.15(b)(1)c. of the Standard Specifications to read:

"c. The minimum portland cement content in the mixture shall be 375 lbs/cu yd (222 kg/cu m). When the total of organic processing additions, inorganic processing additions, and limestone addition exceed 5.0 percent in the cement, the minimum portland cement content in the mixture shall be 400 lbs/cu yd (237 kg/cu m). For a drilled shaft, foundation, footing, or substructure, the minimum portland cement may be reduced to as low as 330 lbs/cu yd (196 kg/cu m) if the concrete has adequate freeze/thaw durability. The Contractor

shall provide freeze/thaw test results according to AASHTO T 161, and the relative dynamic modulus of elasticity of the mix design shall be a minimum of 80 percent. Testing shall be performed by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete. Freeze/thaw testing will not be required for concrete that will not be exposed to freezing and thawing conditions as determined by the Engineer."

Revise Article 1021.01 of the Standard Specifications to read:

"1021.01 General. Admixtures shall be furnished in liquid or powder form ready for use. The admixtures shall be delivered in the manufacturer's original containers, bulk tank trucks or such containers or tanks as are acceptable to the Engineer. Delivery shall be accompanied by a ticket which clearly identifies the manufacturer, the date of manufacture, and trade name of the material. Containers shall be readily identifiable as to manufacturer, the date of manufacture, and trade name of the material they contain.

Concrete admixtures shall be on one of the Department's qualified product lists. Unless otherwise noted, admixtures shall have successfully completed and remain current with the AASHTO Product Eval and Audit Concrete Admixture (CADD) testing program. For admixture submittals to the Department; the product brand name, manufacturer name, admixture type or types, an electronic link to the product's technical data sheet, and the NTPEP testing number which contains an electronic link to all test data shall be provided. In addition, a letter shall be submitted certifying that no changes have been made in the formulation of the material since the most current round of tests conducted by AASHTO Product Eval and Audit. After 28 days of testing by AASHTO Product Eval and Audit, air-entraining admixtures may be provisionally approved and used on Departmental projects. For all other admixtures, unless otherwise noted, the time period after which provisionally approved status may be earned is 6 months.

The manufacturer shall include the following in the submittal to the AASHTO Product Eval and Audit CADD testing program: the manufacturing range for specific gravity, the midpoint and manufacturing range for residue by oven drying, and manufacturing range of pH. The submittal shall also include an infrared spectrophotometer trace no more than five years old.

For air-entraining admixtures according to Article 1021.02, the specific gravity allowable manufacturing range established by the manufacturer shall be according to AASHTO M 194. For residue by oven drying and pH, the allowable manufacturing range and test methods shall be according to AASHTO M 194.

For admixtures according to Articles 1021.03, 1021.04, 1021.05, 1021.06, 1021.07, and 1021.08, the pH allowable manufacturing range established by the manufacturer shall be according to ASTM E 70. For specific gravity and residue by oven drying, the allowable manufacturing range and test methods shall be according to AASHTO M 194.

All admixtures, except chloride-based accelerators, shall contain a maximum of 0.3 percent chloride by weight (mass) as determined by an appropriate test method. To verify the test result, the Department will use Illinois Modified AASHTO T 260, Procedure A, Method 1.

Prior to final approval of an admixture, the Engineer reserves the right to request a sample for testing. The test and reference concrete mixtures tested by the Engineer will contain a cement content of 5.65 cwt/cu yd (335 kg/cu m). For freeze-thaw testing, the Department will perform the test according to Illinois Modified AASHTO T 161. The flexural strength test will be performed according to AASHTO T 177. If the Engineer decides to test the admixture, the manufacturer shall submit AASHTO T 197 water content and set time test results on the standard cement used by the Department. The manufacturer may select their lab or an independent lab to perform this testing. The laboratory is not required to be accredited by AASHTO.

Random field samples may be taken by the Department to verify an admixture meets specification. A split sample will be provided to the manufacturer if requested. Admixtures that do not meet specification requirements or an allowable manufacturing range established by the manufacturer shall be replaced with new material."

Revise Article 1021.03 of the Standard Specifications to read:

- "1021.03 Retarding and Water-Reducing Admixtures. The admixture shall be according to the following.
 - (a) Retarding admixtures shall be according to AASHTO M 194, Type B (retarding) or Type D (water-reducing and retarding).
 - (b) Water-reducing admixtures shall be according to AASHTO M 194, Type A.
 - (c) High range water-reducing admixtures shall be according to AASHTO M 194, Type F (high range water-reducing) or Type G (high range water-reducing and retarding)."

Revise Article 1021.05 of the Standard Specifications to read:

"1021.05 Self-Consolidating Admixtures. Self-consolidating admixture systems shall consist of either a high range water-reducing admixture only or a high range water-reducing admixture combined with a separate viscosity modifying admixture. The one or two component admixture system shall be capable of producing a concrete that can flow around reinforcement and consolidate under its own weight without additional effort and without segregation.

High range water-reducing admixtures shall be according to AASHTO M 194, Type F.

Viscosity modifying admixtures shall be according to AASHTO M 194, Type S (specific performance)."

Revise Article 1021.06 of the Standard Specifications to read:

"1021.06 Rheology-Controlling Admixture. Rheology-controlling admixtures shall be capable of producing a concrete mixture with a lower yield stress that will consolidate easier for slipform applications used by the Contractor. Rheology-controlling admixtures shall be according to AASHTO M 194, Type S (specific performance)."

Revise Article 1021.07 of the Standard Specifications to read:

"1021.07 Corrosion Inhibitor. The corrosion inhibitor shall be according to one of the following.

- (a) Calcium Nitrite. Corrosion inhibitors shall contain a minimum 30 percent calcium nitrite by weight (mass) of solution and shall comply with either the requirements of AASHTO M 194, Type C (accelerating) or the requirements of ASTM C 1582. The corrosion inhibiting performance requirements of ASTM C 1582 shall not apply.
- (b) Other Materials. The corrosion inhibitor shall be according to ASTM C 1582.

For submittals requiring testing according to ASTM M 194, Type C (accelerating), the admixture shall meet the requirements of the AASHTO Product Eval and Audit CADD testing program according to Article 1021.01.

For submittals requiring testing according to ASTM C 1582, a report prepared by an independent laboratory accredited by AASHTO re:source for portland cement concrete shall be provided. The report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications. However, ASTM G 109 test information specified in ASTM C 1582 is not required to be from an independent accredited lab. All other information in ASTM C 1582 shall be from an independent accredited lab. Test data and other information required to be submitted to AASHTO Product Eval and Audit according to Article 1021.01, shall instead be submitted directly to the Department."

Add Article 1021.08 of the Standard Specifications as follows:

"1021.08 Other Specific Performance Admixtures. Other specific performance admixtures shall, at a minimum, be according to AASHTO M 194, Type S (specific performance). The Department also reserves the right to require other testing, as determined by the Engineer, to show evidence of specific performance characteristics.

Initial testing according to AASHTO M 194 may be conducted under the AASHTO Product Eval and Audit CADD testing program according to Article 1021.01, or by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete. In either case, test data and other information required to be submitted to AASHTO Product Eval and Audit according to Article 1021.01, shall also be submitted directly to the Department. The independent accredited lab report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications."

Revise Article 1024.01 of the Standard Specifications to read:

"1024.01 Requirements for Grout. The grout shall be proportioned by dry volume, thoroughly mixed, and shall have a minimum temperature of 50 °F (10 °C). Water shall not exceed the minimum needed for placement and finishing.

Materials for the grout shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Fine Aggregate	
(d) Fly Ash	1010
(e) Ground Granulated Blast Furnace (GGBF) Slag	
(f) Concrete Admixtures	

Revise Note 1 of Article 1024.02 of the Standard Specifications to read:

"Note 1. Nonshrink grout shall be according to Illinois Modified ASTM C 1107.

The nonshrink grout shall have a water-soluble chloride ion content of less than 0.40 lb/cu yd (0.24 kg/cu m). The test shall be performed according to ASTM C 1218, and the grout shall have an age of 28 to 42 days at the time of test. The ASTM C 1218 test shall be performed by an independent lab a minimum of once every five years, and the test results shall be provided to the Department. Mixing of the nonshrink grout shall be according to the manufacturer's specifications. The Department will maintain a qualified product list."

Revise Article 1029.02 of the Standard Specifications to read:

" **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	
(d) Water	
(e) Fine Aggregate	1003
(f) Concrete Admixtures	
(g) Foaming Agent (Note 1)	

Note 1. The manufacturer shall submit infrared spectrophotometer trace and test results indicating the foaming agent meets the requirements of ASTM C 869 in order to be on the Department's qualified product list. Submitted data/results shall not be more than five years old."

Revise the second paragraph of Article 1103.03(a)(4) the Standard Specifications to read:

"The dispenser system shall provide a visual indication that the liquid admixture is actually entering the batch, such as via a transparent or translucent section of tubing or by independent check with an integrated secondary metering device. If approved by the Engineer, an alternate indicator may be used for admixtures dosed at rates of 25 oz/cwt (1630 mL/100 kg) or greater, such as accelerating admixtures, corrosion inhibitors, and viscosity modifying admixtures."

Revise the first two sections of Check Sheet #11 of the Supplemental Specifications and Recurring Special Provisions to read:

"<u>Description</u>. This work shall consist of filling voids beneath rigid and composite pavements with cement grout.

<u>Materials</u>. Materials shall be according to the following Articles of Division 1000 - Materials of the Standard Specifications:

Item	Article/Section
(a) Cement	1001
(b) Water	
(c) Fly Ash	
(d) Ground Granulated Blast Furnace (GGBF) Slag	
(e) Admixtures	
(f) Packaged Rapid Hardening Mortar or Concrete	1018"

Revise the third paragraph of Materials Note 2 of Check Sheet #28 of the Supplemental Specifications and Recurring Special Provisions to read:

"The Department will maintain a qualified product list of synthetic fibers, which will include the minimum required dosage rate. For the minimum required fiber dosage rate based on the Illinois Modified ASTM C 1609 test, a report prepared by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete shall be provided. The report shall show results of tests conducted no more than five years prior to the time of submittal."

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."

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000 Revised: January 2, 2025

1. OVERVIEW AND GENERAL OBLIGATION. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR Part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified in accordance with the requirements of 49 CFR Part 26 and listed in the Illinois Unified Certification Program (IL UCP) DBE Directory. Award of the contract is conditioned on meeting the requirements of 49 CFR Part 26, and failure by the Contractor to carry out the requirements of Part 26 is a material breach of the contract and may result in the termination of the contract or such other remedies as the Department deems appropriate.

- 2. <u>CONTRACTOR ASSURANCE</u>. All assurances set forth in FHWA 1273 are hereby incorporated by reference and will be physically attached to the final contract and all subcontracts.
- 3. CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. The Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies and that, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 5.00% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work in accordance with the requirements of 49 CFR 26.53 and SBE Memorandum No. 24-02.
- 4. <u>IDENTIFICATION OF CERTIFIED DBE</u>. Information about certified DBE Contractors can be found in the Illinois UCP Directory. Bidders can obtain additional information and assistance with identifying DBE-certified companies at the Department's website or by contacting the Department's Bureau of Small Business Enterprises at (217) 785-4611.
- 5. <u>BIDDING PROCEDURES</u>. Compliance with this Special Provision and SBE Policy Memorandum 24-02 is a material bidding requirement. The following shall be included with the bid.
 - (a) DBE Utilization Plan (form SBE 2026) documenting enough DBE participation has been obtained to meet the goal, or a good faith effort has been made to meet the goal even though the efforts did not succeed in obtaining enough DBE participation to meet the goal.
 - (b) Applicable DBE Participation Statement (form SBE 2023, 2024, and/or 2025) for each DBE firm the bidder has committed to perform the work to achieve the contract goal.

The required forms and documentation shall be submitted as a single .pdf file using the "Integrated Contractor Exchange (iCX)" application within the Department's "EBids System".

The Department will not accept a bid if it does not meet the bidding procedures set forth herein and the bid will be declared non-responsive. A bidder declared non-responsive for failure to meet the bidding procedures will not give rise to an administrative reconsideration. In the event the bid is declared non-responsive, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty and may deny authorization to bid the project if re-advertised for bids.

6. <u>UTILZATION PLAN EVALUATION</u>. The contract will not be awarded until the Utilization Plan is approved. All information submitted by the bidder must be complete, accurate, and adequately document the bidder has committed to DBE participation sufficient to meet the goal, or that the bidder has made good faith efforts to do so, in the event the bidder cannot meet the goal, in order for the Department to commit to the performance of the contract by the bidder.

The Utilization Plan will be approved by the Department if the Utilization Plan documents sufficient commercially useful DBE work to meet the contract goal or the Department determines, based upon the documentation submitted, that the bidder has made a good faith

effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A and the requirements of SBE 2026.

If the Department determines that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan of that determination in accordance with SBE Policy Memorandum 24-02.

- 7. <u>CALCULATING DBE PARTICIPATION</u>. The Utilization Plan values represent work the bidder commits to have performed by the specified DBEs and paid for upon satisfactory completion. The Department is only able to count toward the achievement of the overall goal and the contract goal the value of payments made for the work actually performed by DBE firms. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR Part 26.55(c) on questions of commercially useful functions as it affects the work. Specific guidelines for counting goal credit are provided in 49 CFR Part 26.55. In evaluating Utilization Plans for award the Department will count goal credit as set forth in Part 26 and in accordance with SBE Policy Memorandum 24-02.
- 8. CONTRACT COMPLIANCE. The Contractor must utilize the specific DBEs listed to perform the work and supply the materials for which each DBE is listed in the Contractor's approved Utilization Plan, unless the Contractor obtains the Department's written consent to terminate the DBE or any portion of its work. The DBE Utilization Plan approved by SBE is a condition-of-award, and any deviation to that Utilization Plan, the work set forth therein to be performed by DBE firms, or the DBE firms specified to perform that work, must be approved, in writing, by the Department in accordance with federal regulatory requirements. Deviation from the DBE Utilization Plan condition-of-award without such written approval is a violation of the contract and may result in termination of the contract or such other remedy the Department deems appropriate. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan.
 - (a) NOTICE OF DBE PERFORMANCE. The Contractor shall provide the Engineer with at least three days advance notice of when all DBE firms are expected to perform the work committed under the Contractor's Utilization Plan.
 - (b) SUBCONTRACT. If awarded the contract, the Contractor is required to enter into written subcontracts with all DBE firms indicated in the approved Utilization Plan and must provide copies of fully executed DBE subcontracts to the Department upon request. Subcontractors shall ensure that all lower tier subcontracts or agreements with DBEs to supply labor or materials be performed in accordance with this Special Provision.
 - (c) PAYMENT TO DBE FIRMS. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goal has been paid to the DBE. The Contractor shall document and report all payments for work performed by DBE certified firms in accordance with Article 109.11 of the Standard Specifications. All records of payment for work performed by DBE certified firms shall be made available to the Department upon request.

- (d) FINAL PAYMENT. After the performance of the final item of work or trucking, or delivery of material by a DBE and final payment to the DBE by the Contractor, but not later than 30 calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement (form SBE 2115) to the Engineer. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages.
- (g) ENFORCEMENT. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.

FUEL COST ADJUSTMENT (BDE)

Effective: April 1, 2009 Revised: August 1, 2017

<u>Description</u>. Fuel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in fuel prices when optioned by the Contractor. The bidder shall indicate with their bid whether or not this special provision will be part of the contract. Failure to indicate "Yes" for any category of work will make that category of work exempt from fuel cost adjustment.

<u>General</u>. The fuel cost adjustment shall apply to contract pay items as grouped by category. The adjustment shall only apply to those categories of work checked "Yes", and only when the cumulative plan quantities for a category exceed the required threshold. Adjustments to work items in a category, either up or down, and extra work paid for by agreed unit price will be subject to fuel cost adjustment only when the category representing the added work was subject to the fuel cost adjustment. Extra work paid for at a lump sum price or by force account will not be subject to fuel cost adjustment. Category descriptions and thresholds for application and the fuel usage factors which are applicable to each are as follows:

- (a) Categories of Work.
 - (1) Category A: Earthwork. Contract pay items performed under Sections 202, 204, and 206 including any modified standard or nonstandard items where the character of the work to be performed is considered earthwork. The cumulative total of all applicable item plan quantities shall exceed 25,000 cu yd (20,000 cu m). Included in the fuel usage factor is a weighted average 0.10 gal/cu yd (0.50 liters/cu m) factor for trucking.
 - (2) Category B: Subbases and Aggregate Base Courses. Contract pay items constructed under Sections 311, 312 and 351 including any modified standard or nonstandard items where the character of the work to be performed is considered construction of a subbase or aggregate, stabilized or modified base course. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is a 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.

- (3) Category C: Hot-Mix Asphalt (HMA) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 355, 406, 407 and 482 including any modified standard or nonstandard items where the character of the work to be performed is considered HMA bases, pavements and shoulders. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.
- (4) Category D: Portland Cement Concrete (PCC) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 353, 420, 421 and 483 including any modified standard or nonstandard items where the character of the work to be performed is considered PCC base, pavement or shoulder. The cumulative total of all applicable item plan quantities shall exceed 7500 sq yd (6000 sq m). Included in the fuel usage factor is 1.20 gal/cu yd (5.94 liters/cu m) factor for trucking.
- (5) Category E: Structures. Structure items having a cumulative bid price that exceeds \$250,000 for pay items constructed under Sections 502, 503, 504, 505, 512, 516 and 540 including any modified standard or nonstandard items where the character of the work to be performed is considered structure work when similar to that performed under these sections and not included in categories A through D.

(b) Fuel Usage Factors.

English Units Category A - Earthwork B - Subbase and Aggregate Base courses C - HMA Bases, Pavements and Shoulders D - PCC Bases, Pavements and Shoulders E - Structures	Factor 0.34 0.62 1.05 2.53 8.00	Units gal / cu yd gal / ton gal / ton gal / cu yd gal / \$1000
Metric Units Category A - Earthwork B - Subbase and Aggregate Base courses C - HMA Bases, Pavements and Shoulders D - PCC Bases, Pavements and Shoulders E - Structures	Factor 1.68 2.58 4.37 12.52 30.28	Units liters / cu m liters / metric ton liters / metric ton liters / cu m liters / \$1000

(c) Quantity Conversion Factors.

Category	Conversion	Factor
В	sq yd to ton sq m to metric ton	0.057 ton / sq yd / in depth 0.00243 metric ton / sq m / mm depth
С	sq yd to ton sq m to metric ton	0.056 ton / sq yd / in depth 0.00239 m ton / sq m / mm depth
D	sq yd to cu yd sq m to cu m	0.028 cu yd / sq yd / in depth 0.001 cu m / sq m / mm depth

Method of Adjustment. Fuel cost adjustments will be computed as follows.

 $CA = (FPI_P - FPI_L) \times FUF \times Q$

Where: CA = Cost Adjustment, \$

 FPI_P = Fuel Price Index, as published by the Department for the month the work is

performed, \$/gal (\$/liter)

FPI_L = Fuel Price Index, as published by the Department for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit

price, \$/gal (\$/liter)

FUF = Fuel Usage Factor in the pay item(s) being adjusted

Q = Authorized construction Quantity, tons (metric tons) or cu yd (cu m)

The entire FUF indicated in paragraph (b) will be used regardless of use of trucking to perform the work.

<u>Basis of Payment</u>. Fuel cost adjustments may be positive or negative but will only be made when there is a difference between the FPI_L and FPI_P in excess of five percent, as calculated by:

Percent Difference = $\{(FPI_L - FPI_P) \div FPI_L\} \times 100$

Fuel cost adjustments will be calculated for each calendar month in which applicable work is performed; and will be paid or deducted when all other contract requirements for the items of work are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

GRADING AND SHAPING DITCHES (BDE)

Effective: January 1, 2023

Delete the second paragraph of Article 214.03 of the Standard Specifications.

Delete the second paragraph of Article 214.04 of the Standard Specifications.

HOT-MIX ASPHALT (BDE)

Effective: January 1, 2024 Revised: January 1, 2025

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."

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 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."

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."

HOT-MIX ASPHALT - LONGITUDINAL JOINT SEALANT (BDE)

Effective: November 1, 2022 Revised: August 1, 2023

Add the following after the second sentence in the eighth paragraph of Article 406.06(h)(2) of the Standard Specifications:

"If rain is forecasted and traffic is to be on the LJS or if pickup/tracking of the LJS material is likely, the LJS shall be covered immediately following its application with FA 20 fine aggregate mechanically spread uniformly at a rate of 1.5 ± 0.5 lb/sq yd $(0.75 \pm 0.25$ kg/sq m). Fine aggregate landing outside of the LJS shall be removed prior to application of tack coat."

Add the following after the first sentence in the ninth paragraph of Article 406.06(h)(2) of the Standard Specifications:

"LJS half-width shall be applied at a width of 9 ± 1 in. (225 \pm 25 mm) in the immediate lane to be placed with the outside edge flush with the joint of the next HMA lift. The vertical face of any longitudinal joint remaining in place shall also be coated."

Add the following after the eleventh paragraph of Article 406.06(h)(2) of the Standard Specifications:

"LJS Half-Width Application Rate, lb/ft (kg/m) 1/			
Lift Thickness, in. (mm)	Coarse Graded Mixture (IL-19.0, IL-19.0L, IL-9.5, IL-9.5L, IL-4.75)	Fine Graded Mixture (IL-9.5FG)	SMA Mixture (SMA-9.5, SMA-12.5)
³ / ₄ (19)	0.44 (0.66)		
1 (25)	0.58 (0.86)		
1 ¼ (32)	0.66 (0.98)	0.44 (0.66)	
1 ½ (38)	0.74 (1.10)	0.48 (0.71)	0.63 (0.94)
1 3/4 (44)	0.82 (1.22)	0.52 (0.77)	0.69 (1.03)
2 (50)	0.90 (1.34)	0.56 (0.83)	0.76 (1.13)
≥ 2 1/4 (60)	0.98 (1.46)		

^{1/} The application rate includes a surface demand for liquid. The thickness of the LJS may taper from the center of the application to a lesser thickness on the edge of the application, provided the correct width and application rate are maintained."

Revise the second paragraph of Article 406.13(b) of the Standard Specifications to read:

"Aggregate for covering tack, LJS, or FLS will not be measured for payment."

Add the following to the end of the second paragraph of Article 406.14 of the Standard Specifications:

"Longitudinal joint sealant (LJS) half-width will be paid for at the contract unit price per foot (meter) for LONGITUDINAL JOINT SEALANT, HALF-WIDTH."

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, ΔTc, 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 styrenebutadiene 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.), inlbs (N-m)	110 (12.5) min.	110 (12.5) min.
Tenacity		
ASTM D 5801, 77 °F (25 °C),	75 (0.5) maio	75 (0.5) main
20 in./min. (500 mm/min.), inlbs (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 µm)	95 ± 5
No. 50 (300 µm)	> 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		
·	Asphalt Grade	
	SM PG 46-28 SM PG 46-34	
Test	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, ΔTc, 40 hrs PAV (40 hrs continuous	-5°C min.	
or 2 PAV at 20 hrs)		
Large Strain Parameter (Illinois Modified		
AASHTO T 391) DSR/LAS Fatigue	≥ 54 %	
Property, Δ G* peak τ, 40 hrs PAV (40 hrs	2 J4 70	
continuous or 2 PAV at 20 hrs)		

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 % 1/ 2/				
Ndesign	Binder Surface Polymer Modified Binder or Surface ^{3/}			
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 % 1/2/				
Ndesign	Binder	Surface	Polymer Modified Binder or Surface ^{3/}	
30	55	45	15	
50	45	40	15	
70	45	35	15	
90	90 45		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."

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 III. 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 Methods 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."

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

Class	– Туре	Seeds	lb/acre (kg/hectare)
4	Native Grass 2/ 6/	Andropogon gerardi (Big Blue Stem) 5/	4 (4)
		Schizachyrium scoparium (Little Blue Stem) 5/	5 (5)
		Bouteloua curtipendula (Side-Oats Grama) 5/	5 (5)
		Elymus canadensis (Canada Wild Rye) 5/	1 (1)
		Panicum virgatum (Switch Grass) 5/	1 (1)
		Sorghastrum nutans (Indian Grass) 5/	2 (2)
		Annual Ryegrass	25 (25)
		Oats, Spring	25 (25)
		Perennial Ryegrass	15 (15)
4A	Low Profile Native Grass 2/ 6/	Schizachyrium scoparium (Little Blue Stem) 5/	5 (5)
		Bouteloua curtipendula (Side-Oats Grama) 5/	5 (5)
		Elymus canadensis (Canada Wild Rye) 5/	1 (1)
		Sporobolus heterolepis (Prairie Dropseed) 5/	0.5 (0.5)
		Annual Ryegrass	25 (25)
		Oats, Spring	25 (25)
		Perennial Ryegrass	15 (15)
4B	Wetland Grass and	Annual Ryegrass	25 (25)
	Sedge Mixture 2/ 6/	Oats, Spring	25 (25)
		Wetland Grasses (species below) 5/	6 (6)
	Species:		% By Weight
		densis (Blue Joint Grass)	12
	Carex lacustris (Lak		6
	Carex slipata (Awl-F		6
	Carex stricta (Tusso		6
	Carex vulpinoidea (I		6
	Eleocharis acicularis Eleocharis obtusa (E	s (Needle Spike Rush)	3 3
			3 14
Glyceria striata (Fowl Juncus effusus (Com Juncus tenuis (Slendo Juncus torreyi (Torrey			6
			6
			6
	Leersia oryzoides (F		10
		d-Stemmed Bulrush)	3
	Scirpus atrovirens (I		3
		iatilis (River Bulrush)	3
		ernaemontani (Softstem Bulrush)	3
	Spartina pectinata (4

Class	– Туре	Seeds	lb/acre (kg/hectare)
5	Forb with	Annuals Mixture (Below)	1 (1)
	Annuals Mixtu	ure 2/ 5/ 6/ Forb Mixture (Below)	10 (10)
	Annuals Mix	cture - Mixture not exceeding 25 % by weight of	
	7 tillidais iviix	any one species, of the following:	
		s lanceolata (Sand Coreopsis)	
		emum maximum (Shasta Daisy)	
		pulchella (Blanket Flower)	
		columnifera (Prairie Coneflower)	
	Ruubeckia	a hirta (Black-Eyed Susan)	
	Forb Mixture	e - Mixture not exceeding 5 % by weight PLS of	
		any one species, of the following:	
	Amorpha (canescens (Lead Plant) 4/	
		cylindrica (Thimble Weed)	
		tuberosa (Butterfly Weed)	
		reus (Sky Blue Aster)	
		trichum leave (Smooth Aster)	
		ae-angliae (New England Aster)	
		eucantha (White Wild Indigo) 4/	
		s palmata (Prairie Coreopsis)	
		a pallida (Pale Purple Coneflower)	
		yuccifolium (Rattlesnake Master)	
		s mollis (Downy Sunflower)	
		helianthoides (Ox-Eye)	
		pera (Rough Blazing Star)	
		cnostachya (Prairie Blazing Star)	
		fistulosa (Prairie Bergamot)	
	Partheniur	m integrifolium (Wild Quinine)	
	Dalea can	ndida (White Prairie Clover) 4/	
	Dalea pur	rpurea (Purple Prairie Clover) 4/	
	Physosteg	gia virginiana (False Dragonhead)	
		arguta (Prairie Cinquefoil)	
	Ratibida p	pinnata (Yellow Coneflower)	
		a subtomentosa (Fragrant Coneflower)	
	Silphium la	laciniatum (Compass Plant)	
		terebinthinaceum (Prairie Dock)	
		ron rigidum (Rigid Goldenrod)	
		ntia ohiensis (Spiderwort)	
	<i>Veronicas</i>	strum virginicum (Culver's Root)	

Class -	– Туре	Seeds	lb/acre (kg/hectare)
5A	Large Flower Native Forb Mixture 2/ 5/ 6/	Forb Mixture (see below)	5 (5)
	Species:	% By Weight	
	Aster novae-angliae	5	
		ale Purple Coneflower)	10
	Helianthus mollis (Do		10
	Heliopsis helianthoid		10
		(Prairie Blazing Star)	10
	Ratibida pinnata (Ye		5
	Rudbeckia hirta (Bla		10
	Silphium laciniatum (10
	Silphium terebinthina		20
	Oligoneuron rigidum	· -	10
5B	Wetland Forb 2/ 5/ 6/	Forb Mixture (see below)	2 (2)
	Species:		% By Weight
	Acorus calamus (Sw		3
	Angelica atropurpure		6
	Asclepias incarnata		2
	Aster puniceus (Purp		10
	Bidens cernua (Bego		7
		um (Spotted Joe Pye Weed)	7 7
	Eupatorium perfoliat	um (Boneset) (Autumn Sneeze Weed)	
	Iris virginica shrevei		2
	Lobelia cardinalis (C		2 5 5
	Lobelia siphilitica (G		5
	Lythrum alatum (Win		2
		na (False Dragonhead)	_ 5
		nica (Pennsylvania Smartweed)	10
		a (Curlytop Knotweed)	10
		nianum (Mountain Mint)	5
		(Cut-leaf Coneflower)	5
	Oligoneuron riddellii		2
	Sparganium eurycar	· · · · · · · · · · · · · · · · · · ·	5
6	Conservation Mixture 2/ 6/	Schizachyrium scoparium	5 (5)
	Wilklufe 2/ 6/	(Little Blue Stem) 5/ Elymus canadensis	2 (2)
		(Canada Wild Rye) 5/	2 (2)
		Buffalo Grass 5/ 7/	5 (5)
		Vernal Alfalfa 4/	15 (15)
		Oats, Spring	48 (55)
6A	Salt Tolerant	Schizachyrium scoparium	5 (5)
•	Conservation	(Little Blue Stem) 5/	· (-)
	Mixture 2/ 6/	Elymus canadensis	2 (2)
		(Canada Wild Rye) 5/	` ,
		Buffalo Grass 5/ 7/	5 (5)
		Vernal Alfalfa 4/	15 (15)
		Oats, Spring	48 (55)
		Puccinellia distans (Fults Saltgrass or Salty Alkaligrass)	20 (20)
7	Temporary Turf	Perennial Ryegrass	50 (55)
	Cover Mixture	Oats, Spring	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 KNO₃ 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."

SHORT TERM AND TEMPORARY PAVEMENT MARKINGS (BDE)

"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 ± 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.

Х	0.490	0.475	0.485	0.530
У	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∟		
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) ^{1/} 20 (0.51) ^{2/}	65 (1.65) ^{1/} 20 (0.51) ^{2/}
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."

SOURCE OF SUPPLY AND QUALITY REQUIREMENTS (BDE)

Effective: January 2, 2023

Add the following to Article 106.01 of the Standard Specifications:

"The final manufacturing process for construction materials and the immediately preceding manufacturing stage for construction materials shall occur within the United States. Construction materials shall include an article, material, or supply that is or consists primarily of the following.

- (a) Non-ferrous metals;
- (b) Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- (c) Glass (including optic glass);
- (d) Lumber;
- (e) Drywall.

Items consisting of two or more of the listed construction materials that have been combined through a manufacturing process, and items including at least one of the listed materials combined with a material that is not listed through a manufacturing process shall be exempt."

SPEED DISPLAY TRAILER (BDE)

Effective: April 2, 2014 Revised: January 1, 2022

Revise the last paragraph of Article 701.11 of the Standard Specifications to read:

"When not being utilized to inform and direct traffic, sign trailers, speed display trailers, arrow boards, and portable changeable message boards shall be treated as nonoperating equipment."

Add the following to Article 701.15 of the Standard Specifications:

"(m) Speed Display Trailer. A speed display trailer is used to enhance safety of the traveling public and workers in work zones by alerting drivers of their speed, thus deterring them from driving above the posted work zone speed limit."

Add the following to Article 701.20 of the Standard Specifications:

"(k) When speed display trailers are shown on the Standard, this work will not be paid for separately but shall be considered as included in the cost of the Standard.

For all other speed display trailers, this work will be paid for at the contract unit price per calendar month or fraction thereof for each trailer as SPEED DISPLAY TRAILER."

Add the following to Article 1106.02 of the Standard Specifications:

"(o) Speed Display Trailer. The speed display trailer shall consist of a LED speed indicator display with self-contained, one-direction radar mounted on an orange see-through trailer. The height of the display and radar shall be such that it will function and be visible when located behind concrete barrier.

The speed measurement shall be by radar and provide a minimum detection distance of 1000 ft (300 m). The radar shall have an accuracy of ±1 mile per hour.

The speed indicator display shall face approaching traffic and shall have a sign legend of "YOUR SPEED" immediately above or below the speed display. The sign letters shall be between 5 and 8 in. (125 and 200 mm) in height. The digital speed display shall show two digits (00 to 99) in mph. The color of the changeable message legend shall be a yellow legend on a black background. The minimum height of the numerals shall be 18 in. (450 mm), and the nominal legibility distance shall be at least 750 ft (250 m).

The speed indicator display shall be equipped with a violation alert that flashes the displayed detected speed when the work zone posted speed limit is exceeded. The speed indicator shall have a maximum speed cutoff. On roadway facilities with a normal posted speed limit greater than or equal to 45 mph, the detected speeds of vehicles traveling more than 25 mph over the work zone speed limit shall not be displayed. On facilities with normal posted speed limit of less than 45 mph, the detected speeds of vehicles traveling more than 15 mph over the work zone speeds limit shall not be displayed. On any roadway facility if detected speeds are less than 25 mph, they shall not be displayed. The display shall include automatic dimming for nighttime operation.

The speed indicator measurement and display functions shall be equipped with the power supply capable of providing 24 hours of uninterrupted service."

STEEL COST ADJUSTMENT (BDE)

Effective: April 2, 2004 Revised: January 1, 2022

<u>Description</u>. Steel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in steel prices when optioned by the Contractor. The bidder shall indicate with their bid whether or not this special provision will be part of the contract. Failure to indicate "Yes" for any item of work will make that item of steel exempt from steel cost adjustment.

<u>Types of Steel Products</u>. An adjustment will be made for fluctuations in the cost of steel used in the manufacture of the following items:

Metal Piling (excluding temporary sheet piling) Structural Steel Reinforcing Steel

Other steel materials such as dowel bars, tie bars, welded reinforcement, guardrail, steel traffic signal and light poles, towers and mast arms, metal railings (excluding wire fence), and frames and grates will be subject to a steel cost adjustment when the pay items they are used in have a contract value of \$10,000 or greater.

The adjustments shall apply to the above items when they are part of the original proposed construction, or added as extra work and paid for by agreed unit prices. The adjustments shall not apply when the item is added as extra work and paid for at a lump sum price or by force account.

<u>Documentation</u>. Sufficient documentation shall be furnished to the Engineer to verify the following:

- (a) The dates and quantity of steel, in lb (kg), shipped from the mill to the fabricator.
- (b) The quantity of steel, in lb (kg), incorporated into the various items of work covered by this special provision. The Department reserves the right to verify submitted quantities.

Method of Adjustment. Steel cost adjustments will be computed as follows:

SCA = Q X D

Where: SCA = steel cost adjustment, in dollars

Q = quantity of steel incorporated into the work, in lb (kg)

D = price factor, in dollars per lb (kg)

 $D = MPI_M - MPI_L$

Where: MPI_M = The Materials Cost Index for steel as published by the Engineering News-

Record for the month the steel is shipped from the mill. The indices will be

converted from dollars per 100 lb to dollars per lb (kg).

MPI_L = The Materials Cost Index for steel as published by the Engineering News-

Record for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price,. The indices will be converted from

dollars per 100 lb to dollars per lb (kg).

The unit weights (masses) of steel that will be used to calculate the steel cost adjustment for the various items are shown in the attached table.

No steel cost adjustment will be made for any products manufactured from steel having a mill shipping date prior to the letting date.

If the Contractor fails to provide the required documentation, the method of adjustment will be calculated as described above; however, the MPI_M will be based on the date the steel arrives at the job site. In this case, an adjustment will only be made when there is a decrease in steel costs.

<u>Basis of Payment</u>. Steel cost adjustments may be positive or negative but will only be made when there is a difference between the MPI_L and MPI_M in excess of five percent, as calculated by:

Percent Difference = $\{(MPI_L - MPI_M) \div MPI_L\} \times 100$

Steel cost adjustments will be calculated by the Engineer and will be paid or deducted when all other contract requirements for the items of work are satisfied. Adjustments will only be made for fluctuations in the cost of the steel as described herein. No adjustment will be made for changes in the cost of manufacturing, fabrication, shipping, storage, etc.

The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Attachment

Item	Unit Mass (Weight)
Metal Piling (excluding temporary sheet piling)	
Furnishing Metal Pile Shells 12 in. (305 mm), 0.179 in. (3.80 mm) wall thickness)	23 lb/ft (34 kg/m)
Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness)	32 lb/ft (48 kg/m)
Furnishing Metal Pile Shells 14 in. (356 mm), 0.250 in. (6.35 mm) wall thickness)	37 lb/ft (55 kg/m)
Other piling	See plans
Structural Steel	See plans for weights
	(masses)
Reinforcing Steel	See plans for weights
	(masses)
Dowel Bars and Tie Bars	6 lb (3 kg) each
Welded Reinforcement	63 lb/100 sq ft (310 kg/sq m)
Guardrail	
Steel Plate Beam Guardrail, Type A w/steel posts	20 lb/ft (30 kg/m)
Steel Plate Beam Guardrail, Type B w/steel posts	30 lb/ft (45 kg/m)
Steel Plate Beam Guardrail, Types A and B w/wood posts	8 lb/ft (12 kg/m)
Steel Plate Beam Guardrail, Type 2	305 lb (140 kg) each
Steel Plate Beam Guardrail, Type 6	1260 lb (570 kg) each
Traffic Barrier Terminal, Type 1 Special (Tangent)	730 lb (330 kg) each
Traffic Barrier Terminal, Type 1 Special (Flared)	410 lb (185 kg) each
Steel Traffic Signal and Light Poles, Towers and Mast Arms	
Traffic Signal Post	11 lb/ft (16 kg/m)
Light Pole, Tenon Mount and Twin Mount, 30 - 40 ft (9 - 12 m)	14 lb/ft (21 kg/m)
Light Pole, Tenon Mount and Twin Mount, 45 - 55 ft (13.5 – 16.5 m)	21 lb/ft (31 kg/m)
Light Pole w/Mast Arm, 30 - 50 ft (9 – 15.2 m)	13 lb/ft (19 kg/m)
Light Pole w/Mast Arm, 55 - 60 ft (16.5 – 18 m)	19 lb/ft (28 kg/m)
Light Tower w/Luminaire Mount, 80 - 110 ft (24 - 33.5 m)	31 lb/ft (46 kg/m)
Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 – 42.5 m)	65 lb/ft (97 kg/m)
Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 – 48.5 m)	80 lb/ft (119 kg/m)
Metal Railings (excluding wire fence)	
Steel Railing, Type SM	64 lb/ft (95 kg/m)
Steel Railing, Type S-1	39 lb/ft (58 kg/m)
Steel Railing, Type T-1	53 lb/ft (79 kg/m)
Steel Bridge Rail	52 lb/ft (77 kg/m)
Frames and Grates	
Frame	250 lb (115 kg)
Lids and Grates	150 lb (70 kg)

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."

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%"

SUBMISSION OF BIDDERS LIST INFORMATION (BDE)

Effective: January 2, 2025

In accordance with 49 CFR 26.11(c) all bidders for federally assisted contracts shall submit bidders list information with their bid or initial response to a procurement solicitation. Submission of the bidders list information is a material bidding requirement, and failure to comply with this requirement may render the bid non-responsive.

The bidders list information shall be provided for each firm from whom the bidder receives any bid as a subcontractor. This requirement is not limited to DBE subcontractor bids but applies to 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 contain the following.

- (a) Firm name;
- (b) Firm address including ZIP code;
- (c) Firm's status as a DBE or non-DBE;
- (d) Race and gender information for the firm's majority owner;
- (e) NAICS code applicable to each scope of work the firm sought to perform in its bid;
- (f) Age of the firm; and
- (g) The annual gross receipts of the firm (this may be provided by indicating whether the firm's annual gross receipts are less than \$1 million; \$1-3 million; \$3-6 million; \$6-10 million; etc.).

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".

SUBMISSION OF PAYROLL RECORDS (BDE)

Effective: April 1, 2021 Revised: November 2, 2023

<u>FEDERAL AID CONTRACTS</u>. 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."

<u>STATE CONTRACTS</u>. Revise Item 3 of Section IV of Check Sheet #5 of the Recurring Special Provisions to read:

"3. Submission of Payroll Records. The Contractor and each subcontractor shall, no later than the 15th day of each calendar month, file a certified payroll for the immediately preceding month to the Illinois Department of Labor (IDOL) through the Illinois Prevailing Wage Portal in compliance with the State Prevailing Wage Act (820 ILCS 130). The portal can be found on the IDOL website at https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Prevailing-Wage-Portal.aspx. Payrolls shall be submitted in the format prescribed by the IDOL.

In addition to filing certified payroll(s) with the IDOL, the Contractor and each subcontractor shall certify and submit payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers shall not be included on weekly submittals. Instead, the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted. The submittals shall be made using LCPtracker Pro software. The software is web-based and can be accessed at https://lcptracker.com/. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option ("No Work", "Suspended", or "Complete") selected."

SURFACE TESTING OF PAVEMENTS – IRI (BDE)

Effective: January 1, 2021 Revised: January 1, 2023

<u>Description</u>. This work shall consist of testing the ride quality of the finished surface of pavement sections with new concrete pavement, PCC overlays, full-depth HMA, and HMA overlays with at least 2.25 in. (57 mm) total thickness of new HMA combined with either HMA binder or HMA surface removal, according to Illinois Test Procedure 701, "Ride Quality Testing Using the International Roughness Index (IRI)". Work shall be according to Sections 406, 407, or 420 of the Standard Specifications, except as modified herein.

Hot-Mix Asphalt (HMA) Overlays

Add the following to Article 406.03 of the Standard Specifications:

"(n) Pavement Surface Grinding Equipment......1101.04"

Revise Article 406.11 of the Standard Specifications to read:

"406.11 Surface Tests. Prior to HMA overlay pavement improvements, the Engineer will measure the smoothness of the existing high-speed mainline pavement. The Contractor shall measure the smoothness of the finished high-speed mainline, low-speed mainline, and miscellaneous pavements after the pavement improvement is complete but within the same construction season. Testing shall be performed in the presence of the Engineer and according to Illinois Test Procedure 701. The pavement will be identified as high-speed mainline, low-speed mainline, or miscellaneous as follows.

- (a) Test Sections.
 - (1) High-Speed Mainline Pavement. High-speed mainline pavement consists of pavements, ramps, and loops with a posted speed limit greater than 45 mph. These sections shall be tested with an inertial profiling system (IPS).
 - (2) Low-Speed Mainline Pavement. Low-speed mainline pavement consists of pavements, ramps, and loops with a posted speed limit of 45 mph or less. These sections shall be tested using a 16 ft (5 m) straightedge or with an IPS analyzed using the rolling 16 ft (5 m) straightedge simulation in ProVAL.
 - (3) Miscellaneous Pavement. Miscellaneous pavement are segments that either cannot readily be tested by an IPS or conditions beyond the control of the Contractor preclude the achievement of smoothness levels typically achievable with mainline pavement construction. This may include the following examples or as determined by the Engineer.
 - a. Pavement on horizontal curves with a centerline radius of curvature of less than or equal to 1,000 ft (300 m) and the pavement within the superelevation transition of such curves;
 - b. Pavement on vertical curves having a length less than or equal to 200 ft (60 m) in combination with an algebraic change in tangent grade greater than or equal to 3 percent as may occur on urban ramps or other constricted-space facilities;
 - c. The first and last 50 ft (15 m) of a pavement section where the Contractor is not responsible for the adjoining surface;
 - d. Intersections and the 25 ft (7.6 m) before and after an intersection or end of radius return;
 - e. Variable width pavements;
 - f. Side street returns, to the end of radius return;

- g. Crossovers;
- h. Pavement connector for bridge approach slab;
- i. Bridge approach slab;
- j. Pavement that must be constructed in segments of 600 ft (180 m) or less;
- k. Pavement within 25 ft (7.6 m) of manholes, utility structures, at-grade railroad crossings, or other appurtenances;
- I. Turn lanes; and
- m. Pavement within 5 ft (1.5 m) of jobsite sampling locations for HMA volumetric testing that fall within the wheel path.

Miscellaneous pavement shall be tested using a 16 ft (5 m) straightedge.

- (4) International Roughness Index (IRI). An index computed from a longitudinal profile measurement using a quarter-car simulation at a simulation speed of 50 mph (80 km/h).
- (5) Mean Roughness Index (MRI). The average of the IRI values for the right and left wheel tracks.
 - a. MRI₀. The MRI of the existing pavement prior to construction.
 - b. MRI_I. The MRI value that warrants an incentive payment.
 - c. MRI_F. The MRI value that warrants full payment.
 - d. MRI_D. The MRI value that warrants a financial disincentive.
- (6) Areas of Localized Roughness (ALR). Isolated areas of roughness, which can cause significant increase in the calculated MRI for a given sublot.
- (7) Sublot. A continuous strip of pavement 0.1 mile (160 m) long and one lane wide. A partial sublot greater than or equal to 264 ft (80 m) will be subject to the same evaluation as a whole sublot. Partial sublots less than 264 ft (80 m) shall be included with the previous sublot for evaluation purposes.

- (b) Corrective Work. Corrective work shall be completed according to the following.
 - (1) High-Speed Mainline Pavement. For high-speed mainline pavement, any 25 ft (7.6 m) interval with an ALR in excess of 200 in./mile (3,200 mm/km) will be identified by the Engineer and shall be corrected by the Contractor. Any sublot having a MRI greater than MRI_D, including ALR, shall be corrected to reduce the MRI to the MRI_F, or replaced at the Contractor's option.
 - (2) Low-Speed Mainline Pavement. Surface variations in low-speed mainline pavement which exceed the 5/16 in. (8 mm) tolerance will be identified by the Engineer and shall be corrected by the Contractor.
 - (3) Miscellaneous Pavements. Surface variations in miscellaneous pavement which exceed the 5/16 in. (8 mm) tolerance will be identified by the Engineer and shall be corrected by the Contractor.

Corrective work shall be completed with pavement surface grinding equipment or by removing and replacing the pavement. Corrective work shall be applied to the full lane width. When completed, the corrected area shall have uniform texture and appearance, with the beginning and ending of the corrected area perpendicular to the centerline of the paved surface.

Upon completion of the corrective work, the surface of the sublot(s) shall be retested. The Contractor shall furnish the data and reports to the Engineer within 2 working days after corrections are made. If the MRI and/or ALR still do not meet the requirements, additional corrective work shall be performed.

Corrective work shall be at no additional cost to the Department.

(c) Smoothness Assessments. Assessments will be paid to or deducted from the Contractor for each sublot of high-speed mainline pavement per the Smoothness Assessment Schedule. Assessments will be based on the MRI of each sublot prior to performing any corrective work unless the Contractor has chosen to remove and replace the pavement. For pavement that is replaced, assessments will be based on the MRI determined after replacement.

The upper MRI thresholds for high-speed mainline pavement are dependent on the MRI of the existing pavement before construction (MRI₀) and shall be determined as follows.

	MRI Thresholds (High-Speed, HMA Overlay)		
Upper MRI Thresholds 1/	$MRI_0 \le 125.0 \text{ in./mile}$ (\le 1,975 mm/km)	MRI ₀ > 125.0 in./mile ^{1/} (> 1,975 mm/km)	
Incentive (MRI _I)	45.0 in./mile (710 mm/km)	0.2 × MRI ₀ + 20	
Full Pay (MRI _F)	75.0 in./mile (1,190 mm/km)	0.2 × MRI ₀ + 50	
Disincentive (MRI _D)	100.0 in./mile (1,975 mm/km)	$0.2 \times MRI_0 + 75$	

1/ MRI_D, MRI_D, MRI_D, and MRI_D shall be in in./mile for calculation.

Smoothness assessments for high-speed mainline pavement shall be determined as follows.

SMOOTHNESS ASSESSMENT SCHEDULE (High-Speed, HMA Overlay)		
Mainline Pavement MRI Range	Assessment Per Sublot 1/	
MRI ≤ MRI₁	+ (MRI _I – MRI) × \$20.00 ^{2/}	
$MRI_{I} < MRI \le MRI_{F}$	+ \$0.00	
$MRI_F < MRI \le MRI_D$	$- (MRI - MRI_F) \times 8.00	
MRI > MRI _D	- \$200.00	

- 1/ MRI, MRI, MRIF, and MRID shall be in in./mile for calculation.
- 2/ The maximum incentive amount shall not exceed \$300.00.

Smoothness assessments will not be paid or deducted until all other contract requirements for the pavement are satisfied. Pavement that is corrected or replaced for reasons other than smoothness, shall be retested as stated herein."

Hot-Mix Asphalt (HMA) Pavement (Full-Depth)

Revise the first paragraph of Article 407.03 of the Standard Specifications to read:

"407.03 Equipment. Equipment shall be according to Article 406.03."

Revise Article 407.09 of the Standard Specifications to read:

"407.09 Surface Tests. The finished surface of the pavement shall be tested for smoothness according to Article 406.11, except as follows:

The testing of the existing pavement prior to improvements shall not apply and the smoothness assessment for high-speed mainline pavement shall be determined according to the following table.

SMOOTHNESS ASSESSMENT SCHEDULE (High-Speed, Full-Depth HMA)		
Mainline Pavement MRI, in./mile (mm/km)	Assessment Per Sublot 1/	
≤ 45.0 (710)	+ (45 – MRI) × \$45.00 ^{2/}	
> 45.0 (710) to 75.0 (1,190)	+ \$0.00	
> 75.0 (1,190) to 100.0 (1,580)	- (MRI - 75) × \$20.00	
> 100.0 (1,580)	- \$500.00	

- 1/ MRI shall be in in./mile for calculation.
- 2/ The maximum incentive amount shall not exceed \$800.00."

Portland Cement Concrete Pavement

Delete Article 420.03(i) of the Standard Specifications.

Revise Article 420.10 of the Standard Specifications to read:

"420.10 Surface Tests. The finished surface of the pavement shall be tested for smoothness according to Article 406.11, except as follows.

The testing of the existing pavement prior to improvements shall not apply. The Contractor shall measure the smoothness of the finished surface of the pavement after the pavement has attained a flexural strength of 250 psi (3,800 kPa) or a compressive strength of 1,600 psi (20,700 kPa).

Membrane curing damaged during testing shall be repaired as directed by the Engineer at no additional cost to the Department.

(a) Corrective Work. No further texturing for skid resistance will be required for areas corrected by grinding. Protective coat shall be reapplied to areas ground according to Article 420.18 at no additional cost to the Department.

Jointed portland cement concrete pavement corrected by removal and replacement, shall be corrected in full panel sizes.

(b) Smoothness Assessments. Smoothness assessment for high-speed mainline pavement shall be determined as follows.

SMOOTHNESS ASSESSMENT SCHEDULE (High-Speed, PCC)		
Mainline Pavement MRI, in./mile (mm/km) 3/	Assessment Per Sublot 1/	
≤ 45.0 (710)	+ (45 – MRI) × \$60.00 ^{2/}	
> 45.0 (710) to 75.0 (1,190)	+ \$0.00	
> 75.0 (1,190) to 100.0 (1,580)	- (MRI - 75) × \$37.50	
> 100.0 (1,580)	- \$750.00	

- 1/ MRI shall be in in./mile for calculation.
- 2/ The maximum incentive amount shall not exceed \$1200.00.
- 3/ If pavement is constructed with traffic in the lane next to it, then an additional 10 in./mile will be added to the upper thresholds."

Removal of Existing Pavement and Appurtenances

Revise the first paragraph of Article 440.04 of the Standard Specifications to read:

"440.04 HMA Surface Removal for Subsequent Resurfacing. The existing HMA surface shall be removed to the depth specified on the plans with a self-propelled milling machine. The removal depth may be varied slightly at the discretion of the Engineer to satisfy the smoothness requirements of the finished pavement. The temperature at which the work is performed, the nature and condition of the equipment, and the manner of performing the work shall be such that the milled surface is not torn, gouged, shoved or otherwise damaged by the milling operation. Sufficient cutting passes shall be made so that all irregularities or high spots are eliminated to the satisfaction of the Engineer. When tested with a 16 ft (5 m) straightedge, the milled surface shall have no surface variations in excess of 3/16 in. (5 mm)."

General Equipment

Revise Article 1101.04 of the Standard Specifications to read:

"1101.04 Pavement Surface Grinding Equipment. The pavement surface grinding device shall have a minimum effective head width of 3 ft (0.9 m).

- (a) Diamond Saw Blade Machine. The machine shall be self-propelled with multiple diamond saw blades.
- (b) Profile Milling Machine. The profile milling machine shall be a drum device with carbide or diamond teeth with spacing of 0.315 in. (8 mm) or less and maintain proper forward speed for surface texture according to the manufacturer's specifications."

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 <u>4</u>. 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.

<u>Basis of Payment</u>. 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.

IDOT TRAINING PROGRAM GRADUATE ON-THE-JOB TRAINING SPECIAL PROVISION

Effective: August 1, 2012 Revised: February 2, 2017

In addition to the Contractor's equal employment opportunity (EEO) affirmative action efforts undertaken as required by this Contract, the Contractor is encouraged to participate in the incentive program described below to provide additional on-the-job training to certified graduates of the IDOT pre-apprenticeship training program, as outlined in this Special Provision.

IDOT funds, and various Illinois community colleges operate, pre-apprenticeship training programs throughout the State to provide training and skill-improvement opportunities to promote the increased employment of minority groups, disadvantaged persons and women in all aspects of the highway construction industry. The intent of this IDOT Pre-Apprenticeship Training Program Graduate (TPG) special provision (Special Provision) is to place these certified program graduates on the project site for this Contract in order to provide the graduates with meaningful on-the-job training. Pursuant to this Special Provision, the Contractor must make every reasonable effort to recruit and employ certified TPG trainees to the extent such individuals are available within a practicable distance of the project site.

Specifically, participation of the Contractor or its subcontractor in the Program entitles the participant to reimbursement for graduates' hourly wages at \$15.00 per hour per utilized TPG trainee, subject to the terms of this Special Provision. Reimbursement payment will be made even though the Contractor or subcontractor may also receive additional training program funds from other non-IDOT sources for other non-TPG trainees on the Contract, provided such other source does not specifically prohibit the Contractor or subcontractor from receiving reimbursement from another entity through another program, such as IDOT through the TPG program. With regard to any IDOT funded construction training program other than TPG, however, additional reimbursement for other IDOT programs will not be made beyond the TPG Program described in this Special Provision when the TPG Program is utilized.

No payment will be made to the Contractor if the Contractor or subcontractor fails to provide the required on-site training to TPG trainees, as solely determined by IDOT. A TPG trainee must begin training on the project as soon as the start of work that utilizes the relevant trade skill and the TPG trainee must remain on the project site through completion of the Contract, so long as training opportunities continue to exist in the relevant work classification. Should a TPG trainee's employment end in advance of the completion of the Contract, the Contractor must promptly notify the IDOT District EEO Officer for the Contract that the TPG's involvement in the Contract has ended. The Contractor must supply a written report for the reason the TPG trainee involvement terminated, the hours completed by the TPG trainee on the Contract, and the number of hours for which the incentive payment provided under this Special Provision will be, or has been claimed for the separated TPG trainee.

Finally, the Contractor must maintain all records it creates as a result of participation in the Program on the Contract, and furnish periodic written reports to the IDOT District EEO Officer that document its contractual performance under and compliance with this Special Provision. Finally, through participation in the Program and reimbursement of wages, the Contractor is not relieved of, and IDOT has not waived, the requirements of any federal or state labor or employment law applicable to TPG workers, including compliance with the Illinois Prevailing Wage Act.

Method of Measurement: The unit of measurement is in hours.

Basis of Payment: This work will be paid for at the contract unit price of \$15.00 per hour for each utilized certified TPG Program trainee (TRAINES TRAINING PROGRAM GRADUATE). The estimated total number of hours, unit price, and total price must be included in the schedule of prices for the Contract submitted by Contractor prior to beginning work. The initial number of TPG trainees for which the incentive is available for this contract is **4**.

The Department has contracted with several educational institutions to provide screening, tutoring and pre-training to individuals interested in working as a TPG trainee in various areas of common construction trade work. Only individuals who have successfully completed a Pre-Apprenticeship Training Program at these IDOT approved institutions are eligible to be TPG trainees. To obtain a list of institutions that can connect the Contractor with eligible TPG trainees, the Contractor may contact: HCCTP TPG Program Coordinator, Office of Business and Workforce Diversity (IDOT OBWD), Room 319, Illinois Department of Transportation, 2300 S. Dirksen Parkway, Springfield, Illinois 62764. Prior to commencing construction with the utilization of a TPG trainee, the Contractor must submit documentation to the IDOT District EEO Officer for the Contract that provides the names and contact information of the TPG trainee(s) to be trained in each selected work classification, proof that that the TPG trainee(s) has successfully completed a Pre-Apprenticeship Training Program, proof that the TPG is in an Apprenticeship Training Program approved by the U.S. Department of Labor Bureau of Apprenticeship Training, and the start date for training in each of the applicable work classifications.

To receive payment, the Contractor must provide training opportunities aimed at developing a full journeyworker in the type of trade or job classification involved. During the course of performance of the Contract, the Contractor may seek approval from the IDOT District EEO Officer to employ additional eligible TPG trainees. In the event the Contractor subcontracts a portion of the contracted work, it must determine how many, if any, of the TPGs will be trained by the subcontractor. Though a subcontractor may conduct training, the Contractor retains the responsibility for meeting all requirements imposed by this Special Provision. The Contractor must also include this Special Provision in any subcontract where payment for contracted work performed by a TPG trainee will be passed on to a subcontractor.

Training through the Program is intended to move TPGs toward journeyman status, which is the primary objective of this Special Provision. Accordingly, the Contractor must make every effort to enroll TPG trainees by recruitment through the Program participant educational institutions to the extent eligible TPGs are available within a reasonable geographic area of the project. The Contractor is responsible for demonstrating, through documentation, the recruitment efforts it has undertaken prior to the determination by IDOT whether the Contractor is in compliance with this Special Provision, and therefore, entitled to the Training Program Graduate reimbursement of \$15.00 per hour.

Notwithstanding the on-the-job training requirement of this TPG Special Provision, some minimal off-site training is permissible as long as the offsite training is an integral part of the work of the contract, and does not compromise or conflict with the required on-site training that is central to the purpose of the Program. No individual may be employed as a TPG trainee in any work classification in which he/she has previously successfully completed a training program leading to journeyman status in any trade, or in which he/she has worked at a journeyman level or higher.

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."

WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012 Revised: January 2, 2025

The following applies to all Disadvantaged Business Enterprise (DBE) trucks on the project, whether they are utilized for DBE goal credit or not.

The Contractor shall notify the Engineer at least three days prior to DBE trucking activity.

The Contractor shall submit a weekly report of DBE trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) to the Engineer on Department form "SBE 723" within ten business days following the reporting period. The reporting period shall be Sunday through Saturday for each week reportable trucking activities occur.

Any costs associated with providing weekly DBE trucking reports shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed.

WORK ZONE TRAFFIC CONTROL DEVICES (BDE)

Effective: March 2, 2020 Revised: January 1, 2025

Add the following to Article 701.03 of the Standard Specifications:

"(q) Temporary Sign Supports1106.02"

Revise the third paragraph of Article 701.14 of the Standard Specifications to read:

"For temporary sign supports, the Contractor shall provide a FHWA eligibility letter for each device used on the contract. The letter shall provide information for the set-up and use of the device as well as a detailed drawing of the device. The signs shall be supported within 20 degrees of vertical. Weights used to stabilize signs shall be attached to the sign support per the manufacturer's specifications."

Revise the first paragraph of Article 701.15 of the Standard Specifications to read:

"701.15 Traffic Control Devices. For devices that must meet crashworthiness standards, the Contractor shall provide a manufacturer's self-certification or a FHWA eligibility letter for each Category 1 device and a FHWA eligibility letter for each Category 2 and Category 3 device used on the contract. The self-certification or letter shall provide information for the set-up and use of the device as well as a detailed drawing of the device."

Revise the first six paragraphs of Article 1106.02 of the Standard Specifications to read:

"1106.02 Devices. Work zone traffic control devices and combinations of devices shall meet crashworthiness standards for their respective categories. The categories are as follows.

Category 1 includes small, lightweight, channelizing and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These include cones, tubular markers, plastic drums, and delineators, with no attachments (e.g. lights). Category 1 devices shall be MASH compliant.

Category 2 includes devices that are not expected to produce significant vehicular velocity change but may otherwise be hazardous. These include vertical panels with lights, barricades, temporary sign supports, and Category 1 devices with attachments (e.g. drums with lights). Category 2 devices shall be MASH compliant.

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions (impact attenuators), truck mounted attenuators, and other devices not meeting the definitions of Category 1 or 2. Category 3 devices manufactured after December 31, 2019 shall be MASH compliant. Category 3 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350, may be used on contracts let before December 31, 2029. Category 3 devices shall be crash tested for Test Level 3 or the test level specified.

Category 4 includes portable or trailer-mounted devices such as sign supports, speed feedback displays, arrow boards, changeable message signs, temporary traffic signals, and area lighting supports. It is preferable for Category 4 devices manufactured after December 31, 2019 to be MASH-16 compliant; however, there are currently no crash tested devices in this category, so it remains exempt from the NCHRP 350 or MASH compliance requirement.

For each type of device, when no more than one MASH compliant is available, an NCHRP 350 compliant device may be used, even if manufactured after December 31, 2019."

Revise Articles 1106.02(g), 1106.02(k), and 1106.02(l) to read:

- "(g) Truck Mounted/Trailer Mounted Attenuators. The attenuator shall be approved for use at Test Level 3. Test Level 2 may be used for normal posted speeds less than or equal to 45 mph.
- (k) Temporary Water Filled Barrier. The water filled barrier shall be a lightweight plastic shell designed to accept water ballast and be on the Department's qualified product list.
 - Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings.
- (I) 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."

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within **110** working days.

PROJECT LABOR AGREEMENT

Effective: May 18, 2007 Revised: August 1, 2019

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 Department 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 Department 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.

Execution of Letter of Assent. A copy of the PLA applicable to this project is included as part of this special provision. 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 Department 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 to submit quarterly reports regarding the number of minorities and females employed under PLAs. To assist in this reporting effort, the Contractor shall provide a quarterly workforce participation report for all minority and female employees working under the PLA of this contract. The data shall be reported on Construction Form BC 820, Project Labor Agreement (PLA) Workforce Participation Quarterly Reporting Form available on the Department's website http://www.idot.illinois.gov/Assets/uploads/files/IDOT-Forms/BC/BC%20820.docx.

The report shall be submitted no later than the 15th of the month following the end of each quarter (i.e., April 15 for the January – March reporting period). The form shall be emailed to DOT.PLA.Reporting@illinois.gov or faxed to (217) 524-4922.

Any costs associated with complying with this provision shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed.

Illinois Department of Transportation PROJECT LABOR AGREEMENT

This Project Labor Agreement ("PLA" or "Agreement") is entered into this _____ day of

, 2025, by and between the Illinois Department of Transportation ("IDOT" or "Department") in its proprietary capacity, and each relevant Illinois AFL-CIO Building Trades signatory hereto as determined by the Illinois AFL-CIO Statewide Project Labor Agreement Committee on behalf of each of its affiliated members (individually and collectively, the "Unions"). This PLA shall apply to Construction Work (as defined herein) to be performed by IDOT's Prime Contractor and each of its subcontractors of whatever tier ("Subcontractor" or "Subcontractors") on Contract No. (hereinafter, the "Project").

ARTICLE I - INTENT AND PURPOSES

- 1.1 This PLA is entered into in accordance with the Project Labor Agreement Act ("Act", 30 ILCS 571). It is mutually understood and agreed that the terms and conditions of this PLA are intended to promote the public interest in obtaining timely and economical completion of the Project by encouraging productive and efficient construction operations; by establishing a spirit of harmony and cooperation among the parties; and by providing for peaceful and prompt settlement of any and all labor grievances or jurisdictional disputes of any kind without strikes, lockouts, slowdowns, delays, or other disruptions to the prosecution of the work. The parties acknowledge the obligations of the Contractors and Subcontractors to comply with the provisions of the Act. The parties will work with the Contractors and Subcontractors within the parameters of other statutory and regulatory requirements to implement the Act's goals and objectives.
- 1.2 As a condition of the award of the contract for performance of work on the Project, IDOT's Prime Contractor and each of its Subcontractors shall execute a "Contractor Letter of Assent", in the form attached hereto as Exhibit A, prior to commencing Construction Work on the Project. The Contractor shall submit a Subcontractor's Contractor Letter of Assent to the Department prior to the Subcontractor's performance of Construction Work on the Project. Upon request copies of the applicable collective bargaining agreements will be provided by the appropriate signatory labor organization consistent with this Agreement and at the pre-job conference referenced in Article III, Section 3.1.

- 1.3 Each Union affiliate and separate local representing workers engaged in Construction Work on the Project in accordance with this PLA are bound to this agreement by the Illinois AFL-CIO Statewide Project Labor Agreement Committee which is the central committee established with full authority to negotiate and sign PLAs with the State on behalf of all respective crafts. Upon their signing the Contractor Letter of Assent, the Prime Contractor, each Subcontractor, and the individual Unions shall thereafter be deemed a party to this PLA. No party signatory to this PLA shall, contract or subcontract, nor permit any other person, firm, company, or entity to contract or subcontract for the performance of Construction Work for the Project to any person, firm, company, or entity that does not agree in writing to become bound for the term of this Project by the terms of this PLA prior to commencing such work and to the applicable area-wide collective bargaining agreement(s) with the Union(s) signatory hereto.
- 1.4 It is understood that the Prime Contractor(s) and each Subcontractor will be considered and accepted by the Unions as separate employers for the purposes of collective bargaining, and it is further agreed that the employees working under this PLA shall constitute a bargaining unit separate and distinct from all others. The parties hereto also agree that this PLA shall be applicable solely with respect to this Project, and shall have no bearing on the interpretation of any other collective bargaining agreement or as to the recognition of any bargaining unit other than for the specific purposes of this Project.
- 1.5 In the event of a variance or conflict, whether explicit or implicit, between the terms and conditions of this PLA and the provisions of any other applicable national, area, or local collective bargaining agreement, the terms and conditions of this PLA shall supersede and control. For any work performed under the NTL Articles of Agreement, the National Stack/Chimney Agreement, the National Cooling Tower Agreement, the National Agreement of the International Union of Elevator Constructors, and for any instrument calibration work and loop checking performed under the UA/IBEW Joint National Agreement for Instrument and Control Systems Technicians, the preceding sentence shall apply only with respect to Articles I, II, V, VI, and VII.

- 1.6 Subject to the provisions of paragraph 1.5 of this Article, it is the parties' intent to respect the provisions of any other collective bargaining agreements that may now or hereafter pertain, whether between the Prime Contractor and one or more of the Unions or between a Subcontractor and one or more of the Unions. Accordingly, except and to the extent of any contrary provision set forth in this PLA, the Prime Contractor and each of its Subcontractors agrees to be bound and abide by the terms of the following in order of precedence: (a) the applicable collective bargaining agreement between the Prime Contractor and one or more of the Unions made signatory hereto; (b) the applicable collective bargaining agreement between a Subcontractor and one or more of the Unions made signatory hereto; or (c) the current applicable area collective bargaining agreement for the relevant Union that is the agreement certified by the Illinois Department of Labor for purposes of establishing the Prevailing Wage applicable to the Project. The Union will provide copies of the applicable collective bargaining agreements pursuant to part (c) of the preceding sentence to the Prime Contractor. Assignments by the Contractors or Subcontractors amongst the trades shall be consistent with area practices; in the event of unresolved disagreements as to the propriety of such assignments, the provisions of Article VI shall apply.
- 1.7 Subject to the limitations of paragraphs 1.4 to 1.6 of this Article, the terms of each applicable collective bargaining agreement as determined in accordance with paragraph 1.6 are incorporated herein by reference, and the terms of this PLA shall be deemed incorporated into such other applicable collective bargaining agreements only for purposes of their application to the Project.
- 1.8 To the extent necessary to comply with the requirements of any fringe benefit fund to which the Prime Contractor or Subcontractor is required to contribute under the terms of an applicable collective bargaining agreement pursuant to the preceding paragraph, the Prime Contractor or Subcontractor shall execute all "Participation Agreements" as may be reasonably required by the Union to accomplish such purpose; provided, however, that such Participation Agreements shall, when applicable to the Prime Contractor or Subcontractor solely as a result of this PLA, be amended as reasonably necessary to reflect such fact. Upon written notice in the form of a lien of a Contractor's or Subcontractor's delinquency from any applicable fringe benefit fund, IDOT will withhold from the Contractor's periodic pay request an amount sufficient to extinguish any delinquency obligation of the Contractor or Subcontractor arising out of the Project.
- 1.9 In the event that the applicable collective bargaining agreement between a Prime Contractor and the Union or between the Subcontractor and the Union expires prior to the completion of this Project, the expired applicable contract's terms will be maintained until a new applicable collective bargaining agreement is ratified. The wages and fringe benefits included in any new applicable collective bargaining agreement will apply on and after the effective date of the newly negotiated collective bargaining agreement, except to the extent wage and fringe benefit retroactivity is specifically agreed upon by the relevant bargaining parties.

<u>ARTICLE II – APPLICABILITY, RECOGNITION, AND COMMITMENTS</u>

- 2.1 The term Construction Work as used herein shall include all "construction, demolition, rehabilitation, renovation, or repair" work performed by a "laborer or mechanic" at the "site of the work" for the purpose of "building" the specific structures and improvements that constitute the Project. Terms appearing within quotation marks in the preceding sentence shall have the meaning ascribed to them pursuant to 29 CFR Part 5 and Illinois labor laws.
- 2.2 By executing the Letters of Assent, Prime Contractor and each of its Subcontractors recognizes the Unions signatory to this PLA as the sole and exclusive bargaining representatives for their craft employees employed on the jobsite for this Project. Unions who are signatory to this PLA will have recognition on the Project for their craft.
- 2.3 The Prime Contractor and each of its Subcontractors retains and shall be permitted to exercise full and exclusive authority and responsibility for the management of its operations, except as expressly limited by the terms of this PLA or by the terms and conditions of the applicable collective bargaining agreement.
- 2.4 Except to the extent contrary to an express provision of the relevant collective bargaining agreement, equipment or materials used in the Project may be preassembled or pre- fabricated, and there shall be no refusal by the Union to handle, transport, install, or connect such equipment or materials. Equipment or materials delivered to the job-site will be unloaded and handled promptly without regard to potential jurisdictional disputes; any such disputes shall be handled in accordance with the provisions of this PLA.
- 2.5 The parties are mutually committed to promoting a safe working environment for all personnel at the job-site. It shall be the responsibility of each employer to which this PLA applies to provide and maintain safe working conditions for its employees, and to comply with all applicable federal, state, and local health and safety laws and regulations.
- 2.6 The use or furnishing of alcohol or drugs and the conduct of any other illegal activity at the job-site is strictly prohibited. The parties shall take every practical measure consistent with the terms of applicable collective bargaining agreements to ensure that the job-site is free of alcohol and drugs.
- 2.7 All parties to this PLA agree that they will not discriminate against any employee based on race, creed, religion, color, national origin, union activity, age, gender or sexual orientation and shall comply with all applicable federal, state, and local laws.

In accordance with the Act and to promote diversity in employment, IDOT will establish, in cooperation with the other parties, the apprenticeship hours which are to be performed by minorities and females on the Project. IDOT shall consider the total hours to be performed by these underrepresented groups, as a percentage of the workforce, and create aspirational goals for each Project, based on the level of underutilization for the service area of the Project (together "Project Employment Objectives"). IDOT shall provide a quarterly report regarding the racial and gender composition of the workforce on the Project.

Persons currently lacking qualifications to enter apprenticeship programs will have the opportunity to obtain skills through basic training programs as have been established by the Department. The parties will endeavor to support such training programs to allow participants to obtain the requisite qualifications for the Project Employment Objectives.

The parties agree that all Contractors and Subcontractors working on the Project shall be encouraged to utilize the maximum number of apprentices as permitted under the terms of the applicable collective bargaining agreements to realize the Project Employment Objectives.

The Unions shall assist the Contractor and each Subcontractor in efforts to satisfy Project Employment Objectives. A Contractor or Subcontractor may request from a Union specific categories of workers necessary to satisfy Project Employment Objectives. The application of this section shall be consistent with all local Union collective bargaining agreements, and the hiring hall rules and regulations established for the hiring of personnel, as well as the apprenticeship standards set forth by each individual Union.

- 2.9 The parties hereto agree that engineering consultants and materials testing employees, to the extent subject to the terms of this PLA, shall be fully expected to objectively and responsibly perform their duties and obligations owed to the Department without regard to the potential union affiliation of such employees or of other employees on the Project.
- 2.10 This Agreement shall not apply to IDOT employees or employees of any other governmental entity.

<u>ARTICLE III - ADMINISTRATION OF AGREEMENT</u>

- 3.1 In order to assure that all parties have a clear understanding of the PLA, and to promote harmony, at the request of the Unions a post-award pre-job conference will be held among the Prime Contractor, all Subcontractors and Union representatives prior to the start of any Construction Work on the Project. No later than the conclusion of such pre-job conference, the parties shall, among other matters, provide to one another contact information for their respective representatives (including name, address, phone number, facsimile number, e-mail). Nothing herein shall be construed to limit the right of the Department to discuss or explain the purpose and intent of this PLA with prospective bidders or other interested parties prior to or following its award of the job.
- 3.2 Representatives of the Prime Contractor and the Unions shall meet as often as reasonably necessary following award until completion of the Project to assure the effective implementation of this PLA.
- 3.3 Any notice contemplated under Article VI and VII of this Agreement to a signatory labor organization shall be made in writing to the Local Union with copies to the local union's International Representative.

ARTICLE IV - HOURS OF WORK AND GENERAL CONDITIONS

- 4.1 The standard work day and work week for Construction Work on the Project shall be consistent with the respective collective bargaining agreements. In the event Project site or other job conditions dictate a change in the established starting time and/or a staggered lunch period for portions of the Project or for specific crafts, the Prime Contractor, relevant Subcontractors and business managers of the specific crafts involved shall confer and mutually agree to such changes as appropriate. If proposed work schedule changes cannot be mutually agreed upon between the parties, the hours fixed at the time of the pre-job meeting shall prevail.
- 4.2 Shift work may be established and directed by the Prime Contractor or relevant Subcontractor as reasonably necessary or appropriate to fulfill the terms of its contract with the Department. If used, shift hours, rates and conditions shall be as provided in the applicable collective bargaining agreement.
- 4.3 The parties agree that chronic and/or unexcused absenteeism is undesirable and must be controlled in accordance with procedures established by the applicable collective bargaining agreement. Any employee disciplined for absenteeism in accordance with such procedures shall be suspended from all work on the Project for not less than the maximum period permitted under the applicable collective bargaining agreement.

- 4.4 Except as may be otherwise expressly provided by the applicable collective bargaining agreement, employment begins and ends at the Project site; employees shall be at their place of work at the starting time; and employees shall remain at their place of work until quitting time.
- 4.5 Except as may be otherwise expressly provided by the applicable collective bargaining agreement, there shall be no limit on production by workmen, no restrictions on the full use of tools or equipment, and no restrictions on efficient use of manpower ortechniques of construction other than as may be required by safety regulations.
- 4.6 The parties recognize that specialized or unusual equipment may be installed on the Project. In such cases, the Union recognizes the right of the Prime Contractor or Subcontractor to involve the equipment supplier or vendor's personnel in supervising the setting up of the equipment, making modifications and final alignment, and performing similar activities that may be reasonably necessary prior to and during the start-up procedure in order to protect factory warranties. The Prime Contractor or Subcontractor shall notify the Union representatives in advance of any work at the jobsite by such vendor personnel in order to promote a harmonious relationship between the equipment vendor's personnel and other Project employees.
- 4.7 For the purpose of promoting full and effective implementation of this PLA, authorized Union representatives shall have access to the Project job-site during scheduled work hours. Such access shall be conditioned upon adherence to all reasonable visitor and security rules of general applicability that may be established for the Project site at the pre-job conference or from time to time thereafter.

ARTICLE V – GRIEVANCE PROCEDURES FOR DISPUTES ARISING UNDER A PARTICULAR COLLECTIVE BARGAINING AGREEMENT

- 5.1 In the event a dispute arises under a particular collective bargaining agreement specifically not including jurisdictional disputes referenced in Article VI below, said dispute shall be resolved by the Grievance/Arbitration procedure of the applicable collective bargaining agreement. The resulting determination from this process shall be final and binding on all parties bound to its process.
- 5.2 Employers covered under this Agreement shall have the right to discharge or discipline any employee who violates the provisions of this Agreement. Such discharge or discipline by a contractor or subcontractor shall be subject to Grievance/Arbitration procedure of the applicable collective bargaining agreement only as to the fact of such violation of this agreement. If such fact is established, the penalty imposed shall not be disturbed. Work at the Project site shall continue without disruption or hindrance of any kind as a result of a Grievance/Arbitration procedure under this Article.

5.3 In the event there is a deadlock in the foregoing procedure, the parties agree that the matter shall be submitted to arbitration for the selection and decision of an Arbitrator governed under paragraph 6.8.

ARTICLE VI – DISPUTES: GENERAL PRINCIPLES

- 6.1 This Agreement is entered into to prevent strikes, lost time, lockouts and to facilitate the peaceful adjustment of jurisdictional disputes in the building and construction industry and to prevent waste and unnecessary avoidable delays and expense, and for the further purpose of at all times securing for the employer sufficient skilled workers.
- 6.2 A panel of Permanent Arbitrators are attached as addendum (A) to this agreement. By mutual agreement between IDOT and the Unions, the parties can open this section of the agreement as needed to make changes to the list of permanent arbitrators.
 - The arbitrator is not authorized to award back pay or any other damages for a miss assignment of work. Nor may any party bring an independent action for back pay or any other damages, based upon a decision of an arbitrator.
- 6.3 The PLA Jurisdictional Dispute Resolution Process ("Process") sets forth the procedures below to resolve jurisdictional disputes between and among Contractors, Subcontractors, and Unions engaged in the building and construction industry. Further, the Process will be followed for any grievance or dispute arising out of the interpretation or application of this PLA by the parties except for the prohibition on attorneys contained in 6.11. All decisions made through the Process are final and binding upon all parties.

DISPUTE PROCESS

- 6.4 Administrative functions under the Process shall be performed through the offices of the President and/or Secretary-Treasurer of the Illinois State Federation of Labor, or their designated representative, called the Administrator. In no event shall any officer, employee, agent, attorney, or other representative of the Illinois Federation of Labor, AFL- CIO be subject to any subpoena to appear or testify at any jurisdictional dispute hearing.
- 6.5 There shall be no abandonment of work during any case participating in this Process or in violation of the arbitration decision. All parties to this Process release the Illinois State Federation of Labor ("Federation") from any liability arising from its action or inaction and covenant not to sue the Federation, nor its officers, employees, agents or attorneys.

6.6 In the event of a dispute relating to trade or work jurisdiction, all parties, including the employers, Contractors or Subcontractors, agree that a final and binding resolution of the

dispute shall be resolved as follows:

- (a) Representatives of the affected trades and the Contractor or Subcontractor shall meet on the job site within two (2) business days after receiving written notice in an effort to resolve the dispute. (In the event there is a dispute between local unions affiliated with the same International Union, the decision of the General President, or his/her designee, as the internal jurisdictional authority of that International Union, shall constitute a final and binding decision and determination as to the jurisdiction of work.)
- (b) If no settlement is achieved subsequent to the preceding Paragraph, the matter shall be referred to the local area Building & Construction Trades Council, which shall meet with the affected trades within two (2) business days subsequent to receiving written notice. In the event the parties do not wish to avail themselves of the local Building & Construction Trades Council, the parties may elect to invoke the services of their respective International Representatives with no extension of the time limitations. An agreement reached at this Step shall be final and binding upon all parties.
- (c) If no settlement agreement is reached during the proceedings contemplated by Paragraphs "a" or "b" above, the matter shall be immediately referred to the Illinois Jurisdictional Dispute Process for final and binding resolution of said dispute. Said referral submission shall be in writing and served upon the Illinois State Federation of Labor, or the Administrator, pursuant to paragraph 6.4 of this agreement. The Administrator shall, within three (3) days, provide for the selection of an available Arbitrator to hear said dispute within this time period. Upon good cause shown and determined by the Administrator, an additional three (3) day extension for said hearing shall be granted at the sole discretion of the Administrator. Only upon mutual agreement of all parties may the Administrator extend the hearing for a period in excess of the time frames contemplated under this Paragraph. Business days are defined as Monday through Friday, excluding contract holidays.
- 6.7 The primary concern of the Process shall be the adjustment of jurisdictional disputes arising out of the Project. A sufficient number of Arbitrators shall be selected from list of approved Arbitrators as referenced Sec. 6.2 and shall be assigned per Sec. 6.8. Decisions shall be only for the Project and shall become effective immediately upon issuance and complied with by all parties. The authority of the Arbitrator shall be restricted and limited specifically to the terms and provisions of Article VI and generally to this Agreement as a whole.

6.8 Arbitrator chosen shall be randomly selected based on the list of Arbitrators in Sec. 6.2 and geographical location of the jurisdictional dispute and upon his/her availability, and ability to conduct a Hearing within two (2) business days of said notice. The Arbitrator may issue a "bench" decision immediately following the Hearing or he/she may elect to only issue a written decision, said decision must be issued within two (2) business days subsequent to the completion of the Hearing. Copies of all notices, pleadings, supporting memoranda, decisions, etc. shall be provided to all disputing parties and the Illinois State Federation of Labor.

Any written decision shall be in accordance with this Process and shall be final and binding upon all parties to the dispute and may be a "short form" decision. Fees and costs of the arbitrator shall be divided evenly between the contesting parties except that any party wishing a full opinion and decision beyond the short form decision shall bear the reasonable fees and costs of such full opinion. The decision of the Arbitrator shall be final and binding upon the parties hereto, their members, and affiliates.

In cases of jurisdictional disputes or other disputes between a signatory labor organization and another labor organization, both of which is an affiliate or member of the same International Union, the matter or dispute shall be settled in the manner set forth by their International Constitution and/or as determined by the International Union's General President whose decision shall be final and binding upon all parties. In no event shall there be an abandonment of work.

- 6.9 In rendering a decision, the Arbitrator shall determine:
 - (a) First, whether a previous agreement of record or applicable agreement, including a disclaimer agreement, between National or International Unions to the dispute or agreements between local unions involved in the dispute, governs;
 - (b) Only if the Arbitrator finds that the dispute is not covered by an appropriate or applicable agreement of record or agreement between the crafts to the dispute, he shall then consider the established trade practice in the industry and prevailing practice in the locality. Where there is a previous decision of record governing the case, the Arbitrator shall give equal weight to such decision of record, unless the prevailing practice in the locality in the past ten years favors one craft. In that case, the Arbitrator shall base his decision on the prevailing practice in the locality. Except, that if the Arbitrator finds that a craft has improperly obtained the prevailing practice in the locality through raiding, the undercutting of wages or by the use of vertical agreements, the Arbitrator shall rely on the decision of record and established trade practice in the industry rather than the prevailing practice in the locality; and,

- (c) Only if none of the above criteria is found to exist, the Arbitrator shall then consider that because efficiency, cost or continuity and good management are essential to the well being of the industry, the interests of the consumer or the past practices of the employer shall not be ignored.
- (d) The arbitrator is not authorized to award back pay or any other damages for a mis-assignment of work. Nor may any party bring an independent action for back pay or any other damages, based upon a decision of an arbitrator.
- 6.10 The Arbitrator shall set forth the basis for his/her decision and shall explain his/her findings regarding the applicability of the above criteria. If lower ranked criteria are relied upon, the Arbitrator shall explain why the higher-ranked criteria were not deemed applicable. The Arbitrator's decision shall only apply to the Project. Agreements of Record, for other PLA projects, are applicable only to those parties signatory to such agreements. Decisions of Record are those that were either attested to by the former Impartial Jurisdictional Disputes Board or adopted by the National Arbitration Panel.
- 6.11 All interested parties, as determined by the Arbitrator, shall be entitled to make presentations to the Arbitrator. Any interested labor organization affiliated to the PLA Committee and party present at the Hearing, whether making a presentation or not, by such presence shall be deemed to accept the jurisdiction of the Arbitrator and to agree to be bound by its decision. In addition to the representative of the local labor organization, a representative of the labor organization's International Union may appear on behalf of the parties. Each party is responsible for arranging for its witnesses. In the event an Arbitrator's subpoena is required, the party requiring said subpoena shall prepare the subpoena for the Arbitrator to execute. Service of the subpoena upon any witness shall be the responsibility of the issuing party.

Attorneys shall not be permitted to attend or participate in any portion of a Hearing.

The parties are encouraged to determine, prior to Hearing, documentary evidence which may be presented to the Arbitrator on a joint basis.

- 6.12 The Order of Presentation in all Hearings before an Arbitrator shall be
 - I. Identification and Stipulation of the Parties
 - II. Unions(s) claiming the disputed work presents its case
 - III. Union(s) assigned the disputed work presents its case
 - IV. Employer assigning the disputed work presents its case
 - V. Evidence from other interested parties (i.e., general contractor, project manager, owner)
 - VI. Rebuttal by union(s) claiming the disputed work
 - VII. Additional submissions permitted and requested by

Arbitrator VIII. Closing arguments by the parties

- 6.13 All parties bound to the provisions of this Process hereby release the Illinois State Federation of Labor and IDOT, their respective officers, agents, employees or designated representatives, specifically including any Arbitrator participating in said Process, from any and all liability or claim, of whatsoever nature, and specifically incorporating the protections provided in the Illinois Arbitration Act, as amended from time to time.
- 6.14 The Process, as an arbitration panel, nor its Administrator, shall have any authority to undertake any action to enforce its decision(s). Rather, it shall be the responsibility of the prevailing party to seek appropriate enforcement of a decision, including findings, orders or awards of the Arbitrator or Administrator determining non-compliance with a prior award or decision.
- 6.15 If at any time there is a question as to the jurisdiction of the Illinois Jurisdictional Dispute Resolution Process, the primary responsibility for any determination of the arbitrability of a dispute and the jurisdiction of the Arbitrator shall be borne by the party requesting the Arbitrator to hear the underlying jurisdictional dispute. The affected party or parties may proceed before the Arbitrator even in the absence or one or more stipulated parties with the issue of jurisdiction as an additional item to be decided by the Arbitrator. The Administrator may participate in proceedings seeking a declaration or determination that the underlying dispute is subject to the jurisdiction and process of the Illinois Jurisdictional Dispute Resolution Process. In any such proceedings, the non-prevailing party and/or the party challenging the jurisdiction of the Illinois Jurisdictional Dispute Resolution Process shall bear all the costs, expenses and attorneys' fees incurred by the Illinois Jurisdictional Dispute Resolution Process and/or its Administrator in establishing its jurisdiction.

ARTICLE VII - WORK STOPPAGES AND LOCKOUTS

7.1 During the term of this PLA, no Union or any of its members, officers, stewards, employees, agents or representatives shall instigate, support, sanction, maintain, or participate in any strike, picketing, walkout, work stoppage, slow down or other activity that interferes with the routine and timely prosecution of work at the Project site or at any other contractor's or supplier's facility that is necessary to performance of work at the Project site. Hand billing at the Project site during the designated lunch period and before commencement or following conclusion of the established standard workday shall not, in itself, be deemed an activity that interferes with the routine and timely prosecution of work on the Project.

- 7.2 Should any activity prohibited by paragraph 7.1 of this Article occur, the Union shall undertake all steps reasonably necessary to promptly end such prohibited activities.
 - 7.2.A No Union complying with its obligations under this Article shall be liable for acts of employees for which it has no responsibility or for the unauthorized acts of employees it represents. Any employee who participates or encourages any activity prohibited by paragraph 7.1 shall be immediately suspended from all work on the Project for a period equal to the greater of (a) 60 days; or (b) the maximum disciplinary period allowed under the applicable collective bargaining agreement for engaging in comparable unauthorized or prohibited activity.
 - 7.2.B Neither the PLA Committee nor its affiliates shall be liable for acts of employees for which it has no responsibility. The principal officer or officers of the PLA Committee will immediately instruct, order and use the best efforts of his office to cause the affiliated union or unions to cease any violations of this Article. The PLA Committee in its compliance with this obligation shall not liable for acts of its affiliates. The principal officer or officers of any involved affiliate will immediately instruct, order or use the best effort of his office to cause the employees the union represents to cease any violations of this Article. A union complying with this obligation shall not be liable for unauthorized acts of employees it represents. The failure of the Contractor to exercise its rights in any instance shall not be deemed a waiver of its rights in any other instance.

During the term of this PLA, the Prime Contractor and its Subcontractors shall not engage in any lockout at the Project site of employees covered by this Agreement.

- 7.3 Upon notification of violations of this Article, the principal officer or officers of the local area Building and Construction Trades Council, and the Illinois AFL-CIO Statewide Project Labor Agreement Committee as appropriate, will immediately instruct, order and use their best efforts to cause the affiliated union or unions to cease any violations of this Article. A Trades Council and the Committee otherwise in compliance with the obligations under this paragraph shall not be liable for unauthorized acts of its affiliates.
- 7.4 In the event that activities in violation of this Article are not immediately halted through the efforts of the parties, any aggrieved party may invoke the special arbitration provisions set forth in paragraph 7.5 of this Article.

- 7.5 Upon written notice to the other involved parties by the most expeditious means available, any aggrieved party may institute the following special arbitration procedure when a breach of this Article is alleged:
 - 7.5.A The party invoking this procedure shall notify the individual designated as the Permanent Arbitrator pursuant to paragraph 6.8 of the nature of the alleged violation; such notice shall be by the most expeditious means possible. The initiating party may also furnish such additional factual information as may be reasonably necessary for the Permanent Arbitrator to understand the relevant circumstances. Copies of any written materials provided to the arbitrator shall also be contemporaneously provided by the most expeditious means possible to the party alleged to be in violation and to all other involved parties.
 - 7.5.B Upon receipt of said notice the Permanent Arbitrator shall set and hold a hearing within twenty-four (24) hours if it is contended the violation is ongoing, but not before twenty-four (24) hours after the written notice to all parties involved as required above.
 - 7.5.C The Permanent Arbitrator shall notify the parties by facsimile or any other effective written means, of the place and time chosen by the Permanent Arbitrator for this hearing. Said hearing shall be completed in one session. A failure of any party or parties to attend said hearing shall not delay the hearing of evidence or issuance of an Award by the Permanent Arbitrator.
 - 7.5.D The sole issue at the hearing shall be whether a violation of this Article has, in fact, occurred. An Award shall be issued in writing within three (3) hours after the close of the hearing, and may be issued without a written opinion. If any party desires a written opinion, one shall be issued within fifteen (15) days, but its issuance shall not delay compliance with, or enforcement of, the Award. The Permanent Arbitrator may order cessation of the violation of this Article, and such Award shall be served on all parties by hand or registered mail upon issuance.
 - 7.5.E Such Award may be enforced by any court of competent jurisdiction upon the filing of the Award and such other relevant documents as may be required. Facsimile or other hardcopy written notice of the filing of such enforcement proceedings shall be given to the other relevant parties. In a proceeding to obtain a temporary order enforcing the Permanent Arbitrator's Award as issued under this Article, all parties waive the right to a hearing and agree that such proceedings may be ex parte. Such agreement does not waive any party's right to participate in a hearing for a final order of enforcement. The Court's order or orders enforcing the Permanent Arbitrator's Award shall be served on all parties by hand or by delivery to their last known address or by registered mail.

- 7.6 Individuals found to have violated the provisions of this Article are subject to immediate termination. In addition, IDOT reserves the right to terminate this PLA as to any party found to have violated the provisions of this Article.
- 7.7 Any rights created by statue or law governing arbitration proceedings inconsistent with the above procedure or which interfere with compliance therewith are hereby waived by parties to whom they accrue.
- 7.8 The fees and expenses of the Permanent Arbitrator shall be borne by the party or parties found in violation, or in the event no violation is found, such fees and expenses shall be borne by the moving party.

ARTICLE VIII - TERMS OF AGREEMENT

- 8.1 If any Article or provision of this Agreement shall be declared invalid, inoperative or unenforceable by operation of law or by any of the above mentioned tribunals of competent jurisdiction, the remainder of this Agreement or the application of such Article or provision to persons or circumstances other than those as to which it has been held invalid, inoperative or unenforceable shall not be affected thereby.
- 8.2 This Agreement shall be in full force as of and from the date of the Notice of Award until the Project contract is closed.
- 8.3 This PLA may not be changed or modified except by the subsequent written agreement of the parties. All parties represent that they have the full legal authority to enter into this PLA. This PLA may be executed by the parties in one or more counterparts.
- 8.4 Any liability arising out of this PLA shall be several and not joint. IDOT shall not be liable to any person or other party for any violation of this PLA by any other party, and no Contractor or Union shall be liable for any violation of this PLA by any other Contractor or Union.
- 8.5 The failure or refusal of a party to exercise its rights hereunder in one or more instances shall not be deemed a waiver of any such rights in respect of a separate instance of the same or similar nature.

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Addendum A

IDOT Slate of Permanent Arbitrators

- 1. Bruce Feldacker
- 2. Thomas F. Gibbons
- 3. Edward J. Harrick
- 4. Brent L. Motchan
- 5. Robert Perkovich
- 6. Byron Yaffee
- 7. Glenn A. Zipp

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.], 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 established and entered into by the Illinois Department of Transportation 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)

SWPPP



Storm Water Pollution Prevention Plan



Route	Marked Route	Section Number	
FAI 74	174	92(12,12-1)RS-2	
Project Number	County	Contract Number	
C-95-010-14	Vermilion	70A55	

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.

Kersil a Henrit	tous	10/1/a
Print Name	Title	Agency
Kensil A. Garnett	Region 3 Engineer	IDOT

Note: Guidance on preparing each section of BDE 2342 can be found in Chapter 41 of the IDOT Bureau of Design and Environment (BDE) Manual. Chapter 41 and this form also reference the IDOT Drainage Manual which should be readily available.

I. Site Description:

A. Provide a description of the project location; include latitude and longitude, section, town, and range:

This project is located along section 92(12,12-1)RS-2 of I 74 and consist of 5.312 miles of designed overlay and pipe underdrain replacement that extends from 0.4 Miles East of US 150 / ILL 1 at Tilton to the Indiana State Line. The Project limits begin at STA. 1951+00.00 (40°06'18.8"N 87°37'41.3"W, Sec 17, T19N, R11W, 2 PM.) and ends at STA. 2231+53.37 (40°07'03.9"N 87°31'54.1"W, Sec 18, T19N, R10W, 2 PM.)

B. Provide a description of the construction activity which is the subject of this plan. Include the number of construction stages, drainage improvements, in-stream work, installation, maintenance, removal of erosion measures, and permanent stabilization:

The intent of the project is to inlay I 74 with 7" of HMA, replace the pipe underdrains throughout the section, and fix the ditches near Brewer Road.

Pipe underdrain work will include installing a French drain style pipe in the median ditch at various locations.

Repairs to the ditches near the Brewer Road overhead structure. This work will take place in both EB and WB directions from STA. 2100+00 to STA. 2162+95. Repairs will include installing a French drain style pipe in the ditch bottoms.

Construction is expected to take place in two stages for each direction of traffic.

Temporary Erosion control measures will be used throughout construction to minimize the impact of excavation work. This includes inlet and pipe protection and temporary erosion control seeding. These will be placed during relevant excavation work and removed after vegetation has been regrown.

C.	Provide	the	estimated	duration	of	this	project:

110 Working Days.

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D. The total area of the construction site is	estimated to be 249.77 acre	es.	
The total area of the site estimated to be	e disturbed by excavation, grading or other activi	ties is <u>0.626</u>	acres.
E. The following are weighted averages of Section 4-102 of the IDOT Drainage Ma	the runoff coefficient for this project before and a	after construction activities	s are completed; see
Before: 0.52			
After: 0.52			
	ries; include map unit name, slope information, a		
	 These soils are assigned to Hydrolog 		They have
	nt slopes and are Somewhat poorly dra		
· ·	These soils are assigned to Hydrologic	Soil Group(s) C/D. T	hey have slopes
	es and are Somewhat poorly drained.		D/D. They have
slopes that range from 0 to 2 perce			
that range from 2 to 5 percent slope			
that range from 35 to 75 percent slo			
	 These soils are assigned to Hydrolo es and are Moderately well drained. 	gic Soil Group(s) C.	They have slopes
	 These soils are assigned to Hydrolog int slopes and are Somewhat poorly dra 		They have
	 These soils are assigned to Hydrolog 		They have
	nt slopes and are Somewhat poorly dra		
that range from 2 to 5 percent slope			
slopes that range from Bloomingtor	 These soils are assigned to Hydrolon Ridged Plain, 0 to 2 percent slopes and — These soils are assigned to Hydrolon telepose and are Well drained. 	d are Somewhat poo	rly drained.
Whitaker loam — 571A — 0.1% —	These soils are assigned to Hydrologic es and are Somewhat poorly drained.	Soil Group(s) B/D. T	hey have slopes
	e soils are assigned to Hydrologic Soil (Group(s) C. They hav	e slopes that
	se soils are assigned to Hydrologic Soil	Group(s) C. They ha	ve slopes that
	These soils are assigned to Hydrologic	Soil Group(s) C. The	ey have slopes
	-1.1% — These soils are assigned to H	ydrologic Soil Group(s) C. They have
	- These soils are assigned to Hydrologic	Soil Group(s) B/D.	They have
	nt slopes, frequently flooded and are So		
	 5.7% — These soils are assigned to nt slopes, rarely flooded and are Well d 		p(s) A. They have
Landes fine sandy loam — 8304A -	— 7.4% — These soils are assigned to nt slopes, occasionally flooded and are	Hydrologic Soil Group	p(s) A. They have
	hese soils are assigned to Hydrologic S		ev have slones
	es and are Somewhat poorly drained.	5.1 5.10 ap(3) 6/15. The	2, 114 to 310pes
G. If wetlands were delineated for this proje	ect, provide an extent of wetland acreage at the	site; see Phase I report:	
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· · · · · · · · · · · · · · · · · · ·	1 490 2 01 0	DI	(1 107 017 107 10

H. Provide a description of potentially erosive areas associated with this project:

Potentially erosive areas associated with this project include locations where pipe underdrains are being installed and locations with proposed ditch work.

 The following is a description of soil disturbing activities by stages, their locations, and their erosive factors (e.g., steepness of slopes, length of slopes, etc.):

Slopes at ~1 .5% on the pavement. Slopes are 4% on the HMA shoulders. Slopes are 6% to 9% on the aggregate shoulders. The foreslopes vary from 1:2 to 1:4 and flatter.

Schedules of all proposed work can be found in the Plans.

Soil disturbing activities include pipe underdrain installation (see Pipe Underdrain Schedule and Plan Sheets for limits) and ditch remediation work (See Ditch Remediation Schedule and Plan Sheets for limits)

J. See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking (to be added after contractor identifies locations), areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where storm water is discharged to surface water including wetlands.

K. Identify who owns the drainage system (municipality or agency) this project will drain into:

Illinois

Illinois Department of Transportation

Vermilion County

City of Danville

Danville Township

Indiana

Indiana Department of Transportation

Vermilion County (Indiana)

Highland Township (Indiana)

L. The following is a list of General NPDES ILR40 permittees within whose reporting jurisdiction this project is located:

Illinois Department of Transportation MS4 - ILR400493

Danville MS4 - ILR400546

M. The following is a list of receiving water(s) and the ultimate receiving water(s) for this site. In addition, include receiving waters that are listed as Biologically Significant Streams by the Illinois Department of Natural Resources (IDNR). The location of the receiving waters can be found on the erosion and sediment control plans:

The runoff for this project will sheet flow into the drainage ditches along I 74.

Receiving Waters:

Lick Creek

Stoney Creek

Koehn Creek

Vermilion River

Biologically Significant Streams: None within the limits

Source:

https://gispub.epa.gov/npdes/StormwaterDischargeIframeSrcV2.html?

extent=-9757576.011713037,4881000.168750373,-9748866.967802806,4882911.094457499&wkt=GEOMETR YCOLLECTION(POLYGON((-9753890.313755414 4881856.054459674, -9752686.430559924

4882639.533999596, -9748329.519947676 4882792.408056166, -9745826.207271345 4882859.290455906, -9744889.853674853 4883050.3830266185, -9745272.038816279 4883566.332967543, -9745004.50921728

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4883814.75330947, -9744708.315732677 4883642.769995828, -9744393.012991 4883356.131139759, -9744029.937106647 4883193.702454654, -9744049.046363717 4882954.836741262, -9744765.64350389 4882821.071941763, -9745501.349901134 4882649.088628123, -9747928.225549182 4882601.315485442, -9750785.059481336 4882477.105314478, -9752457.119475072 4882448.441428872, -9752600.438903106 4882161.802572803, -9753030.39718721 4882161.802572806, -9753689.666556168 4881693.6257745605, -9753813.87672713 4881767.300918033, -9753890.313755414 4881856.054459674)))

N. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes (i.e., 1:3 or steeper), highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc. Include any commitments or requirements to protect adjacent wetlands.

For any storm water discharges from construction activities within 50-feet of Waters of the U.S. (except for activities for waterdependent structures authorized by a Section 404 permit, describe: a) How a 50-foot undisturbed natural buffer will be provided between the construction activity and the Waters of the U.S. or b) How additional erosion and sediment controls will be provided within

The areas outside the limits of construction shall remain undisturbed. Only areas noted in the plans shall be

disturbed. All backslopes and ditch bottoms shall remain undisturbed. Foreslopes outside of HMA shoulder construction shall be undisturbed. O. Per the Phase I document, the following sensitive environmental resources are associated with this project and may have the potential to be impacted by the proposed development. Further guidance on these resources is available in Section 41-4 of the BDE Manual. 303(d) Listed receiving waters for suspended solids, turbidity, or siltation.

The name(s) of the listed water body, and identification of all pollutants causing impairment: Causes of Impairment: ALDRIN, DIELDRIN, ENDRIN, FECAL COLIFORM, HEPTACHLOR, MERCURY, MIREX, POLYCHLORINATED BIPHENYLS (PCBS), TOXAPHENE Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event: Temporary erosion control systems will be utilized during construction to prevent sediment from leaving the project. Inlet protection will be utilized following guidance provided in Chapter 41 of the BDE Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body: Ditches and the median at S.N. 092-0014 and S.N. 092-0015 discharge into Vermilion River. Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body: N/A Applicable Federal, Tribal, State, or Local Programs N/A ☐ Floodplain N/A ☐ Historic Preservation N/A Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or siltation TMDL (fill out this section if checked above) The name(s) of the listed water body:

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N/A. Vermilion River does not have sediment, total susp	ended solids, turbidity or siltation TMDL.
Provide a description of the erosion and sediment control strategy the assumptions and requirements of the TMDL:	at will be incorporated into the site design that is consistent with the
N/A	
If a specific numeric waste load allocation has been established that necessary steps to meet that allocation:	would apply to the project's discharges, provide a description of the
N/A	
☐ Threatened and Endangered Species/Illinois Natural Areas (INAI)/Nature Preserves
N/A	
Other	
N/A	
Wetland	
N/A	
N/A	
D. The fall color wall should be accomplished with this con-	-444
P. The following pollutants of concern will be associated with this con Antifreeze / Coolants	istruction project: Solid Waste Debris
⊠ Concrete	⊠ Solvents
Concrete Curing Compounds Concrete Trust Wests	Waste water from cleaning construction equipments
Concrete Truck Waste	Other (Specify)
☑ Fertilizers / Pesticides	Other (Specify)
□ Paints	Other (Specify)
Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids)	Other (Specify)
⊠ Soil Sediment	Other (Specify)
I.C above and for all use areas, borrow sites, and waste sites. For implementation as indicated. The Contractor shall provide to the R indicated. The Contractor, and subcontractors, will notify the Resid	esident Engineer a plan for the implementation of the measures
A. Erosion and Sediment Controls: At a minimum, controls must be	e coordinated, installed and maintained to:
Minimize the amount of soil exposed during constru	uction activity:
Minimize the disturbance of steep slopes;	
 Maintain natural buffers around surface waters, dir maximize storm water infiltration, unless infeasible; 	ect storm water to vegetated areas to increase sediment removal and
Minimize soil compaction and, unless infeasible, pr	
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scheduling of the implementation of the practices. Site plan disturbed portions of the site will be stabilized. Stabilization seeding, mulching, geotextiles, sodding, vegetative buffer st appropriate measures. Except as provided below in II.B.1 a construction activities have temporarily or permanently ceas	terim and permanent stabilization practices, including site-spec will ensure that existing vegetation is preserved where attainable actices may include but are not limited to: temporary seeding, post, protection of trees, preservation of mature vegetation, and of III.B.2, stabilization measures shall be initiated immediately what, but in no case more than one (1) day after the construction acount of the site where construction will not one	e and permanent her ere stivity in
 Where the initiation of stabilization measures is preclude practicable. 	by snow cover, stabilization measures shall be initiated as soon	as
On areas where construction activity has temporarily cea method can be used.	ed and will resume after fourteen (14) days, a temporary stabiliz	ation
The following stabilization practices will be used for this p	oject:	
Erosion Control Blanket / Mulching	Temporary Turf (Seeding, Class 7)	
Geotextiles	Temporary Mulching	
□ Permanent Seeding	Vegetated Buffer Strips	
□ Preservation of Mature Seeding	Other (Specify)	
□ Protection of Trees	Other (Specify)	
Sodding	Other (Specify)	
	Other (Specify)	
be improved. No work shall be completed outside o vegetation. Temporary erosion control seed shall be	ed by limiting the Contractor's activities to only the a the limits shown in the plans that will disturb mature placed in disturbed areas as soon as practical follow	ing
rough grading. Permanent seeding and mulch shall	e placed upon completion of final grading operations	
Describe how the stabilization practices listed above will be util	ed after construction activities have been completed:	
Permanent vegetation will be established before the		
Permanent vegetation will be established before the		
C. Structural Practices: Provided below is a description of str divert flows from exposed soils, store flows or otherwise limit Such practices may include but are not limited to: perimeter subsurface drains, pipe slope drains, level spreaders, storm		site. n checks, g
C. Structural Practices: Provided below is a description of str divert flows from exposed solls, store flows or otherwise limit Such practices may include but are not limited to: perimeter subsurface drains, pipe slope drains, level spreaders, storm systems, gabions, and temporary or permanent sediment ba	contract is closed out. ctural practices that will be implemented, to the degree attainable unoff and the discharge of pollutants from exposed areas of the osion barrier, earth dikes, drainage swales, sediment traps, ditcl ain inlet protection, rock outlet protection, reinforced soil retaining	site. n checks, g
C. Structural Practices: Provided below is a description of str divert flows from exposed soils, store flows or otherwise limit Such practices may include but are not limited to: perimeter subsurface drains, pipe slope drains, level spreaders, storm systems, gabions, and temporary or permanent sediment ba Clean Water Act.	contract is closed out. ctural practices that will be implemented, to the degree attainable unoff and the discharge of pollutants from exposed areas of the osion barrier, earth dikes, drainage swales, sediment traps, ditcle ain inlet protection, rock outlet protection, reinforced soil retaining. The installation of these devices may be subject to Section of the	site. n checks, g
C. Structural Practices: Provided below is a description of str divert flows from exposed soils, store flows or otherwise limit Such practices may include but are not limited to: perimeter subsurface drains, pipe slope drains, level spreaders, storm systems, gabions, and temporary or permanent sediment ba Clean Water Act. Aggregate Ditch	contract is closed out. ctural practices that will be implemented, to the degree attainable unoff and the discharge of pollutants from exposed areas of the osion barrier, earth dikes, drainage swales, sediment traps, ditcle ain inlet protection, rock outlet protection, reinforced soil retaining. The installation of these devices may be subject to Section of Stabilized Construction Exits	site. n checks, g
C. Structural Practices: Provided below is a description of str divert flows from exposed soils, store flows or otherwise limit Such practices may include but are not limited to: perimeter subsurface drains, pipe slope drains, level spreaders, storm systems, gabions, and temporary or permanent sediment bat Clean Water Act. Aggregate Ditch Concrete Revetment Mats	contract is closed out. ctural practices that will be implemented, to the degree attainable unoff and the discharge of pollutants from exposed areas of the osion barrier, earth dikes, drainage swales, sediment traps, ditcle ain inlet protection, rock outlet protection, reinforced soil retaining. The installation of these devices may be subject to Section of Stabilized Construction Exits Stabilized Trench Flow	site. n checks, g
C. Structural Practices: Provided below is a description of str divert flows from exposed soils, store flows or otherwise limit Such practices may include but are not limited to: perimeter subsurface drains, pipe slope drains, level spreaders, storm systems, gabions, and temporary or permanent sediment bat Clean Water Act. Aggregate Ditch Concrete Revetment Mats Dust Suppression	contract is closed out. ctural practices that will be implemented, to the degree attainable unoff and the discharge of pollutants from exposed areas of the osion barrier, earth dikes, drainage swales, sediment traps, ditcle ain inlet protection, rock outlet protection, reinforced soil retaining. The installation of these devices may be subject to Section of Stabilized Construction Exits Stabilized Trench Flow Slope Mattress	site. n checks, g
C. Structural Practices: Provided below is a description of str divert flows from exposed soils, store flows or otherwise limit Such practices may include but are not limited to: perimeter subsurface drains, pipe slope drains, level spreaders, storm systems, gabions, and temporary or permanent sediment bat Clean Water Act. Aggregate Ditch Concrete Revetment Mats Dust Suppression Dewatering Filtering	contract is closed out. ctural practices that will be implemented, to the degree attainable unoff and the discharge of pollutants from exposed areas of the osion barrier, earth dikes, drainage swales, sediment traps, ditcleain inlet protection, rock outlet protection, reinforced soil retaining. The installation of these devices may be subject to Section and Stabilized Construction Exits Stabilized Trench Flow Slope Mattress Slope Walls	site. n checks, g
C. Structural Practices: Provided below is a description of str divert flows from exposed soils, store flows or otherwise limit Such practices may include but are not limited to: perimeter subsurface drains, pipe slope drains, level spreaders, storm systems, gabions, and temporary or permanent sediment ba Clean Water Act. Aggregate Ditch Concrete Revetment Mats Dust Suppression Dewatering Filtering Gabions	contract is closed out. ctural practices that will be implemented, to the degree attainable unoff and the discharge of pollutants from exposed areas of the osion barrier, earth dikes, drainage swales, sediment traps, ditcle ain inlet protection, rock outlet protection, reinforced soil retaining. The installation of these devices may be subject to Section Stabilized Construction Exits Stabilized Trench Flow Slope Mattress Slope Walls Temporary Ditch Check	site. n checks, g
C. Structural Practices: Provided below is a description of str divert flows from exposed soils, store flows or otherwise limit Such practices may include but are not limited to: perimeter subsurface drains, pipe slope drains, level spreaders, storm systems, gabions, and temporary or permanent sediment bat Clean Water Act. Aggregate Ditch Concrete Revetment Mats Dust Suppression Dewatering Filtering Gabions In-Stream or Wetland Work	contract is closed out. ctural practices that will be implemented, to the degree attainable unoff and the discharge of pollutants from exposed areas of the osion barrier, earth dikes, drainage swales, sediment traps, ditcleain inlet protection, rock outlet protection, reinforced soil retaining. The installation of these devices may be subject to Section Stabilized Construction Exits Stabilized Trench Flow Slope Mattress Slope Walls Temporary Ditch Check Temporary Pipe Slope Drain	site. n checks, g
C. Structural Practices: Provided below is a description of str divert flows from exposed soils, store flows or otherwise limit Such practices may include but are not limited to: perimeter subsurface drains, pipe slope drains, level spreaders, storm systems, gabions, and temporary or permanent sediment bath Clean Water Act. Aggregate Ditch Concrete Revetment Mats Dust Suppression Dewatering Filtering Gabions In-Stream or Wetland Work Level Spreaders	contract is closed out. ctural practices that will be implemented, to the degree attainable unoff and the discharge of pollutants from exposed areas of the osion barrier, earth dikes, drainage swales, sediment traps, ditcleain inlet protection, rock outlet protection, reinforced soil retainins. The installation of these devices may be subject to Section Stabilized Construction Exits Stabilized Crench Flow Slope Mattress Slope Walls Temporary Ditch Check Temporary Pipe Slope Drain Temporary Sediment Basin	site. n checks, g
C. Structural Practices: Provided below is a description of str divert flows from exposed soils, store flows or otherwise limit Such practices may include but are not limited to: perimeter subsurface drains, pipe slope drains, level spreaders, storm systems, gabions, and temporary or permanent sediment bath Clean Water Act. Aggregate Ditch Concrete Revetment Mats Dust Suppression Dewatering Filtering Gabions In-Stream or Wetland Work Level Spreaders Paved Ditch	contract is closed out. ctural practices that will be implemented, to the degree attainable unoff and the discharge of pollutants from exposed areas of the osion barrier, earth dikes, drainage swales, sediment traps, ditcleain inlet protection, rock outlet protection, reinforced soil retainins. The installation of these devices may be subject to Section Stabilized Construction Exits Stabilized Trench Flow Slope Mattress Slope Walls Temporary Ditch Check Temporary Pipe Slope Drain Temporary Sediment Basin Temporary Stream Crossing	site. n checks, g
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		ove will be utilized during construction:	
Storm Drain	Inlet Protect will be used	at each culvert under an overhead stru	cture during nearby ditch work.
Describe how th	ne structural practices listed ab	ove will be utilized after construction activities h	ave been completed:
D. Treatment C	hemicals		
Will polymer floo	cculants or treatment chemicals	s be utilized on this project: Yes No	
If yes above, ide	entify where and how polymer	flocculants or treatment chemicals will be utilized	d on this project.
installed during	the construction process to o	m Water Management Controls: Provided be control volume and pollutants in storm water on of these devices may be subject to Section 4	discharges that will occur after construction
structures, flo		imited to: storm water detention structures (in n vegetated swales and natural depressions,	
Water Polluti	ion Control) of the IDOT BE on or if practices are applied to	were determined based on the technical guida DE Manual. If practices other than those of situations different from those covered in Chap	discussed in Chapter 41 are selected for
non-erosive v are maintaine	relocity flow from the structure	at discharge locations and along the length of a to a water course so that the natural physical nance of hydrologic conditions such as the hydr	and biological characteristics and functions
Description of	permanent storm water manag	gement controls:	
installed in th	e ditch bottoms. This will	the abandoned railroad structure Frencinclude a 2' deep trench with am 8" pip they currently hold water.	
IDOT specific and requirements shall be desc plans, site pe surface water and are enforce	cations, which are at least as ents specified in applicable se cribed or incorporated by refer ermits, storm water managem resources are, upon submittal ceable under this permit even f procedures and requirements	agement practices, controls and provisions con- protective as the requirements contained in the diment and erosion site plans or storm water m rence in the space provided below. Requirem ent site plans or site permits approved by loc of an NOI, to be authorized to discharge under if they are not specifically included in the plan. It is specified in applicable sediment and erosion s	e IEPA's Illinois Urban Manual. Procedures anagement plans approved by local officials ents specified in sediment and erosion site al officials that are applicable to protecting the Permit ILR10 incorporated by reference
N/A			
G. Contractor R each subcont Statement, BI	tractor responsible for compl	conducting any professional services at the site iance with the permit shall submit to the Re	e covered by this plan, the Contractor and esident Engineer a Contractor Certification
	or shall provide a construction revention BMPs, including the f	schedule containing an adequate level of detail ollowing items:	to show major activities with implementation
	Approximate duration of the Rainy season, dry season, a	project, including each stage of the project	
	Temporary stabilization mea	sures to be employed by contract phases	
	Mobilization time-frame Mass clearing and grubbing/	roadside clearing dates	
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Deployment of Erosion Control Practices

Deployment of Sediment Control Practices (including stabilized cons

- 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.
 - 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 (chemicals, concrete curing compounds, petroleum, etc.)
- 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.
- Polymer Flocculants and Treatment Chemicals Identify the use and dosage of treatment chemicals and provide the Resident Engineer with Material Safety Data Sheets. Describe procedures on how the chemicals will be used and identify who will be responsible for the use and application of these chemicals. The selected individual must be trained on the established procedures.
 - Additional measures indicated in the plan.

III. Maintenance:

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. Describe how all items will be checked for structural integrity, sediment accumulation and functionality. Any damage or undermining shall be repaired immediately. Provide specifics on how repairs will be made. The following additional procedures will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. 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.

- 1 Construction operations are considered complete after acceptance of the final inspection.
- Improved areas will be inspected on a regular basis by IDOT District 5 Bureau of Operations.
- 3. Maintenance crews will also aid in any ditch maintenance and drainage issues.
- 4. All Maintenance operations will be conducted at times when weather conditions will not cause site damage.

IV. Inspections:

Qualified personnel shall inspect disturbed areas of the construction site including Borrow, Waste, and Use Areas, which have not yet been finally stabilized, structural control measures, and locations where vehicles and equipment enter and exit the site using IDOT Storm Water Pollution Prevention Plan Erosion Control Inspection Report, BC 2259. Such inspections shall be conducted at least once every seven (7) calendar days and within twenty-four (24) hours of the end of a storm or by the end of the following business or work day that is 0.5 inch or greater or equivalent snowfall.

Inspections may be reduced to once per month when construction activities have ceased due to frozen conditions. Weekly inspections

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will recommence when construction activities are conducted, or if there is 0.5" or greater rain event, or a discharge due to snowmelt occurs.

If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer shall notify the appropriate IEPA Field Operations Section office by email at: epa.swnoncomp@illinois.gov, telephone or fax within twenty-four (24) hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Non-Compliance" (ION) report for the identified violation within five (5) days of the incident. The Resident Engineer shall use forms provided by IEPA and shall 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. All reports of non-compliance shall be signed by a responsible authority in accordance with Part VI. G of the Permit ILR10.

The Incidence of Non-Compliance shall be mailed to the following address: Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn: Compliance Assurance Section
1021 North Grand East
Post Office Box 19276
Springfield, Illinois 62794-9276

V. 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.

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REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- 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
- 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 designbuild 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 designbuilder 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, preapprenticeship, and/or on-the-job training."

- 2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women

- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

- a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.
- b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:
 - (1) Withholding monthly progress payments;
 - (2) Assessing sanctions;
 - (3) Liquidated damages, and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.
- c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
- a. The records kept by the contractor shall document the following:

- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA- 1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

- a. Wage rates and fringe benefits. All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.
- b. Frequently recurring classifications. (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:
 - (i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

- (ii) The classification is used in the area by the construction industry; and
- (iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.
- (2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.
- c. Conformance. (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:
 - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (ii) The classification is used in the area by the construction industry; and
 - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.
- (3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.
- (4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to <code>DBAconformance@dol.gov</code>, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.
- (5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

- under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- d. Fringe benefits not expressed as an hourly rate. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- e. Unfunded plans. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
- f. Interest. In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

- a. Withholding requirements. The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.
- b. Priority to withheld funds. The Department has priority to funds withheld or to be withheld in accordance with paragraph

- 2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:
- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
 - (2) A contracting agency for its reprocurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
 - (4) A contractor's assignee(s);
 - (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, <u>31</u> U.S.C. 3901–3907.

3. Records and certified payrolls (29 CFR 5.5)

- a. Basic record requirements (1) Length of record retention. All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.
- (2) Information required. Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.
- (3) Additional records relating to fringe benefits. Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.
- (4) Additional records relating to apprenticeship. Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.
- b. Certified payroll requirements (1) Frequency and method of submission. The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

- agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.
- (2) Information required. The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at https://www.dol.gov/sites/dolgov/files/WHD/ legacy/files/wh347/.pdf or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.
- (3) Statement of Compliance. Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:
 - (i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;
 - (ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and
 - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.
- (4) Use of Optional Form WH–347. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

- (5) Signature. The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.
- (6) Falsification. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.
- (7) Length of certified payroll retention. The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
- c. Contracts, subcontracts, and related documents. The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
- d. Required disclosures and access (1) Required record disclosures and access to workers. The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.
- (2) Sanctions for non-compliance with records and worker access requirements. If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.
- (3) Required information disclosures. Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action

4. Apprentices and equal employment opportunity (29 CFR 5.5)

- a. Apprentices (1) Rate of pay. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (2) Fringe benefits. Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.
- (3) Apprenticeship ratio. The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.
- (4) Reciprocity of ratios and wage rates. Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.
- b. Equal employment opportunity. The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.
- **6. Subcontracts**. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- **8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.
- 9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
- 10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of $\underline{40}$ $\underline{\text{U.s.c. }3144(b)}$ or \S 5.12(a).
- c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, <u>18</u> <u>U.S.C. 1001</u>.
- **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 $\underline{29\ CFR\ part\ 1}$ or $\underline{3}$;
- c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or
- d. Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

- a. Withholding process. The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.
- b. *Priority to withheld funds*. The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:
- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
 - (2) A contracting agency for its reprocurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate:
 - (4) A contractor's assignee(s);
 - (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, <u>31</u> 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 EYELLISION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

- e. The terms "covered transaction," "debarred,"
 "suspended," "ineligible," "participant," "person," "principal,"
 and "voluntarily excluded," as used in this clause, are defined
 in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200.
 "First Tier Covered Transactions" refers to any covered
 transaction between a recipient or subrecipient of Federal
 funds and a participant (such as the prime or general contract).
 "Lower Tier Covered Transactions" refers to any covered
 transaction under a First Tier Covered Transaction (such as
 subcontracts). "First Tier Participant" refers to the participant
 who has entered into a covered transaction with a recipient or
 subrecipient of Federal funds (such as the prime or general
 contractor). "Lower Tier Participant" refers any participant who
 has entered into a covered transaction with a First Tier
 Participant or other Lower Tier Participants (such as
 subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/). 2 CFR 180.300, 180.320, and 180.325.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

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2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800:
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800: and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).
- (5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and
- (6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

- a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 - 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

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4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:
- (1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;
- (2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and
- (3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)
- b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

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XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or

cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

- 1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.
- 2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS

ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B) This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
- a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.
- 5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region
- 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.