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Letting March 11, 2022

Notice to Bidders, Specifications and Proposal



Contract No. 93779
BROWN County
Section 16-00017-02-RS (Mt. Sterling)
Route CAPITOL AVENUE
Project 1M7T-022 ()
District 6 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. March 11, 2022 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. 93779
BROWN County
Section 16-00017-02-RS (Mt. Sterling)
Project 1M7T-022 ()
Route CAPITOL AVENUE
District 6 Construction Funds

Pavement removal, curb & gutter, brick pavers, sidewalks, resurfacing, streetscape, lighting, and pavement markings on Capital Avenue from North Street to South Street in Mt. Sterling.

- 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, 2022

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

No ERRATA this year.

SUPPLEMENTAL SPECIFICATIONS

Std. Spec. Sec. Page No.

No Supplemental Specifications this year.

RECURRING SPECIAL PROVISIONS

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

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30		Longitudinal Joint and Crack Patching				
31		Concrete Mix Design – Department Provided				
32		Station Numbers in Payements or Overlays				

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BDE SPECIAL PROVISIONS

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

	<u>File</u> Name	<u>Pg.</u>		Special Provision Title	Effective	Revised
*	80099			Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2022
	80274			Aggregate Subgrade Improvement	April 1, 2012	April 1, 2016
	80192	56	Х	Automated Flagger Assistance Device	Jan. 1, 2008	
	80173			Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
*	80246			Bituminous Surface Treatment with Fog Seal	Jan. 1, 2020	Jan. 1, 2022
	80436	58	Χ	Blended Finely Divided Minerals	April 1, 2021	
	80241			Bridge Demolition Debris	July 1, 2009	
	50261			Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	50481			Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	50491			Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	50531			Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
	80384	59	X	Compensable Delay Costs	June 2, 2017	April 1, 2019
	80198			Completion Date (via calendar days)	April 1, 2008	
	80199			Completion Date (via calendar days) Plus Working Days	April 1, 2008	
	80293			Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	July 1, 2016
	80311			Concrete End Sections for Pipe Culverts	Jan. 1, 2013	April 1, 2016
	80261			Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
	80434			Corrugated Plastic Pipe (Culvert and Storm Sewer)	Jan. 1, 2021	
	80029	63	Х	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Mar. 2, 2019
	80229			Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
*	80433			Green Preformed Thermoplastic Pavement Markings	Jan. 1, 2021	Jan. 1, 2022
*	80422			High Tension Cable Median Barrier	Jan. 1, 2020	Jan. 1, 2022
*	80442			Hot-Mix Asphalt – Start of Production	Jan. 1, 2022	
*	80438			Illinois Works Apprenticeship Initiative – State Funded Contracts	June 2, 2021	Sept. 2, 2021
*	80411	73	X	Luminaires, LED	April 1, 2019	Jan. 1, 2022
*	80045			Material Transfer Device	June 15, 1999	Jan. 1, 2022
	80418			Mechanically Stabilized Earth Retaining Walls	Nov. 1, 2019	Nov. 1, 2020
	80430	82	Х	Portland Cement Concrete – Haul Time	July 1, 2020	
*	34261			Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2022
	80395			Sloped Metal End Section for Pipe Culverts	Jan. 1, 2018	1 4 0000
*	80340			Speed Display Trailer	April 2, 2014	Jan. 1, 2022
^	80127	00		Steel Cost Adjustment	April 2, 2014	Jan. 1, 2022
	80397	83	X	Subcontractor and DBE Payment Reporting	April 2, 2018	A !! 4 . 0040
	80391	84	Χ	Subcontractor Mobilization Payments	Nov. 2, 2017	April 1, 2019
*	80437			Submission of Payroll Records	April 1, 2021	I 4 0000
	80435			Surface Testing of Pavements – IRI	Jan. 1, 2021	Jan. 1, 2022
*	80410	0.5	V	Traffic Spotters	Jan. 1, 2019	Camt 0 0001
	20338	85	Х	Training Special Provisions	Oct. 15, 1975	Sept. 2, 2021
*	80318			Traversable Pipe Grate for Concrete End Sections	Jan. 1, 2013	Jan. 1, 2018
	80429 80439	88	X	Ultra-Thin Bonded Wearing Course Vehicle and Equipment Warning Lights	April 1, 2020 Nov. 1, 2021	Jan. 1, 2022
	80440	00		Verlicle and Equipment Warning Lights Waterproofing Membrane System	Nov. 1, 2021 Nov. 1, 2021	
	80302	89	X	Weekly DBE Trucking Reports	June 2, 2012	Nov. 1, 2021
	80427	90	X	Work Zone Traffic Control Devices	Mar. 2, 2012	11UV. 1, ZUZ I
	80071	90		Working Days	Jan. 1, 2002	
	00071		<u> </u>	I Working Days	Jan. 1, 2002	

The following special provisions are in the 2022 Supplemental Specifications and Recurring Special Provisions.

<u>File</u> Name	Special Provision Title	New Location(s)	Effective	Revised
80425 80387 80402	Cape Seal Contrast Preformed Pavement Marking Disposal Fees	Sections 405, 1003 Articles 780.08, 1095.03 Article 109.04(b)	Jan. 1, 2020 Nov. 1, 2017 Nov. 1, 2018	Jan. 1, 2021
80378	Dowel Bar Inserter	Articles 420.03, 420.05, 1103.20	Jan. 1, 2017	Jan. 1, 2018
80421 80415	Electric Service Installation Emulsified Asphalts	Articles 804.04, 804.05 Article 1032.06	Jan. 1. 2020 Aug. 1, 2019	
80423	Engineer's Field Office and Laboratory	Section 670	Jan. 1, 2020	
80417	Geotechnical Fabric for Pipe Underdrains and French Drains	Articles 1080.01(a), 1080.05	Nov. 1, 2019	
80420	Geotextile Retaining Walls	Article 1080.06(d)	Nov. 1, 2019	
80304	Grooving for Recessed Pavement Markings	Articles 780.05, 780.14, 780.15	Nov. 1, 2012	Nov. 1, 2020
80416	Hot-Mix Asphalt – Binder and Surface Course	Sections 406, 1003, 1004, 1030, 1101	July 2, 2019	Nov. 1, 2019
80398	Hot-Mix Asphalt – Longitudinal Joint Sealant	Sections 406, 1032	Aug. 1, 2018	Nov. 1, 2019
80406	Hot-Mix Asphalt – Mixture Design Verification and Production (Modified for I-FIT)	Sections 406, 1030	Jan. 1, 2019	Jan. 2, 2021
80347	Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits – Jobsite Sampling	Sections 406, 1030	Nov. 1, 2014	July 2, 2019
80383	Hot-Mix Asphalt – Quality Control for Performance	Sections 406, 1030	April 1, 2017	July 2, 2019
80393	Manholes, Valve Vaults, and Flat Slab Tops	Articles 602.02, 1042.10	Jan. 1, 2018	Mar. 1, 2019
80424	Micro-Surfacing and Slurry Sealing	Sections 404, 1003	Jan. 1, 2020	Jan. 1, 2021
80428	Mobilization	Article 671.02	April 1, 2020	
80412	Obstruction Warning Luminaires, LED	Sections 801, 822, 1067	Aug. 1, 2019	N 4 0040
80359	Portland Cement Concrete Bridge Deck Curing	Articles 1020.13, 1022.03	April 1, 2015	Nov. 1, 2019
80431	Portland Cement Concrete Pavement Patching	Articles 701.17(e)(3)b, 1001.01(d), 1020.05(b)(5)	July 1, 2020	
80432	Portland Cement Concrete Pavement Placement	Article 420.07	July 1, 2020	
80300	Preformed Plastic Pavement Marking Type D - Inlaid		April 1, 2012	April 1, 2016
80157	Railroad Protective Liability Insurance (5 and 10)	Article 107.11	Jan. 1, 2006	
80306	Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Section 1031	Nov. 1, 2012	Jan. 2, 2021
80407	Removal and Disposal of Regulated Substances	Section 669	Jan. 1, 2019	Jan. 1, 2020
80419	Silt Fence, Inlet Filters, Ground Stabilization and Riprap Filter Fabric	Articles 280.02, 280.04, 1080.02, 1080.03, 1081.15	Nov. 1, 2019	July 1, 2021
80408	Steel Plate Beam Guardrail Manufacturing	Article 1006.25	Jan. 1, 2019	
80413	Structural Timber	Article 1007.03	Aug. 1, 2019	
80298	Temporary Pavement Marking	Section 703, Article 1095.06	April 1, 2012	April 1, 2017
80409	Traffic Control Devices – Cones	Article 701.15(a), 1106.02(b)	Jan. 1, 2019	A 11.4 00.40
80288	Warm Mix Asphalt	Sections 406, 1030, 1102	Jan. 1, 2012	April 1, 2016
80414	Wood Fence Sight Screen	Article 641.02	Aug. 1, 2019	April 1, 2020

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 invitations of bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the check sheet included herein which apply to and govern the construction of Section 16-00017-02-RS Project 1M7T(022) in the City of Mt. Sterling, and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

DESCRIPTION OF WORK: This contract shall consist of removing existing pavements, curb and gutter, sidewalk and constructing new concrete curb and gutter, brick pavers and milling and resurfacing of parking and thru travel lanes. Work items also include storm sewer, concrete sidewalk, landscape/streetscape, lighting, and other related work.

COMPLETION DATE: All work required in this contract shall be completed by December 16, 2022. In addition to the final completion date all asphalt paving, pavement marking, and sodding shall be completed by November 1, 2022.

If the contractor fails to complete the required work by the completion date(s), he/she shall be liable to the Department for liquidated damages in accordance with Article 108.09 of the Standard Specifications, and any other additional special provision which may be attached herein which supplements Article 108.09. The Contractor will also be liable for additional items of work made necessary by not meeting the completion date(s). Such items include, but are not restricted to pavement patching, temporary sidewalk, temporary pavement marking, temporary erosion control, and temporary seeding.

<u>J.U.L.I.E.:</u> The toll-free telephone number of Joint Utility Locating Information for Excavators is 800-892-0123 or 811.

<u>IDOT UTILITY PERMIT:</u> An Illinois Department of Transportation (IDOT) utility permit is pending with IDOT and is necessary for the construction of the watermain to be bored under US 24 at Capitol Avenue. It will be the responsibility of the Contractor to provide three original executed copies of the bond form and complete the Traffic Control Authorization Request Form and return them to IDOT as indicated in the attached email and letter. The IDOT permit shall be approved by IDOT prior to construction of the bored watermain. Cost of obtaining the permit shall not be paid for separately but shall be included in the contract unit price for WATER MAIN 6" BORED.

TRAFFIC CONTROL: 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 Article 107.09 and Sections 701 thru 703 of the Standard Specifications for Road and Bridge Construction and the following Highway Standards:

This project shall be constructed under traffic. Proposed Lane Closures, which at any time will prevent maintenance of two-way traffic, shall be presented to the Engineer for approval prior to implementation.

Two-way traffic shall be maintained during the construction of the concrete crosswalks.

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

Type III barricades and advance warning signs shall be erected at each end of the section to safeguard the public, while warning signs shall be erected notifying traffic of construction of this project. All barricades and signs required shall be furnished by the Contractor. The Type III Barricades at the Road closure shall be equipped with two Type A warning lights.

The Contractor shall allow access to private property along the closed portions of the road or sidewalk where no other public way provides access. Open holes, trenches and drop offs shall be fenced and barricaded to protect local traffic and pedestrians. Flagger(s) will be required when work encroaches on the open lane(s).

Traffic control and protection shall be in accordance with the standards, details and special provisions in the plans and shall be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL), which price shall be payment in full for all materials, labor and equipment required to complete this item as specified and to the satisfaction of the Engineer.

STORM SEWER - WATER MAIN REQUIREMENTS: 6M14 09/01/08

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

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

- 1. Water mains and water service lines shall be located at least 10 feet (3.05 meters) horizontally from any existing or proposed drain, storm sewer, or sewer service connection.
- 2. Water mains and water service lines may be located closer than 10 feet (3.05 meters) to a sewer line when:
 - A. local conditions prevent a lateral separation of 10 feet (3.05 meters), and
 - B. the water main or water service invert is 18 inches (460 mm) above the crown of the sewer, and
 - C. the water main or water service is either in a separate trench or in the same trench on an undisturbed earth shelf located to one side of the sewer.
- 3. A water main or water service shall be separated from a sewer so that its invert is a minimum of 18 inches (460 mm) above the crown of the drain or sewer whenever water mains or services cross storm sewers, sanitary sewers or sewer service connections. The vertical separation shall be maintained for that portion of the water main or water services located 10 feet (3.05 meters) horizontally of any sewer or drain crossed.

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

Concrete Pressure Pipe

Concrete pressure pipe shall conform to the latest ANSI/AWWA C300, C301, C302, or C303.

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

Ductile Iron Pipe

Ductile-iron pipe shall conform to ANSI A 21.51 (AWWA C151), class or thickness designed per ANSI A 21.50 (AWWA C150), tar (seal) coated and/or cement lined per ANSI A 21.4 (AWWA C104), with a mechanical or rubber ring (slip seal or push on) joints.

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

1. Mechanical Joints - AWWA C111 and C600

2. Push-On Joints - AWWA C111 and C600

Plastic Pipe

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

- 1. Polyvinyl Chloride (PVC) conforming to ASTM D 1785. Schedule 80 is the minimum required for all pipe sizes, except when the pipe is to be threaded, and then it shall be Schedule 120. It shall be made from PVC compound meeting ASTM D 1784, Class 12454.
- Polyvinyl Chloride (PVC) conforming to ASTM D 2241. A minimum wall thickness of SDR 26 is required for all pipe sizes (<u>Note</u>: The lower the SDR number, the higher the wall thickness and pressure rating). It shall be made from PVC compound meeting ASTM D 1784, Class 12454.
- 3. Chlorinated Polyvinyl Chloride (CPVC) conforming to ASTM F 441. A minimum of Schedule 80 is required for all pipe sizes. Threaded joints are not allowed. It shall be made from CPVC compound meeting ASTM D 1784, Class 23447.
- 4. Chlorinated Polyvinyl Chloride (CPVC) conforming to ASTM F 442. A minimum wall thickness of SDR 26 is required for all pipe sizes (<u>Note</u>: The lower the SDR number, the higher the wall thickness and pressure rating). It shall be made from CPVC compound meeting ASTM D 1784, Class 23447.
- 5. Polyvinyl Chloride (PVC) conforming to ANSI/AWWA C900. A minimum of wall thickness of DR 25 is required for all pipe sizes (Note: The lower the DR number, the higher the wall thickness and pressure rating). It shall be made from PVC compound meeting ASTM D 1784, Class 12454.
- 6. Polyvinyl Chloride (PVC) conforming to ANSI/AWWA C905. A minimum of wall thickness of DR 26 is required for all pipe sizes (Note: The lower the DR number, the higher the wall thickness and pressure rating). It shall be made from PVC compound meeting ASTM D 1784, Class 12454.

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

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

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

For water-sewer line crossings <u>only</u>, storm sewer meeting water main requirements may also be constructed of reinforced concrete sewer pipe. The pipe shall conform to ASTM C 76 with a joint and rubber gasket meeting ASTM C 443. The joint shall meet the leakage performance test in ASTM C 443. The pipe manufacturer must demonstrate to Illinois Department of Transportation personnel that the joints pass the leakage performance test prior to installation of the pipe. The pipe class shall meet the requirements of Section 550 of the *Standard Specifications for Road and Bridge Construction*.

This work will be measured and paid for at the contract unit price per foot (meter) for STORM SEWER (WATER MAIN REQUIREMENTS) of the diameter specified.

<u>VALVE BOXES TO BE ADJUSTED:</u> This work shall consist of adjusting valve boxes so the top of the box is flush with the finished grade in accordance with the applicable portions of Section 565 and 602 of the Standard Specifications and as directed by the Engineer.

Basis of Payment: This work will be paid for at the contract unit price each for VALVE BOXES TO BE ADJUSTED, which price will be payment in full for all excavation; furnishing all materials; backfilling, including fine aggregate, and disposal of surplus material.

PAVEMENT REMOVAL OVER EXISTING WATER MAINS: At pavement removal locations over existing water mains, pavement breaking using impact equipment will not be permitted. This restriction will apply to pavement being removed within 10 feet of a water main location. The method of removal will be approved by the Engineer and will be included in the unit cost of the removal pay item.

<u>ADJUSTING WATER MAINS:</u> This work shall consist of lowering and relocating existing water mains in accordance with the detail shown on the plans at locations where existing water mains are in conflict with the proposed storm sewer or other construction.

All materials, construction methods, pressure testing, and disinfection of water mains shall conform with Section 561 of the Standard Specifications.

Basis of Payment: This work will be paid for at the contract unit price per foot for ADJUSTING WATER MAIN, of the size shown, measured in place. This price shall include all material, labor and equipment necessary and shall include the cost of trench backfill, hydrostatic tests and disinfecting the water main.

PRESERVING PROPERTY MARKERS: The existing property corner markers located along this section shall be protected by the Contractor. Any such monuments destroyed by the Contractor's operation shall be replaced by a Registered Land Surveyor at no additional cost to the Department.

Any expense, inconveniences, or delays caused the Contractor in complying with this Special Provision will be considered as incidental to the contract and no additional compensation will be allowed.

STATUS OF UTILITIES TO BE ADJUSTED

Name and Address of Utility	Type	Location	Estimated Date Relocation Completed
City of Mt. Sterling 201 Forest Ave. Mt. Sterling, IL	Water & Sewer	Throughout Project	During Construction
Ameren CIPS 700 Jersey Street Quincy, IL 62306	Electric (Aerial) Gas (Buried)	Throughout Project	During Construction
Adams Telephone Coop. 405 Emminga Road Golden, Illinois	Telephone	Throughout Project	During Construction
Cass Communications 100 Redbud Road Virginia, Illinois 62691	Telephone & Cable TV	Throughout Project	During Construction

The above represents the best information of the City and is only included for the convenience of the bidder. The applicable provisions of Articles 105.07 and 107.20 of the Standard Specifications for Road and Bridge Construction shall apply.

If any utility adjustment or removal has not been completed when required by the contractor's operations, the contractor should notify the Engineer in writing. A request for an extension of time will be considered to the extent the contractor's operations were affected.

The alleys located on both North and South Capital have provisions for empty conduits to be installed under this contract and capped a minimum of 12" above grade. Utilities at these locations shall be relocated underground, with the exception of high voltage transmission lines on the south alley. Two 2" conduits will be provided for the relocate at each location. The Plans and Schedules denote these installations as 'Circuit E'. Any change in size of conduit requested by the utility company shall be coordinated with the Engineer at no additional expense.

REMOVING INLETS: This work shall consist of removing inlets at the locations shown on the plans in accordance with the applicable portions of Section 605 of the Standard Specifications.

At locations designated by the Engineer the flow in the existing storm sewer system shall be maintained through the area where the inlet is to be removed. The work of removing existing inlets where flow is to be maintained shall be in accordance with Article 605.03 of the Standard Specifications.

<u>ADJUSTING WATER SERVICE LINES:</u> This work shall consist of lowering and relocating water service lines at locations where existing water service lines are in conflict with the proposed storm sewer or other construction.

All materials, construction methods, pressure testing, and disinfection of water service lines shall conform with Section 562 of the Standard Specifications.

Basis of Payment: This work will be paid for at the contract unit price per foot for ADJUSTING WATER SERVICE LINES, regardless of the size encountered, measured in place. This price shall include all material, labor, and equipment necessary and shall include the cost of trench backfill.

COMBINATION CURB AND GUTTER REMOVAL: This work shall consist of removing concrete curb and gutter, concrete curb and stone curb at locations indicated on the plans and as directed by the Engineer and in accordance with the applicable portions of Section 440 of the Standard Specifications.

Basis of Payment: This work shall be paid for at the contract unit price per foot for COMBINATION CURB AND GUTTER REMOVAL in accordance with Article 440.08 of the Standard Specifications.

SAWCUTTING PAVEMENT, SIDEWALK, CURB AND COMBINATION CURB AND GUTTER: Prior to removal of any of the above items, the joint between that portion to remain and that portion to be removed shall be neatly sawed to obtain a vertical edge.

This work shall not be paid for separately, but considered included in the cost of the item being removed.

COMBINATION CONCRETE CURB AND GUTTER ABUTTING EXISTING PAVEMENT:

This work shall consist of removing existing curb/gutter and pavement and constructing Combination Concrete Curb and Gutter that abuts the existing pavement.

For areas where existing pavement is removed beyond the minimum necessary to construct the proposed curb and gutter, the Contractor shall provide Class B Pavement Patching between the edge of the gutter flag and the edge of the sawcut. This work shall be completed in accordance with Section 442 of the Standard Specifications and as directed by the Engineer.

Prior to removal of any existing curb/gutter for construction of the new combination concrete curb and gutter, the Contractor shall longitudinally sawcut the existing pavement to provide a clean square edge for construction of the proposed curb and gutter. In areas of existing pavement where there is no existing curb/gutter, the existing pavement shall be sawcut longitudinally to provide a clean square edge for construction of the proposed curb and gutter. Saw cutting the existing pavement shall be completed in accordance with the applicable portions of Section 442 of the Standard Specifications.

The proposed construction of the Combination Concrete Curb and Gutter shall be constructed as specified in the plans, IDOT Highway Standard 606001, Section 606 of the Standard Specifications, and as directed by the Engineer.

The work necessary to construct the proposed Combination Concrete Curb and Gutter adjacent to existing pavement, including sawcuts, pavement removal, earth excavation, aggregate subbase, pavement patching, tie/dowel bars shall not be paid for separately, but shall be considered included in the cost of the COMBINATION CONCRETE CURB AND GUTTER, of the type specified, and no additional compensation will be allowed.

HAND GRADING: Grading shall be done by hand around light poles, utility poles, signposts, shrubs, trees or other natural or man-made objects where shallow fills or cuts are adjacent to the items. The decision as to items to remain in place shall be as directed by the Engineer.

This work will not be paid for separately, but shall be considered included in the cost of the contract and no additional compensation will be allowed.

PRIMING OPERATIONS WITHIN THE BUSINESS DISTRICT: Care shall be taken by the Contractor during priming within the limits of this section. Consideration shall be given by the Contractor for manners of performing priming operations in these areas to minimize tracking of the prime coat by pedestrian traffic into adjacent businesses.

The Contractor shall use emulsion prime coat, prime before store hours, prime after store hours, gap prime at pedestrian crossings, prime just far enough ahead of his asphalt laydown operation to assure that the prime coat breaks or prime on weekends when businesses are closed. Care shall also be used in these areas not to prime more area than can be overlaid in one day's operation.

Any inconveniences incurred by the Contractor in complying with this Special Provision will be considered included in the cost per pound for BITUMINOUS MATERIALS (TACK COAT) and no additional compensation will be allowed.

STRINGLINE: Some or all of the milling and/or surface on this section is intended as the first step toward establishing the proposed profile grade as represented by the top of curb. In these locations which are shown in the plans, the milling and surface 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 pay item involved.

HOT-MIX ASPHALT SURFACE REMOVAL, 1 $\frac{1}{2}$. This work shall consist of the partial removal of the hot-mix asphalt surfacing of the existing pavement at the locations shown on the plans. Milling may be 1 $\frac{1}{2}$ and variable as necessary to establish the proposed profile grade and pavement cross slope.

This work shall be performed in accordance with the Special Provision for Stringline and Section 440 of the Standard Specifications.

All millings shall become the property of the City of Mt. Sterling. The Contractor shall deliver the millings to a stockpile within the City of Mt. Sterling at a location specified by the City.

This work will be paid for at the contract unit price per square yard for HOT-MIX ASPHALT SURFACE REMOVAL, 1 ½", which price shall include all labor and equipment, including stringline, necessary to complete the work to the satisfaction of the Engineer.

<u>WATER DISTRIBUTION SYSTEM</u>: This item shall consist of furnishing and installing water main, water services, fire hydrants, fittings, valves, valve boxes, line stops, water main casing and other appurtenances necessary to complete the work; said water main and appurtenances being of the type, classes, sizes and dimensions required on the plans; all items being furnished and installed at the places designated on the plans or by the Engineer, in accordance with these specifications and the plans.

This item shall include in the bid price per linear foot of water main in place, the cost of common excavation and trench backfill, the cost of furnishing and installing all trench bracing, all fittings required to complete the water main as shown on the plans, encasement of water main under existing sewer as shown on the plans and the material for and the making of all joints including all connections to existing mains.

This work shall be performed in accordance with and the materials shall comply with the applicable portions of the Standard Specifications for Water and Sewer Main Construction in Illinois, 8th Edition, dated 2020 and the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, dated January 1, 2022.

MATERIALS

<u>GENERAL</u>

The Contractor shall provide all materials required to construct a potable water main with fire hydrants, valves and fittings, valve boxes, thrust blocking, line stops, water main encasement, disinfecting and testing materials meeting regulatory requirements in accordance with:

- 1. Illinois Environmental Protection Agency:
 - a. Technical Policy Statements, Nov. 1, 1985.
 - b. "Recommended Standards for Water Works," 2012 Edition.
- 2. American Water Works Association (AWWA):
 - a. Cement Mortar Lining for Ductile Iron and Gray Iron Pipe and Fittings for Water (ANSI/AWWA C104/A21.4-90).
 - b. Rubber Gasket Joints for Ductile Iron and Gray Iron Pressure Pipe and Fittings (ANSI/AWWA C111/A21.11.90).

- c. Standard for Disinfecting Water Mains (ANSI/AWWA C651-92).
- d. Installation of Gray and Ductile Cast Iron Water Mains and Appurtenances (ANSI/AWWA C600-87).
- e. Resilient Seated Gate Valves 3" through 12" NPS for Water and Sewage Systems (ANSI/AWWA C509-87).
- f. Dry Barrel Fire Hydrants (ANSI/AWWA C502-85).
- g. Ductile Iron and Gray-Iron fittings, 3 in. through 48 in. for water and other liquids (ANSI/AWWA C110/A21.10-93).
- 3. Specifications for Polyvinyl Chloride (PVC) Plastic Pipe (SDR-PR and Class T) (ASTM D2241).
- 4. Underground Installation of Thermoplastic Pressure Piping (ASTM D2774-72).
- 5. "Standard Specifications for Water and Sewer Main Construction in Illinois," 8th Edition, dated 2020.
- 6. American Water Works Association ANSI/AWWA C900-89, Polyvinyl Chloride (PVC) Pressure Pipe, 4 in. through 12 in. for Water Distribution.

The Contractor shall transport, deliver, unload, store and handle all materials in a manner to prevent damage to the materials or the work. All damaged, broken or otherwise defective materials will be rejected. Store all circular rubber gaskets and special lubricants in packaged materials with the manufacturer's name, brand and all other applicable data plainly marked thereon.

<u>PVC WATER MAIN PIPE:</u> Pressure polyvinyl chloride pipe (PVC) of the size shown on the drawings shall be made from clear, virgin, Type 1, Grade 1 resin conforming to the latest revision of ASTM D1784. It shall be bell and spigot using a rubber gasket in accordance with ASTM F477 and be suitable for use at maximum hydrostatic working pressure of 200 psi at 73 degrees F. All pipe shall meet the requirements set forth in AWWA C900 with Dimension Ratio of DR21 and bear the National Sanitation Foundation seal for potable water. Fittings for PVC water main shall be cast iron bolted mechanical joint with retainer glands in accordance with AWWA C110/ANSI A21.10. Fittings shall not be paid for separately but considered included in the cost of the water main of the size specified.

Proposed water main crossing Main Street within the project omission shall be bored. The cost of all labor, material and equipment necessary to install the bored pipe shall be paid for at the contract unit per foot for WATER MAIN 6" BORED.

<u>FIRE HYDRANT COMPLETE:</u> Fire hydrants shall be Mueller dry barrel with a frangible section near the ground line designed to break on impact. The fire hydrant shall be in

accordance with AWWA C502. Fire hydrants shall have a 6-inch mechanical joint inlet connection. Two 2 ½" hose nozzles and one 6" pumper nozzle shall be fitted with cast iron threaded caps with operating nuts of the same design and proportions as the hydrant stem nut. Caps shall be threaded to fit the corresponding nozzles and shall be fitted with suitable gaskets for positive water tightness under test pressures. All hydrants shall include tee, auxiliary 6-inch gate valve and box as specified below and shall not be paid for separately but included in the cost of Fire Hydrant Complete. Fire hydrants shall be purchased from the City of Mt. Sterling. Joints for the fire hydrants and auxiliary 6-inch gate valve shall be mechanical with joint in accordance with AWWA A21.11 with retaining glands.

<u>VALVES WITH VALVE BOXES:</u> The minimum requirements for all gate valves shall, in design, material and workmanship, conform to the standards of AWWA C509. All materials used in the manufacturer of waterworks gate valves shall conform to the AWWA standards designed for each material listed.

- The gate valves shall be standard pattern and shall have the name or mark of the manufacturer, size and working pressure plainly cast in raised letters on the valve body.
- 2. Valves for underground installation shall be mechanical joint in accordance with AWWA C110/ANSI A21.10, with joints in accordance with AWWA C111/ANSI A21.11 with retainer glands.
- 3. The valve bodies shall be cast iron, mounted with approved non-corrosive materials. All wearing surfaces shall be bronze or other non-corrosive material, and there shall be no moving bearing or moving contact surfaces or moving iron in contact with iron.
- 4. Contact surfaces shall be machined and finished in the best workmanlike manner, and all wearing surfaces shall be easily renewable.
- Gate valves shall be non-rising stem, resilient wedge style Mueller A-2360 with stainless steel bolts. All valves shall open by turning the operator counterclockwise.

Valve boxes of sufficient length to permit operation of the valves shall be supplied with the valves for underground installation. The cast iron valve box shall be of the extension type, Mueller #H-10360 with length sufficient to extend from the water main up to the surface of the finished grade, provided with a detachable iron lid at least six inches in diameter. The word "WATER" shall be cast on the lid of each box. A plastic alignment device shall be placed on valve stem prior to valve box placement. Valve boxes shall not be paid for separately but considered included in the cost of the valve of the size specified.

<u>CASING:</u> The encasing of watermains shall be in accordance with Standard Drawing No. 21M of the Standard Specifications for Water and Sewer Construction in Illinois, 8th Edition, 2020.

THRUST BLOCKING: Construct poured concrete thrust blocking at all bends in piping equal to or greater than 11-1/4° and at hydrant locations. The concrete blocking shall be poured against undisturbed earth. Thrust block bearing surface shall be of size as shown on drawings and as directed by the Engineer. Concrete shall be Class SI, in accordance with the applicable requirements of Sections 503 and 1020 of the Illinois Department of Transportation "Standard Specifications for Road and Bridge Construction". The cost to provide thrust blocking shall be considered included in the cost of the contract. Wrap all fittings in 6 mil plastic to act as bond breaker between the concrete and valve or fitting.

<u>TRACER WIRE:</u> Provide a #10 single strand coated copper tracer wire suitable for underground installation over all water mains constructed under this contract.

Wire shall be installed directly with the water main before placing any backfill. Wire shall terminate and begin at ground level within the valve boxes. Care shall be exercised during installation to not kink, twist, smash or otherwise weaken or break the wire. Installation shall be subject to the satisfaction of the Engineer. Before acceptance, the tracer wire installations shall be tested for electrical continuity. The Contractor will be responsible for conducting all tests and repairing or replacing all faulty installations to the satisfaction of the Engineer. The cost to provide tracer wire shall be considered included in the cost of the water main.

1" and 1 1/2" WATER SERVICE CONNECTIONS:

- A. Tapping Saddle shall be a Mueller H-13000 Bronze tapping saddle.
- B. 1" or 1 ½" service corporations and curb stops shall be Mueller compression type (Minneapolis Pattern).
- C. 1" or 1 ½" copper size PVC pipe shall be in accordance with Section 40-2.06B of the "Standard Specifications for Water and Sewer Main Construction in Illinois", and as shown in the plans.
- D. All trenches shall be backfilled with trench backfill.
- E. Services shall be installed from the main to the existing or proposed water meter as specified in the plans.
- F. Services with meters in business basement shall be extended thru the basement wall and connected to the service indoors with the appropriate fitting. The penetration thru the wall shall be sealed to the satisfaction of the Engineer.

Any proposed water services that are under existing roadways shall be bored. Cost of boring is to be included in the per foot price. All service pipe, valve, valve boxes, and fittings shall be in accordance with PVC WATER MAIN, VALVES AND VALVE BOXES, and THRUST BLOCKING as described herein.

Water Meter in Vault 1":

This work shall consist of installation of a new water meter in vault at the location shown in the plans and as directed by the Engineer. The water meter and vault shall be purchased from the City of Mt. Sterling. Installation of the meter and vault shall be completed in accordance with the Standard Specifications for "Water and Sewer Construction in Illinois", 8th Edition, 2020, and as directed by the Engineer.

This work will be paid for as WATER METER IN VAULT 1" which cost shall include all equipment, labor and material necessary including meter yoke and incidental fittings to complete the construction of this item as specified.

<u>LINESTOPS:</u> Furnish and install linestops for the pipe diameter specified. This work shall be completed, tested and ready for service prior to the installation of water mains or appurtenances. The static pressure at the installation site is approximately 75 psi. Prior to line stop removal, line stops shall be closed to check for installed valve leaks.

<u>TAPPING SLEEVE AND VALVE WITH ROAD BOX:</u> Tapping sleeve shall be a stainless steel tapping sleeve Muellar #H-304 and tapping valve shall be Muellar #T-2360. Valve and valve box shall be as specified previously in these special provisions.

CONSTRUCTION METHODS

<u>GENERAL:</u> The contractor shall provide trenching, excavation, backfilling, compaction, removal of excess excavation, removal of existing water main and appurtenances as necessary, installation of water main and appurtenances, thrust blocking, disinfecting, and testing, cast in place concrete and all other work necessary to complete the installation of the water main. No additional compensation will be allowed due to encounters with buried brick, concrete walls from existing basements/vaults.

TRENCHING, BACKFILLING AND COMPACTION. This work shall be performed and executed as follows: INSPECTION:

A. Examine the area where and conditions under which trenching, backfilling and compacting for utilities are to be performed. Notify Engineer in writing of conditions detrimental to proper and timely completion of the work.

EXCAVATION OR TRENCH FOR PIPE OR CONDUIT:

A. Excavation shall be made by open cut. The sides of the trench shall be kept as nearly vertical as possible, especially from the trench floor to the level of 12 inches above the top of the pipe. Excavation shall be in accordance with Section 20 of the "Standard Specifications for Water and Sewer Main Construction in Illinois".

- B. Trenches shall be excavated to a depth that will provide a covering of not less than 4'-6" or as shown on the drawings, measured from the top of the pipe barrel to the finish grade of the ground. Trench bottoms shall have a minimum width of the pipe plus 12 inches.
- C. Provide and maintain such sheeting and bracing to support the sides of the excavation, and to prevent movement which might injure personnel, damage the pipe or delay the work.

BACKFILL BELOW CENTERLINE OF PIPE OR CONDUIT:

- 1. Granular cradle and pipe cradle materials shall be in accordance with the details shown on the drawings and in accordance with Sections 20-2.20C of the "Standard Specifications for Water and Sewer Main Construction in Illinois" and in accordance with Section 208 of the "Standard Specifications for Road and Bridge Construction".
- 2. Granular cradle and pipe cradle shall be placed and compacted in accordance with Sections 20-2.20B of the "Standard Specifications for Water and Sewer Main Construction in Illinois".

BACKFILL ABOVE CENTERLINE OF PIPE OR CONDUIT:

- After completion of pressure and leakage tests specified elsewhere, the exposed pipe and joints shall be backfilled by hand, together with tamping, until fill has progressed to a minimum depth of 12 inches above the top of the pipe.
- 2. Backfill above the centerline of pipe or conduit shall be placed and compacted in accordance with Section 20-2.21B, of the "Standard Specifications for Water and Sewer Main Construction in Illinois" and as specified in paragraph 3 below.
- 3. Backfilling under existing or proposed roads, parking areas, sidewalks, other improved surfaces or at locations shown on the drawings shall be entirely aggregate for trench backfill as specified in Section 208 of the "Standard Specifications for Road and Bridge Construction.

<u>DISPOSAL OF SURPLUS AND UNDESIRABLE EXCAVATION MATERIAL:</u> All surplus excavated material not required for backfilling the excavation shall be removed and deposited and graded in accordance with Section 202.03 of the "Standard Specifications for Road and Bridge Construction". All undesirable material, including rocks, trees, stumps, etc. shall be removed and deposited in accordance with Section 202.03 of the "Standard Specifications for Road and Bridge Construction".

<u>PAYMENT:</u> Costs for work required by this specification section shall be included in the cost of the pipeline installation and no additional compensation will be allowed.

INSTALLATION

COORDINATION:

A. Coordinate installation of water line with all other crafts to alignment, depth and service locations and as shown on the drawings. Damage done to other utilities including, but not limited to telephone, cable, electrical and natural gas shall be addressed as specified in Article 107.31 of the Standard Specifications for Road and Bridge Construction.

INSTALLATION:

A. Laying of Pipe

- All installations shall conform to lines and grade shown on the drawings. Valves and special fittings shall be placed where shown on the drawings unless their location is changed by the Engineer. When field conditions dictate deviation from the drawings, no change shall be made without written authorization of the Engineer.
- 2. No pipe shall be laid in water or when, in the opinion of the Engineer, trench conditions are unsuitable. When pipe laying is stopped at night or for any other reason, watertight plugs shall be used to exclude dirt, water, small animals and other foreign material from the pipe.
- 3. Prior to starting work, have the manufacturer furnish instructions in the proper assembly and installation of the pipe. Such instructions shall in no way be construed to assume all or any part of the Contractor's responsibility for proper installation.
- 4. All pipe, fittings and accessories shall be carefully placed into the trench by suitable equipment in such manner to prevent damage to pipe and fittings. A granular cradle shall extend completely around all ductile iron fittings to help prevent corrosion.
- 5. In distributing the material at the site of the work, each piece shall be unloaded opposite or near the place where it is to be laid in the trench. All pipe shall be loaded and unloaded piece-meal by hand or in bundles by lifting with hoists or skidding so as to avoid shock or damage. Under no circumstances shall pipe materials be dropped. Pipe handled on skidways shall not be skidded or rolled against pipe already on the ground.
- 6. Bedding and backfilling shall be as specified previously.
- 7. Before any length of pipe is placed in the trench, a careful inspection shall be made of the interior of the pipe to see that no foreign material is in the pipe. In order to properly remove all foreign material, swab of necessary length shall be available at all times.

- 8. All pipe shall be lowered carefully into the trench, properly aligned, and properly jointed by use of suitable tools and equipment, in a manner to prevent damage to pipe materials and protective coatings and linings.
- Under no circumstances shall pipe materials or fittings be dropped or dumped into the trench. The pipe and fittings shall also be inspected to determine if they are sound and free from cracks. Laying of pipe shall be commenced immediately after excavation is started.
- 10. Pipe shall be laid with bell ends facing in the direction of laying, unless the main is being laid down a steep incline, in which case the bell ends shall face uphill.
- 11. All lumps, blisters and excess coating shall be removed from the joint of each pipe; and the outside and inside of all joints shall be wire brushed and wiped clean and dry and free from oil and grease before the pipe is laid.
- 12. Avoid field cutting of pipe if at all possible. When pipe is to be cut in the field, the cut end shall be conditioned so that it can be used to make up the next joint. Bevel the outside of the cut 3/16 inch to ¼ inch at an angle of approximately 30 degrees to prevent damage to the gasket.

B. Jointing:

- 1. Remove all foreign matter from the socket, making sure the gasket seat is clean.
- 2. The gasket shall be wiped clean with a clean cloth, flexed and properly placed in the socket for a snug fit in the retainer seat.
- 3. Apply lubricant furnished by the pipe manufacturer on the surface of the gasket which will come in contact with the plain end of the pipe to be laid.
- 4. Clean the plain end of the pipe and apply a thin film of lubricant about one inch wide around the circumference of the pipe. Keep pipe free of ground or trench sides to prevent foreign matter from clinging to the lubricant.
- 5. The plain end of the pipe shall be aligned and carefully entered into the socket until it just makes contact with the gasket. This is the starting position for the final assembly of the joint.
- 6. Joint assembly shall then be completed by jacking the plain end of the entering pipe past the gasket (which is thereby compressed) until it makes contact with the bottom of the socket. A system of marking the pipe shall be used to make certain the assembled joint is at the proper depth.

C. Laying of Pipe on Curves:

- 1. Long radius curves, either horizontal or vertical, may be laid with standard pipe by deflections at the joints. When the pipe is shown curved on the drawings and no special fittings are shown, the curves can be made by deflection of the joints as shown on the drawings with standard lengths of pipe. Where shorter lengths are required, the drawings will indicate maximum lengths that can be used. No pipes shall be laid on curve without written authorization of the Engineer.
- 2. When rubber gasketed pipe is laid on a curve, the pipe shall be jointed in a straight alignment and then deflected to the curved alignment. Trenches shall be made wider on curves for this purpose.

D. Valve Boxes and Valves for Underground Installation:

- The valve boxes shall be set in position during backfilling operations so they will be in a vertical alignment to the gate valve operating stem. A plastic alignment device shall be placed on valve stem prior to valve box placement. The lower casting of the unit shall be installed first in such a manner as to be cushioned and to not rest directly upon the body of the gate valve or upon the water main. The upper casting of the unit shall then be placed in proper alignment and to such an elevation that its top will be final grade.
- 2. All valve boxes shall be installed flush with sidewalks, drives or finish grade.
- All gate valves shall be inspected upon delivery in the field to insure proper working order before installation. They shall be set and jointed to the pipe in a manner as set forth in the AWWA Standards for the type of connection ends furnished.
- 4. Buried valves shall be installed in a vertical position and be provided with a standard valve chamber in a cast iron valve box so arranged that no shock will be transmitted to the valve or strain on pipe joints. The box shall be centered over the operating nut, and the cast iron box cover shall be set flush with the roadbed or finished surface.

E. Hydrants

1. Hydrants shall be installed at the locations shown on the drawings. They shall be plumb and shall be set so that the lowest hose connection is at least 15 inches above the surrounding finish grade. All hydrants shall be inspected in the field upon delivery to the job to insure proper operation before installation. A minimum of ¼ cubic yard of 1" gravel shall be placed at and around the base of the hydrant to insure proper drainage of the hydrant after use. The blocking of the hydrant shall conform with the blocking detail shown on the drawings. A layer of filter fabric shall be placed

over the gravel drain field. Care shall be taken to ensure that weep holes are not covered by concrete blocking or filter fabric.

F. Thrust Blocking

- 1. Where any section of water line is provided with concrete reaction blocking, the hydrostatic pressure test shall not be made until at least two days have elapsed after the concrete reaction blocking was installed.
- G. Installation procedures shall also follow methods as specified in ASTM D-2774 and ANSI/AWWA C600 in combination with the manufacturer's recommendations.

HORIZONTAL SEPARATION-WATER MAINS AND SEWERS:

- A. Water mains shall be located at least ten feet horizontally from any existing or proposed drain, storm sewer, sanitary sewer, combined sewer or sewer service connection.
- B. Water mains may be located closer than ten feet to a sewer line when:
 - 1. Local conditions prevent a lateral separation of ten feet; and
 - 2. The water main invert is at least 18 inches above the crown of the sewer; and
 - 3. The water main is either in a separate trench or in the same trench on an undisturbed earth shelf located to one side of the sewer.
- C. When it is impossible to meet (A) or (B) above, both the water main and drain or sewer shall be constructed of slip-on or mechanical joint ductile iron pipe or PVC pipe equivalent to water main standards of construction. The drain or sewer shall be pressure tested to the maximum expected surcharge head before backfilling.

<u>VERTICAL SEPARATION – WATER MAINS AND SEWERS:</u>

- A. A water main shall be separated from a sewer so that its invert is a minimum of 18 inches above the crown of the drain or sewer whenever water mains cross storm sewers, sanitary sewers or sewer service connections. The vertical separation shall be maintained for that portion of the water main located within ten feet horizontally of any sewer or drain crossed. A length of water main pipe shall be centered over the sewer to be crossed with joints equidistant from the sewer or drain.
- B. Both the water main and sewer shall be constructed of slip-on or mechanical joint ductile iron pipe or PVC pipe equivalent to water main standards of construction when:

- 1. It is impossible to obtain the proper vertical separation as described in (A) above; or
- 2. The water main passes under a sewer or drain.
- C. A vertical separation of 18 inches between the invert of the sewer or drain and the crown on the water main shall be maintained where a water main crosses under a sewer. Support the sewer or drain lines to prevent settling and breaking the water main, as shown on the plans or as directed by the Engineer.
- D. Construction shall extend on each side of the crossing until the perpendicular distance from the water main to the sewer or drain line is at least ten feet.

TESTING:

A. Hydrostatic Test

- 1. Backfill shall be placed over the pipe except at the joints. The pipe shall be slowly filled with water. Care shall be taken to expel all the air from the pipes. The pipes shall be tapped at high points to vent the air. Pressure of 125 psi, measured at the point of lowest elevation, shall be applied for not less than two hours; and all pipe, fittings, valves, hydrants and joints shall be carefully examined for defects. Leaking joints shall be remade and then retested. Test pressure shall be 125 psi.
- No pipe installation shall be accepted unless and until the leakage, determined under the test pressure, is less than that allowed in Section 41-2.13C in the "Standard Specifications for Water and Sewer Main Construction in Illinois".
- 3. The test shall be made between valves and shall be made within 10 working days of the completion of such sections of lines. To determine the rate of leakage, furnish a suitable pump, pressure gauge and water meter or other appliance for measuring the amount of water pumped. The instruments shall be tested for accuracy as frequently as directed by the Engineer. Contractor shall furnish all the labor and materials to make the tests and to perform all testing work incidental to the Contract.
- B. All other water line appurtenances shall be tested at the factory in accordance with the applicable AWWS Standard stated in Section 760-2.1 of this special provision. Accept all material upon delivery and insure its proper operation at substantial completion.

DISINFECTION:

- A. Disinfection of valves, hydrants and piping shall be conducted in accordance with the materials and methods specified in AWWA C651. In the process of disinfecting newly laid pipe, all valves or other appurtenances shall be operated while the pipe line is filled with the chlorinating agent.
- B. Following disinfection, all chlorinated water shall be thoroughly flushed from the newly laid pipe line at its extremities until the replacement water throughout its length shall, upon test, be proved comparable in quality to the water served the public from the existing water supply system. Bacteriological testing shall be as required by the Illinois Environmental Protection Agency. Two passing tests a minimum of 24 hours apart will be required.
- C. Upon completion of testing and disinfection, Contractor shall leave all lines full of water ready for use by the Owner. The cost to disinfect including all water required shall be considered included in the cost of the Contract.

RESTORATION AND CLEAN-UP:

- A. Upon completion of the water distribution system, all excavated areas shall be restored by reseeding, replacement of aggregate base course, and/or pavement replacement as required. All areas will be left in a condition to not restrict drainage. Regrade all ditches and side slopes. Reseeding shall be in accordance with Section 250 of the IDOT Standard Specifications for Road & Bridge Construction.
- B. Upon completion of the work, inspect the entire installation. Correct all defective work. Replace all damaged and defective parts with new materials.
- C. Upon completion of installation and at such other times as directed, remove all surplus materials, debris, empty cartons, rubbish, and legally dispose of same off the site.

PAYMENT:

A. Payment for the installation of pipe, valves, line stops and hydrants shall be at the Contractor Unit Price Bid for the respective items. The Unit Price Bid shall include excavation and trench backfill for the pipeline whether it is by trenching or open cut. All work required for the complete installation, ready for use, of this water distribution system shall be included in the Unit Prices Bid.

CONCRETE THRUST BLOCKING:

Handling, proportioning, batching, mixing, testing and placing the cast-in-place concrete for thrust blocking shall be performed in accordance with the applicable requirements of Section 1020 and of the construction requirements of Section 503 of the "Standard Specifications for Road and Bridge Construction". The concrete shall have a minimum compressive strength of 3,500 psi at 14 days.

Basis of Payment: Payment will be made at the contract unit price per linear foot for each kind of water main/service pipe of the type, class and size designated. Payment will also be made for the installation of valves (including valve boxes), line stops, and fire hydrants (including auxiliary valves and valve boxes) of the types and sizes designated at the contract unit price per each for the respective items. Trench backfill will not be paid for separately but considered included in the cost of the respective item. Pavement patching 9inch in areas of pavement to remain will not be paid for separately but considered included in the cost of the respective item.

These prices shall be full compensation for furnishing all materials required as shown in the plans and for all preparation, assembly, and installation of these materials; and for all testing, disinfecting, cleanup, and restoration; and for all labor, equipment, tools, trench backfill, and pavement patching as indicated and incidentals necessary to complete the installation of this water distribution system, ready for use, and accepted by the Engineer.

Payment will be made at the contract unit price for the following items:

Water Meter Assembly 1" - per each

Water Main 6" - per foot

Water Main 8" – per foot

Water Main 6" Bored – per foot

Water Main Line Stop 6" – per each

Water Main Line Stop 8" – per each

Fire Hydrant Complete – per each

Water Valves 6" - per each

Water Valves 8" – per each

Water Service Line 1" – per foot

Water Service Line 1 1/2" - per foot

Tapping Valves and Sleeves 6" – per each

<u>WATER MAIN ABANDONMENT:</u> This work shall consist of abandoning existing water mains in place and the removal of existing water mains, fittings, valves, meters, boxes, yard hydrants, and associated appurtenances associated with construction of the proposed water main/services and storm sewer as shown in the plans and as directed by the Engineer.

The work items shall include shutting off all valves and corporation stops. All exposed service lines and water mains to be abandoned that are exposed as a result of other construction activities shall be capped and thrust blocking installed. Service lines to be abandoned on water mains to remain in operation shall be shut off at the corporation stop and capped. All service risers/boxes shall be removed to 2' below the limits of the proposed improvements. All work shall be as specified herein, as directed by the Engineer to meet the satisfaction of the City of Mt. Sterling.

Backfilling under existing or proposed roads, sidewalks, or other improved surfaces shall be completed using Trench Backfill as specified in Section 208 of the Standard Specifications.

All abandoned water main that conflicts with the operation or maintenance of existing or proposed sanitary or storm sewer, including manholes and all associated appurtenances, shall be removed as to not interfere with the service to remain as specified and to the satisfaction of the Engineer.

Basis of Payment: This work shall be paid for at the contract unit price per each for WATER MAIN ABANDONMENT, which price shall include all labor, equipment and materials, including trench backfill, to complete this item for all watermains and services within the entire project limits as specified and to the satisfaction of the Engineer. The removal of existing water mains, regardless of size of material encountered, fittings, valves, meters, boxes and associated appurtenances shall not be paid for separately, but considered included in the cost of WATER MAIN ABANDONMENT.

PAVEMENT PATCHING: This work shall consist of temporary aggregate patching, and final patching of the existing roadway after storm sewer installation. This work shall be completed in accordance with Section 442 of the Standard Specifications and as directed by the Engineer.

For those areas to be patched as a result of storm sewer installation, a temporary aggregate or permanent pavement patch will be allowed until the appropriate stage for construction of the pavement(s).

This work shall be paid for at the contract unit price per square yard for PAVEMENT PATCHING of the class and type specified which price shall include all equipment, labor and material necessary to construct the final patching area. Temporary aggregate will not be considered for separate payment, but considered included in the cost of the Storm Sewer.

REMOVAL OF UNCLASSIFIED MATERIAL: The existing handrails, timbers, sign bases, and other unclassified materials not called out in the Summary of Quantities shall be removed as designated by the Engineer. The material removed as required in this Special Provision shall be disposed of outside the limits of the right of way in accordance with Article 202.03 of the Standard Specifications and as directed by the Engineer.

This work will not be paid for separately, but shall be considered included in the cost of the other associated removal items and no additional compensation will be allowed.

STORM SEWER CONNECTIONS: The cost of connecting existing storm sewers to the proposed drainage system shall be considered included in the cost of the proposed storm sewers or drainage structures involved. No additional compensation will be allowed.

STORM SEWER DEPTHS: The proposed storm sewer on North Street will discharge into an existing 24" storm sewer at the northwest corner of North St. and E. Court St. The approximate location of the sewer is shown in the plans. The exact location and depth is unknown. Prior to ordering materials, it shall be the contractor's responsibility to field locate the outfall pipe and coordinate with the City and Engineer to field adjust location of the manhole which is shown in the plans at Sta. 23+08.48, 43.55' LT. Proposed shop drawings will be submitted and approved by the Engineer prior to ordering materials. The cost of completing the work specified herein will not be paid for separately but shall be considered included in the storm sewer items involved.

EXISTING DRAIN PIPES: All existing drainage pipes, tiles or downspouts which may be encountered during construction of the proposed improvement shall be connected to the storm sewer as detailed in the plans and to the satisfaction of the Engineer. All trenches shall be filled with trench backfill as specified in Section 550 of the Standard Specifications. The type of materials permitted for Storm Sewer (Special) shall be according to Article 550.03 for storm sewers, Type 2.

Basis of Payment: This work shall be paid for at the unit price per foot of STORM SEWER (SPECIAL) of the diameter specified which price shall include all equipment, labor and material, including trench backfill necessary to connect existing drain tiles/pipes to the storm sewer as specified herein and to the satisfaction of the Engineer.

<u>DEBRIS:</u> All debris of any type, large or small, encountered during any excavation shall be removed by the Contractor and disposed of at a site off the right of way.

This work will not be paid for separately, but shall be considered as included in the cost of the pay item for which the work is being completed.

EXISTING FRAMES AND GRATES: All frames and grates that are to be removed and which are not to be incorporated into the proposed improvement shall be carefully removed and stored by the Contractor. These items shall become the property of the City of Mt. Sterling and shall be removed from the job site by the City. This work shall be considered included in the contract and no additional compensation will be allowed.

TEMPORARY DRAINAGE INTO PROPOSED DRAINAGE STRUCTURES: This work shall consist of providing temporary drainage into any proposed drainage structure that is to be constructed in sag locations. These sag locations shall also be interpreted to include side streets.

Concrete curb and gutter shall not be placed at sag inlet locations until Hot-mix asphalt or other provisions have been made to allow for drainage into structure.

This work will not be paid for separately, but shall be considered as included in the contract unit price for the various pay items involved and no additional compensation will be allowed.

FIRE HYDRANTS TO BE REMOVED: This work shall consist of the removal of existing fire hydrants as shown in the plans and as directed by the Engineer.

This work item shall be completed in accordance with the applicable portion of Section 564 of the Standard Specifications and to the satisfaction of the Engineer. The exposed water main shall be modified as required to install new fire hydrants as specified elsewhere herein. Fire hydrants shall be carefully removed and stored by the Contractor and shall become the property of the City of Mt. Sterling and shall be removed from the job site by the City.

Basis of Payment: This work shall be paid for at the contract unit price per each for FIRE HYDRANTS TO BE REMOVED which price shall include all labor, equipment and material necessary to complete the work as specified herein and to the satisfaction of the Engineer.

CLASS C PATCHES, TYPE IV 8 INCH (SPECIAL):

Description: This work applies to colored concrete surfaces within the parking lanes and consists of removal of the existing pavement, forming, placing and finishing concrete as shown in the plans and as directed by the Engineer in accordance with the applicable portions of Section 442 of the Standard Specifications. Existing aggregate base repair and preparation of base shall be as specified elsewhere herein.

Submittals:

- (a) The following items shall be submitted and approved prior to operations:
 - 1.) Proposed concrete mix, color additive, and sealer.
 - 2.) A 5'x5' sample pour of colored concrete shall be provided for evaluation by the Engineer. Sections shall be prepared with integral color and sealed. Additional test section(s) shall be provided if needed to achieve the desired quality.
- (b) The following items shall be submitted during operations:
 - 1.) Concrete load tickets and concrete sample test results.

Products:

- (a) Concrete: Portland cement concrete in compliance with PV in accordance with Section 1020-Portland Cement Concrete of IDOT Standard Specifications.
- (b) Integral Color shall be fine ground pure mineral pigments, specifically designed for coloring concrete as manufactured by Soloman Colors.
 - 1. Soloman Colors, 4050 Color Plant Road, Springfield, IL 62702, (t) 800-624-0261, www.solomoncolors.com.
 - Toffee color (25 lb. bag per 2 cu. Yds. Concrete) to match colored pavement on Main St.
- (c) Concrete Sealer shall be according to Section 1026 Standard Specifications.
- (d) Anti-Skid Agent shall be shall be compatible with selected Sealer.

Construction Requirements:

- (a) Construction shall be in compliance with Section 420 Portland Cement Concrete Pavement, IDOT Standard Specifications and these specifications.
- (b) Colored concrete shall be integrally and uniformly colored to achieve manufacturer's color guide.
- (c) Test Pour
 - Pour a 5'x5' section of colored concrete at the project site for evaluation by the Engineer. Section to be poured with integral color and sealed. Additional test section(s) shall be provided if needed to achieve the desired quality.
- (d) Construction Joints
 - 1. Provide construction joints according to plans, regularly spaced unless noted otherwise. Tool joints with 2" smooth edges both sides. After the concrete has hardened, the pavement should be cut along the tooled joints to ¼ the pavement thickness to ensure the joints are controlled.
- (e) Expansion Joints
 - 1. Provide expansion joints according to pavement details, no greater than 30' apart. Joints not indicated on plans or details to be determined by Engineer.

2. Joints to be full depth and filled with ½" thick asphaltic coated expansion material set ¼" below the concrete surface and filled with joint sealer to meet adjoining concrete elevations.

(f) Finish Surface

- 1. Tool with a $\frac{1}{2}$ " diameter round over all exposed edges.
- 2. Medium-broom finish perpendicular to vehicular traffic circulation.

(g) Repair

- 1. As early as possible after the removal of the forms, patch poor joints, voids, air pockets and minor honeycombs. Large areas of honeycomb and other weak areas to be chipped out with a light pneumatic chip-hammer.
- 2. Repair: Wet the area. Apply bonding grout consisting of one part cement and one part sand (passing the No. 30 sieve) mixed to the consistency of thick cream. Apply patching concrete consisting of one part Portland cement, 2-1/2" parts sand (passing the No. 30 sieve) and enough water to produce a workable mixture which, when placed and cured, will match the color of the unmarred surfaces.
- (h) Sealed exposed surfaces not less than 30 days after concrete is poured.
 - 1. Thoroughly clean surface.
 - 2. Apply a uniform coat of sealer at manufacturer's recommended rate by spraying or rolling.
 - 3. After a minimum of 8 hours, apply a second coat of sealer in the same manner.
- (i) Upon completion, the contractor shall take particular care not to damage the pavement surface with other construction operations by covering the pavement with an appropriate protective cover material. Rollers, bituminous prime trucks, concrete trucks, and trucks carrying HMA will not be allowed to track over the pavement.

Basis of Payment: This work will be paid for at the contract unit price per square yard for CLASS C PATCHES, TYPE IV 8 INCH (SPECIAL) which price shall include all equipment, materials, labor, pavement removal, coloring, pouring and finishing, to complete this work as specified to the satisfaction of the Engineer.

CLASS C PATCHES, 9 INCH (SPECIAL):

This work applies to the concrete crosswalk surfaces across Capitol Avenue and North Street and consists of straight saw-cutting of the existing pavement at the locations shown

in the plans, removal of the existing pavement, preparation of sub-base subsequent to removal of the pavement, placing and finishing the concrete as shown in the plans and as directed by the Engineer.

The work shall be completed in accordance with the applicable portions of Section 420 of the IDOT Standard Specifications and as directed by the Engineer.

Basis of Payment: This work will be paid for at the contract unit price per square yard for CLASS C PATCHES, 9 INCH (SPECIAL) of the type specified which price shall include all equipment, materials, and labor, saw-cutting including base preparation, pavement removal, pouring and finishing to complete the work as specified to the satisfaction of the engineer.

<u>AGGREGATE BASE REPAIR - PAVEMENT PATCHING, CLASS C, 8" SPECIAL & CONCRETE CURB AND GUTTER, TYPE B-6.24:</u>

This work shall consist of furnishing and placing aggregate base material in accordance with Section 358 of the Standard Specifications at the locations indicated in the plans and as directed by the Engineer.

The base layer for the proposed Pavement Patching, Class C, 8" Special and Combination Concrete Curb and Gutter, Type B-6.24 shall consist of 4" minimum thickness of aggregate base material. The preparation of the area prior to placing the aggregate base material including the removal of any excess or unsuitable material will be paid for at the contract unit price per square yard for PREPARATION OF BASE.

The furnishing and placement of the aggregate base material will be paid for at the contract unit price per ton for AGGREGATE BASE REPAIR, which price shall include all labor, materials and equipment to complete the work as specified.

<u>AGGREGATE BASE REPAIR - PCC SIDEWALK, 4" AND PCC DRIVEWAY</u> PAVEMENT, 8":

The base layer for proposed Portland cement concrete sidewalk 4" and Portland cement concrete driveway pavement, 8" shall be prepared in accordance with the applicable portions of Section 423 and 424 of the Standard Specifications with no additional compensation allowed. Any additional base material needed to raise the base layer will be completed in accordance with Section 358 of the Standard Specifications and will be paid for at the contract unit price per ton for AGGREGATE BASE REPAIR, which price shall include all labor, materials, and equipment to complete the work as specified.

AGGREGATE FOR TEMPORARY ACCESS:

This item shall consist of the construction and maintenance of aggregate materials for temporary access to buildings in accordance with Section 402 of the Standard Specifications at the locations specified by the Engineer.

Once the aggregate for temporary access is no longer necessary for access, the aggregate may remain in place and be used in lieu of aggregate base repair at the discretion of the Engineer.

The furnishing and placement of the aggregate will be paid for at the contract unit price per ton for AGGREGATE FOR TEMPORARY ACCESS, which price shall include all labor, materials, and equipment to complete the work as specified.

TELESCOPING STEEL SIGN SUPPORT (SPECIAL):

This work shall consist of furnishing and installing telescoping steel sign supports for ground-mounted signs utilizing a telescoping base section as specified in Section 728 of the Standard Specifications, and as directed by the Engineer.

The steel pipe and the base shall be coated as specified below. Color of the coating shall be black. The coating shall be applied only after the steel pipe and base have been fabricated. The final product shall not contain cracks in the coating, ripples in the curved areas, nor any damage due to fabrication and or shipping.

- (a) Steel shall be shot blast to near white steel and then an iron phosphate pretreatment shall be applied.
- (b) Primer shall be a thermosetting epoxy powder coating (Corvel Zinc Gray 13-7004) electrostatically applied and cured six minutes at 250°F. (121°C.). The primer thickness shall be 1.8-10 mils (45-250 μm).
- (c) Topcoat shall be triglycidly isocyanurate (TGIC) polyester powder coating, electrostatically applied and cured in an oven for 20 minutes at 250°F. (121°C.). The total of all the coatings shall be 8-10 mils (200-250 μm).S

This work shall be paid for per unit foot of Telescoping Steel Sign Support (Special) which price shall include all material, equipment and labor necessary to complete this work as specified to the satisfaction of the Engineer.

CONCRETE STOOPS:

This work shall consist of constructing the concrete stoops at the location shown on the plans.

This work shall be performed in accordance with the applicable portions of Section 424 of the Standard Specifications and with the details shown in the plans.

Method of Measurement: The top surface area of the stoop will be measured and computed in square feet. Vertical faces will not be measured for payment.

Basis of Payment: Concrete stoop will be paid for at the contract unit price per square feet, measured as specified, for PORTLAND CEMENT CONCRETE SIDEWALK, 4 INCH,

which price shall be payment in full for all labor, equipment and materials, including concrete, reinforcement bars, backfill, expansion joints, etc. required to complete this item as specified and as directed by the Engineer.

CONCRETE CURB, TYPE B (SPECIAL):

This work shall consist of the construction of Concrete Curb, Type B (Special) as detailed in the plans at locations shown in the plans. This work shall be completed in accordance with the applicable portions of Section 606 of the Standard Specifications and as directed by the Engineer.

This work will be paid for at the contract unit price per foot for CONCRETE CURB, TYPE B (SPECIAL) which price shall include all labor and equipment necessary, including concrete reinforcement bars, expansion joint, etc. to complete the work specified herein.

SODDING, SPECIAL:

This work shall consist of furnishing and placing sod in accordance with Section 252 of the Standard Specifications. Work items shall also include any necessary excavation, furnished excavation and/or furnishing and placement of a minimum 4" of topsoil in all areas requiring sod in accordance with the applicable portions of sections 202, 204 and 211 of the Standard Specifications. Fertilizer Nutrients in accordance with the applicable portions of Section 250 of the Standard Specifications shall be placed in areas of sod.

This work will be paid for at the contract unit price per square yard for SODDING, SPECIAL, which price shall include all material, equipment and labor necessary to complete this work as specified including all excavation, furnished excavation, furnishing and placing topsoil, fertilizer nutrients and sod.

PIPE HANDRAIL:

This work shall consist of furnishing and installing decorative handrail at the locations shown in the plans and described in this Special Provision. Except as noted herein, this work shall be in accordance with the applicable provisions of Section 509 of the Standard Specifications.

Exact location and configuration will be determined at the time of construction. Prior to ordering and manufacturing handrails, the contractor will be responsible for field measuring and submitting shop drawings for review and approval by the Engineer.

Mounting means and methods shall be in accordance with the detail in the plans and approved by the Engineer at the time of construction.

The handrail shall be finished as specified below. Color of the coating shall be black. The coating shall be applied only after the pipe handrail have been fabricated. The final product shall not contain cracks in the coating, ripples in the curved areas, nor any damage due to fabrication and or shipping.

- (a) Steel shall be shot blast to near white steel and then an iron phosphate pretreatment shall be applied.
- (b) Primer shall be a thermosetting epoxy powder coating (Corvel Zinc Gray 13-7004) electrostatically applied and cured six minutes at 250°F. (121°C.). The prime thickness shall be 1.8-10 mils (45-250 μm).
- (c) Topcoat shall be triglycidly isocyanurate (TGIC) polyester powder coating, electrostatically applied and cured in an oven for 20 minutes at 250°F. (121°C.). The total of all the coatings shall be 8-10 mils (200-250 µm).

This work shall be paid for at the contract unit price per foot for PIPE HANDRAIL, which price shall include all materials, fabrication, coatings, transportation and erection necessary to complete the work to the satisfaction of the Engineer.

PLANTERS:

Description: This work consists of furnishing, installing, and filling planters. Planters shall match the planters installed on Main Street. Contractor shall verify

shall match the planters installed on Main Street. Contractor shall verify such with manufacturer in 2019.

Submittals

- (a) Manufacturer's product information and cut sheets.
- (b) Manufacturer's product warranty information.

Warranty: Contract warranty of the General Conditions and manufacturer's warranty applies.

Products and Materials

- (a) Planters
 - 1. Square, self-watering resin planter as manufactured by OCC Outdoors.
 - a. Model "TCB-12-SQ-SW/WWR14" as manufactured by OCC Outdoors, 6925 S. Carroll Road, Indianapolis, IN 46259, 1-800-821-7670. www.occoutdoors.com
 - Resin Californian Square planter, 35"x35"x29" high, 55 lbs. with drain hole
 - Victorian Lace color
 - Water reservoir in the bottom of the planter with drain hole
- (b) Potting soil: commercial potting soil mix comprised of equal parts of peat moss, rotted cow or horse manure and vermiculite and enhanced with fertilizer, forming a good growth medium for flowers.
- (c) Pea gravel: ½" to 1" diameter, light to medium brown color. No limestone content allowed.

- (d) Filter fabric: 6 oz. weight non-woven fabric meeting standards of Section 282 Filter Fabric.
- (e) Wood Mulch: Composted, shredded hardwood, particles free of viable seeds and foreign material. Mulch must be approved.
 - 1. Fine-Textured Hardwood Mulch: Particles no larger than 2" in any dimension.

Construction Requirements

- (a) Set planters carefully on pavement as shown on plans.
- (b) Fill planters with pea gravel, filter fabric, potting soil, and mulch according to plans.
- (c) Repair any scuffing or other surface marring to the satisfaction of the Engineer.

Payment

(a) This work will be paid for at the contract unit price per each for PLANTER, which price shall include potting soil, pea gravel, filter fabric, and mulch for a complete installation.

BRICK PAVERS:

Description:

This work consists of installing brick pavers including sub-base, concrete base with weep holes, and setting sand. Brick pavers shall match those installed in conjunction with Main Street project completed in 2019. Contractor shall verify such with manufacturer prior to shop drawing submittal.

Submittals:

- (a) Prior to commencement of operations, Contractor to submit for approval:
 - 1. Cut sheets for brick pavers.
 - 2. Samples: Minimum of 3 pavers representing full range of selected coloration.
 - 3. List of equipment anticipated for the work.
 - 4. Manufacturer's product warranty.

Warranty: Contract warranty of the General Conditions and manufacturer's warranty applies.

Products and Materials:

- (a) Brick Pavers
 - 1. 4"x8"x21/4" fired clay pavers with chamfered edges and spacer lugs.
 - 2. Pavers to comply with ASTM C902, Class SX, Type I, Application PX and ASTM C67 for Freeze/Thaw.
 - a. Manufactured by Pine Hall Brick Co., Inc. P.O. Box 11044, Winston-Salem, NC 27116-1044, www.pinehallbrick.com 336-721-7500.
 - Color: English Edge Red
- (b) Setting Sand: Fine crushed stone aggregate gradation FA8 in compliance with Section 1003 Fine Aggregate, IDOT Standard Specifications.
- (c) Geotextile fabric: 6 oz. weight non-woven fabric meeting standards of Section 1080.03 Filter Fabric, IDOT Standard Specifications.
- (d) Concrete Base: Concrete in compliance with SI in accordance with Section 1020 Portland Cement Concrete, IDOT Standard Specifications.
- (e) Sub-base Aggregate: CA6 in compliance with Section 1004 Coarse Aggregate, IDOT Standard Specifications.

Construction Requirements:

Brick Pavers

- (a) Time of operation: When the sub-base and concrete base can be properly prepared and when setting sand is dry.
- (b) Concrete testing. None required.
- (c) Prepare sub-base and compact to 95% density.
- (d) Install CA6 aggregate and compact to 95% density according to project plans.
- (e) Install concrete base slab in accordance with Section 424 PC Concrete Sidewalk, project plans, and special provisions, including:
 - 1. Allow adequate width for pavers to avoid excessive cutting of pavers. Layout paver patterns prior to construction of curbs and sidewalks. Paver slivers less than 2" wide will not be allowed.

- 2. Prepare concrete base slab with uniformly sloped surface, coarse textured surface, and weep holes 24" O.C. and in low areas for drainage.
- (f) Install geotextile fabric over concrete base and 1" up the sides.
- (g) Place setting sand over geotextile fabric to a fluffed-up thickness of ½" minimum to 1" maximum. Screed sand to a smooth and uniform surface.
- (h) Brick Pavers
 - 1. Set according to manufacturer's recommendations with colors and patterns shown on plans.
 - Cut pavers as necessary to fill designated areas. Long distances of cut pavers should be avoided by proper sidewalk layout. Short segments of cut pavers are acceptable to fill paved areas. Cut at precise angles with no chipping or broken edges.
 - 3. Set pavers on an area of freshly screeded sand. It is recommended that a contained area of pavers be installed and vibrated in place the same day.
- (i) Fill Joints
 - 1. Sweep sand between joints.
 - 2. Mechanically vibrate pavers to achieve a uniform surface.
 - 3. Repeat the process until joints are completely filled and the surface is smooth and uniform.
 - 4. Remove and replace any cracked or broken pavers.
 - 5. All unit paver areas to drain.
- (j) Tolerance. No greater than 1" in 10' from lines and grades shown on plan.

Measurement: This work will be measured for payment in place.

Payment

(a) Work will be paid for at the contract unit price per square foot of BRICK PAVERS which price shall include preparation of sub-base and installation of concrete base with weep holes, geotextile fabric, setting sand, brick pavers, equipment, materials and labor for a complete installation.

CONCRETE SIDEWALK FINISHING:

Description: This work applies to concrete sidewalk surfaces within the project limits

and consists of finishing concrete as detailed in the plans and as directed

by the Engineer.

Submittals: None

Products: None

Construction Requirements:

- (a) Construction shall be in compliance with Section 424 Portland Cement Concrete Sidewalk, IDOT Standard Specifications.
- (b) Construction joints shall be located as shown on the plans.
- (c) Expansion joints shall be ½" thick, full depth, ¼" from the surface with sealer to fill the void. Locations shall be as indicated on the plans, no greater than 30' oncenter.
- (d) Joints for PCC Sidewalk 4 inch to be hand tooled 1-1/2" deep with a 2" wide smooth, "picture frame" border on both sides of the joint.
- (e) Finish Surface
 - 1. Finish surface shall be medium-broomed, perpendicular to pedestrian traffic flow according to the plans.

Basis of Payment: This work will not be paid for separately, but considered included

in the cost of Portland Cement Concrete Sidewalk 4 Inch.

BENCHES:

Description: This work consists of furnishing and installing benches. Benches shall

match those installed in conjunction with the Main Street project completed in 2019. Contractor shall verify such with manufacturer prior to shop

drawing submittals.

Submittals:

- (a) Cut sheets for benches.
- (b) Manufacturer's product warranty information.

Warranty: Contract warranty of the General Conditions and manufacturer's warranty

applies.

Products:

(a) Bench

- 1. 6' cast aluminum bench with slat surface and back, surface mount, and textured black color.
- 2. All steel components to be certified American steel as approved by IDOT.
- 3. All hardware to be stainless steel or coated to resist corrosion.
- 4. Manufactured by Sitescapes:
 - a. Sitescapes
 P.O. Box 22326
 Lincoln, NE 68542
 402-421-9464
 FAX: 402-421-9479
 www.sitescapesonline.com
 - Cityview Backed Bench CV1-1060

Construction Requirements

- (a) Set benches on pavement as shown on plans and anchor using 3/8" anchor bolts. Securely set bolts in concrete with epoxy grout recommended by manufacturer.
- (b) Repair any scuffing or surface marring to the satisfaction of the Engineer.

Payment:

(a) This work will be paid for at the contract unit price per each for BENCHES, which price shall include all equipment, materials and labor necessary for a complete installation.

TRASH RECEPTACLES:

Description: This work consists of furnishing and installing trash receptacles. Trash

receptacles shall match those installed in conjunction with Main Street project completed in 2019. Contractor shall verify such with manufacturer prior to shop drawing submittal.

Submittals:

- (a) Cut sheets for trash receptacles.
- (b) Manufacturer's product warranty information.

Warranty: Contract warranty of the General Conditions and manufacturer's warranty applies.

Products:

(a) Trash Receptacles

- 1. 32 or 36 gallon slat receptacle with side opening door, solid bonnet top, textured black color.
- 2. All steel components to be certified American steel as approved by IDOT.
- 3. All hardware to be stainless steel or coated to resist corrosion.
- Manufactured by Sitescapes:
 - a. Sitescapes
 P.O. Box 22326
 Lincoln, NE 68542
 402-421-9464
 FAX: 402-421-9479
 www.sitescapesonline.com

www.sitescapesoriline.com

Cityview Trash Receptacle CV2-2101

Construction Requirements

- (a) Set trash receptacles on pavement as shown on plans and anchor using 3/8" anchor bolts. Securely set bolts in concrete with epoxy grout recommended by manufacturer.
- (b) Repair any scuffing or surface marring to the satisfaction of the Engineer.

Payment:

(a) This work will be paid for at the contract unit price per each for TRASH RECEPTACLES, which price shall include all equipment, materials and labor necessary for a complete installation.

UNDERGROUND CONDUIT PVC 3/4" DIAMETER:

This work item shall consist of the installation of conduit to be utilized for connection of speakers on Capitol Avenue to the existing sound system. The speakers will be installed under separate contract.

The conduit shall be installed behind the curb in the same trench as the conduit for lighting in accordance with the drawings and as directed by the Engineer. The conduit shall terminate at the existing stub on one end as indicated in the plans. The opposite end shall

be stabbed up into the light base at the location indicated in the plans. Wiring shall be installed under a separate contract. All trenches shall be backfilled with trench backfill in accordance with the Standard Specifications. Trench backfill will not be paid for separately but shall be included in the cost of the conduit and electrical conduit.

This work will be paid for at the contract unit price per foot for UNDERGROUND CONDUIT PVC 3/4" DIAMETER which cost shall include all labor, materials and equipment necessary to complete the work to the satisfaction of the Engineer.

STREET LIGHT ASSEMBLY COMPLETE:

Description: This work consists of providing and installing decorative aluminum, bases, arms, caps, luminaires, internal pole wiring for the luminaires, and GFI receptacle outlets as shown on the plans and as directed by the Engineer.

Submittals: The following items shall be submitted and approved prior to operations; product cut sheets.

Warranty: Light fixtures and decorative poles shall have the manufacturer's 5-year limited warranty.

Products:

Street Light Assembly, Complete

- 1. Poles shall be a Sternberg Lighting 9400 Marshall Roadway.
- 2. Poles shall be cast aluminum alloy. The pole height shall be 25' high, round tapered fluted shaft with a taper of 0.14 inch per foot.
- 3. A lockable GFI 2-outlet 20 ampere receptacle with weatherproof cover shall be mounted at a 20' height and oriented 180 degrees from roadway arm.
- 4. Double banner arms (18" x 60") shall be provided on each pole. Lower arm shall be mounted at a 14' height oriented 180 degrees from roadway arm.
- 5. Flag pole holder shall be provided on each pole. Holder shall be mounted at a 10' height and in the same orientation as the roadway arm.
- 6. Roadway arm shall be Model CA, 8' long with spiked hangstraight coupling.
- 7. Caps for poles shall be spiked, model RSSCC.
- 8. Fixture shall be 1912-XRLED Summit series, a decorative down-light with a decorative cast aluminum fitter and cast ballast housing. The fixture shall be prismatic acrylic tear drop acorn Type 3. The light source shall be 58 watt LED, 4500K temperature, 12 LED with MDL14 driver and Type 3 distribution.

- Options specified are expected to result in order model #1A-1912-XRLED-12L45T3-MDL14-A3-HSHS/CA8/9425ARTF-8SF-BDBA6-FH-GFI20LPIUC-RSSCC/BKT as manufactured by Sternberg Lighting, 555 Lawrence Ave., Roselle, IL 60172, 847/588-3400, www.sternberglighting.com. Contractor shall confirm order number with options to be provided by Sternberg. All metal parts shall be textured black.
- 10. Foundations shall be constructed in accordance with the IDOT Highway Standard.
- (a) Concrete for footing shall be in accordance with Section 1020 Portland Cement Concrete, Type SI.
- (b) Reinforcement shall be in accordance with Section 1006.10 Concrete Reinforcement Bars, Fabric, and Strand.

Construction Requirements:

- (a) Poles shall be set on concrete bases using anchor bolts provided by the manufacturer. Bolts shall be set in concrete during base construction or as recommended by the manufacturer.
- (b) Fluted base cover shall clamp around base plate cover and lower shaft of the pole assembly. Secure with 6 tamper-proof stainless steel screws. Access door in pole shaft and base cover shall be secured with 2 tamper-proof stainless steel screws according to manufacturer's recommendation.
- (c) All components shall be installed according to manufacturer's recommendation.
- (d) Any scuffing or surface marring shall be repaired to the satisfaction of the Owner.

Measurement: This work will be measured by the number of units installed.

Payment:

Single Light fixture mount, pole and base will be paid for at the contract unit price each for STREET LIGHT ASSEMBLY COMPLETE, which price shall include equipment, materials and labor including foundation to complete this item as specified to the satisfaction of the Engineer.

ORNAMENTAL LIGHT UNIT, COMPLETE:

Description: This work consists of furnishing and installing decorative cast aluminum poles and luminaires as shown on the plans and as directed by the Engineer.

Submittals: The following items shall be submitted and approved prior to operations; product cut sheets.

Warranty: Light fixtures and decorative poles shall have the manufacturer's 5-year limited warranty.

Products:

- (a) Poles shall be 7314TO Brighton Series 14-feet high cast aluminum alloy. The shaft shall be octagonal tapered with an integral 20" wide base. Four hot dipped galvanized "L" type anchor bolts shall be provided for each light pole.
- (b) A lockable GFI 2-outlet 20 ampere receptacle with weatherproof cover shall be mounted on each pole at a 4' height and oriented 180 degrees from roadway/flag holder.
- (c) Each pole shall have a flag pole holder mounted at a height of 10'.
- (d) Fixture shall be Boulevard Series D650 SRLED, a decorative acorn light with metal cap. Shade shall be polycarbonate. The light source shall be 67 watt LED, 4500K temperature, 56 LED with MDL03 driver and Type 3 distribution.
- (e) Options specified are expected to result in order model #PT-D650SRLED-B7-4ARC45T3-MDL03-P/7314TO(MOD)-GFI20LPIUC-FH/BKT as manufactured by Sternberg Lighting, 555 Lawrence Ave., Roselle, IL 60172, 847/588-3400, www.sternberglighting.com. Contractor shall confirm order number with options to be provided by Sternberg. All metal parts shall be textured black.
- (f) Concrete for footing shall be in accordance with Section 1020 Portland Cement Concrete, Type SI.
- (g) Reinforcement shall be in accordance with Section 1006.10 Concrete Reinforcement Bars, Fabric, and Stand.
- (h) Foundations shall be constructed in accordance with the IDOT Highway Standard.

Construction Requirements:

- (a) Poles shall be set on concrete based using anchor bolts provided by the manufacturer. Bolts shall be set in concrete during base construction or as recommended by the manufacturer.
- (b) All components shall be installed according to manufacturer's recommendation.
- (c) Any scuffing or surface marring shall be repaired to the Satisfaction of the Owner.
- (d) Sign Frames and mounting brackets shall be installed and finished by Sternberg Lighting on light fixtures requiring the mounting of sign panels at locations shown in the plans.

Basis of Payment:

Ornamental Light fixture mount, pole and base will be paid for at the contract unit price each for ORNAMENTAL LIGHT UNIT COMPLETE, which price shall include equipment, materials and labor including foundation to complete this item as specified to the satisfaction of the Engineer.

DECORATIVE SIGN POST:

Description: This work consists of furnishing and installing decorative cast aluminum sign poles, aluminum frames, and sign panels as specified in the plans and as directed by the Engineer.

Submittals:

- (a) The following items shall be submitted and approved prior to operations:
 - 1. Product cut sheets.

Warranty: For a period of two years following acceptance of project Contractor shall warranty against faulty installation and deterioration of sign frames. Decorative poles also shall have the manufacturer's 5-year limited warranty.

Products:

- (a) Ornamental Street Sign Post, Complete
 - 1. Ornamental base and post shall be 450 Lexington Series. 10' tall. Model number 450T4-10-0.188-SSCC/BKT (with cap) or 450T4-10-0.188-450DRAKE/BKT (with street sign holder)
 - 2. Posts shall be manufactured by Sternberg Lighting, 555 Lawrence Ave. Roselle, IL 60172, 847/588-3400, www.sternberglighting.com. Post and base shall be textured black.

(b) Signs

1. Signs shall meet all applicable IDOT specifications and be according to project plans.

(c) Sign Frames

1. Sign Frames shall be one-piece fully backed aluminum frames matching size and shape of signs shown in the plans and schedules, Color and texture to match poles.

Sign Brackets shall be provided and factory installed by pole manufacturer, whether or not the accompanying sign frames are in-whole or in-part provided by the same manufacturer. The sign bracket height and orientation to be coordinated with manufacturer. Sign Frames shall be fastened to the sign brackets with manufacturer approved fasteners.

Alternate: If sign frames must be attached to the pole without the use of a factory installed sign bracket, they shall be installed on the pole with mechanical fasteners such as rivet nuts or other fastener appropriate for the material and gauge of the pole provided. Steel bands will not be allowed unless approved by the Engineer in shop drawing review.

- 3. Sign Frames shall be manufactured by Sternberg Lighting, 555 Lawrence Ave, Roselle, IL 60172, 847/588-3400, www.sternberglighting.com.
- (d) Post top finish shall be one of the following, as shown on the plan sheets:
 - (1) Street Name Sign Holder
 - a. Street Name Sign Holder shall be 450 Drake Series, Four-way twin post with spike.
 - b. Owner shall furnish aluminum sign blades with custom City graphics. Sternberg/manufacturer does not need to provide standard 6x24 aluminum blade street name signs. Owner furnished sign blades are 6" tall by 36" long and 0.080 gauge aluminum. Contractor shall coordinate with manufacturer to verify the sign holders can accommodate the thickness of the owner furnished sign blades.
 - c. Sign holder shall be manufactured by Sternberg Lighting, 555 Lawrence Ave. Roselle, IL 60172, 847/588-3400, www.sternberglighting.com. Holder shall be textured black.
 - (2) Spiked Cap
 - a. Caps for poles shall be spiked, model SSCC.
- (e) Concrete for footing shall be in accordance with Section 1020 Portland Cement Concrete, Type SI, IDOT Standard Specifications.
- (f) Reinforcement shall be in accordance with Section 1006.10 Concrete Reinforcement Bars, Fabric, and Strand, IDOT Standard Specifications.

(g) Footing size shall be according to manufacturer recommendations, or the following dimensions, whichever is greater: 24" square or round, 36" depth, 1" bevel

Construction Requirements:

- (a) Poles shall be set using anchor bolts provided by manufacturer. Bolts shall be securely set in concrete with epoxy grout recommended by manufacturer.
- (b) Sign frames and signs shall be installed on pole according to manufacturer's installation instructions.
- (c) Any scuffing or surface marring shall be repaired to the satisfaction of the Owner.

Basis of Payment:

This work will be paid for at the contract unit price per each for DECORATIVE SIGN POST which price shall include all equipment, materials, and labor, including post, sign frame, and footing to complete this item as specified and to the satisfaction of the Engineer. Sign Panels will be measured for payment separately and paid for at the contract unit price per square foot for SIGN PANEL.

REMOVING OF LIGHTING UNITS:

Description: This work shall consist of the removal and disposal of existing light units and their foundations.

CONSTRUCTION REQUIREMENTS

General. No removal work will be permitted without approval from both the Engineer and the City of Mt. Sterling.

Removal of Lighting Units.

The Contractor shall be responsible for the coordination of the removal of the existing luminaries with the City. All lighting units to be removed are owned and will be retained by the City of Mt. Sterling.

The Contractor shall be responsible for the electrical disconnection, the removal of the poles and lighting units from the existing foundations, and transporting off-site to the location specified by the City.

Contractor shall abandon any existing underground electric cables. Cables shall be removed with conduit and duct to a depth of 1 ft. (300 mm) below ground level and the hole shall be backfilled. Cables in a unit duct may be removed from the duct and become the property of the Contractor. The empty duct shall be removed to 1 ft. (300 mm) below ground level and the hole backfilled.

Removal of Pole Foundation.

Contractor shall be responsible for the removal of all existing pole foundations. Concrete foundations shall be removed to at least 2 ft. (600 mm) below grade, with removed material disposed of according to Article 202.03. The removal shall extend deeper where required to facilitate roadway construction at no additional cost. Underground conduits and cables shall be separated from the foundation at 2.5 ft (750 mm) below grade and shall be abandoned or re-used as indicated. The void caused by the removal of the foundations shall be backfilled according to Article 841.02.

Method of Measurement.

Each lighting unit and foundation or foundation without a lighting unit which is removed will be counted as a unit for payment.

Basis of Payment.

Coordination required for the removal of lighting units will not be paid for separately but shall be included in the cost of this item.

Foundation removal will be paid for at the contract unit price per each for REMOVAL OF LIGHT UNIT, SALVAGE.

FLAGPOLE RECEIVER:

This item shall consist of furnishing and placing $1\frac{1}{2}$ " x 20" PVC pipe in the ground to serve as flagpole receivers. The pipe shall be schedule 40 PVC pipe with a minimum ID of $1\frac{1}{2}$ ". The pipe shall be installed vertically in the ground and secured within a compacted CA-7 gravel bed in accordance with the detail in the plans and as directed by the Engineer.

This work will be paid for at the contract unit price per each for FLAGPOLE RECEIVER, which price shall include all materials, equipment and labor required to complete this item as specified.

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

SPECIAL PROVISION FOR INSURANCE

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

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

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

City of Mt. Sterling			
Brown County			

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

State of Illinois DEPARTMENT OF TRANSPORTATION Bureau of Local Roads & Streets SPECIAL PROVISION FOR

LOCAL QUALITY ASSURANCE/ QUALITY MANAGEMENT QC/QA Effective: January 1, 2022

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

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

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

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

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

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

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

Density Verification Method				
	Cores			
X	Nuclear Density Gauge (Correlated when			
	paving ≥ 3,000 tons per mixture)			

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

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

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

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

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

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

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

From: Fowler, Michelle S < Michelle.Fowler@illinois.gov>

Sent: Thursday, November 4, 2021 2:22 PM **To:** Anthony Miller <AMiller@HutchisonEng.com>

Subject: Pending IDOT Utility Permit 6-35137 - On FAP 317 (US 24) Main & Capitol Ave. in Mt. Sterling, IL

Hi Tony,

Please see attached Bond form and Traffic Control Authorization Request Form. Please print out 3 copies of the Bond form and have them signed. Please mail all 3 bond forms with original signatures back to us.

Please complete the Traffic Control Authorization Request Form completely. I have highlighted the sections that need completed. Please email the completed Traffic Control Authorization Request Form back to me.

Thank you,

Michelle Fowler
Executive Secretary III
Illinois Department of Transportation, District 6
126 E. Ash Street
Springfield, IL 62704
Phone: (217) 782-5593

Alternate Phione: (217) 782-7314

State of Illinois - CONFIDENTIALITY NOTICE: The information contained in this communication is confidential, may be attorney-client privileged or attorney work product, may constitute inside information or internal deliberative staff communication, and is intended only for the use of the addressee. Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender immediately by return e-mail and destroy this communication and all copies thereof, including all attachments. Receipt by an unintended recipient does not waive attorney-client privilege, attorney work product privilege, or any other exemption from disclosure.



Illinois Department of Transportation

Office of Highways Project Implementation / Region 4 / District 6 126 East Ash Street / Springfield, Illinois 62704-4792

November 4, 2021

RE: Permit 6-35137

City of Mt. Sterling c/o Hutchison Engineering Attn: Anthony Miller 1801 W. Lafayette Ave. P. O. Box 820 Jacksonville, IL 62650

Dear Mr. Miller:

Enclosed are 3 copies of Individual Utility Permit Bond for District Serial No. 6-35137, for a water main at the south return of the Capitol Ave./Main St. (US 24) intersection to the north return of the Capitol Ave./Main St. (US 24) parallel to the Capitol Ave. centerline in Mt. Sterling, IL; Brown County. The Department will require the bonds before approval of this permit can be issued.

All copies of the Individual Utility Permit Bond are to be returned to this office for approval on the part of the Department, after which two fully approved copies will be returned.

If you should have any questions, please feel free to contact Kim Tribbet at (217) 782-7745.

Sincerely,

Jeffrey P. Myers, P.E. Region Four Engineer

Steve V. Beran, P.E., S.E.

District 6 Operations Engineer

SVB/KT/msf

Enclosure



Individual Utility Permit Bond

			Bond No.		
We		,			
			(Mailing Add	ress)	
as Permittee, and			, as Surety, c	lo hereby guarantee p	erformance
of the work described in	he Illinois Department	of Transportation Utility	Permit number	6-35137	which
grants permission and au	thority to perform that	work upon or adjacent	to <u>FAP 31</u>	7	
Route US 24 and description in the pe Utilities on Right-of-Way				inty in accordance wit iistrative Code, Accor	
If the Permittee performs and with Part 530 of Tit State Highway System, liable to the Department	le 92 of the Illinois Ad no claim or demand wi	ministrative Code, Accill be made against this	commodation of Utilit s bond's monetary of	ies on Right-of-Way oligation. Otherwise,	of the Illinois the Surety is
Surety's monetary responsifies successors and ass		I is limited to \$	5,000 aı	nd shall also be the re	sponsibility
Surety shall provide writ dissolution or otherwise) responsibility to replace \$	of Surety to fulfill its co	mmitments under this	bond. Permittee and	Surety have a joint a	
By our signatures below,	we commit ourselves t	o the terms and the co	nditions of this bond:		
Signature	of Agent for Surety		Signature	e of Agent for Permittee	
Name of S	Surety (Print or Type)		Name of F	Permittee (Print or Type)	
Ma	ailing Address		N	Nailing Address	
City	State	Zip	City	State	Zip
()			()		
Telephone Number	Date		Telephone Number	Date)



Individual Utility Permit Bond

			Bona No.		
We		ŗ			
			(Mailing Add	(ress)	
as Permittee, and			, as Surety, o	do hereby guarantee p	erformance
of the work described in the	Illinois Department o	f Transportation Utility	Permit number	6-35137	which
grants permission and auth	ority to perform that w	ork upon or adjacent	to FAP 31	7	
Route US 24		BROWN		unty in accordance wit	
and description in the perm Utilities on Right-of-Way of			of the Illinois Admir	nistrative Code, Accor	nmodation of
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Surety's monetary responsi of its successors and assign		is limited to \$5	i,000 a	nd shall also be the re	sponsibility
Surety shall provide writter dissolution or otherwise) of responsibility to replace Sur	Surety to fulfill its cor	nmitments under this	bond. Permittee and	l Surety have a joint a	
By our signatures below, we	e commit ourselves to	the terms and the co	nditions of this bond:		
Signature of	Agent for Surety		Signatur	e of Agent for Permittee	
Name of Sur	ety (Print or Type)		Name of	Permittee (Print or Type)	j
Mailin	g Address			Mailing Address	
City	State	Zip	City	State	Zip
(()		
Telephone Number	Date		Telephone Number	Date)



Individual Utility Permit Bond

			Bona No.		
We		1			
			(Mailing Add	ress)	
as Permittee, and	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		, as Surety, c	lo hereby guarantee p	erformance
of the work described in	the Illinois Department of	Transportation Utili	ty Permit number	6-35137	which
grants permission and a	uthority to perform that wo	rk upon or adjacen	t to FAP 31	7	
Route US 24		ROWN		unty in accordance wit	
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and with Part 530 of Ti State Highway System,	s the work in accordance tle 92 of the Illinois Admir no claim or demand will b for all expenses incurred i	nistrative Code, Ad e made against th	ccommodation of Utilities bond's monetary of	ies on Right-of-Way oligation. Otherwise,	of the Illinois the Surety is
Surety's monetary responsits successors and as	nsibility under this bond is signs for five years.	limited to \$	5,000 a	nd shall also be the re	sponsibility
dissolution or otherwise)	itten notice to the Illinois of Surety to fulfill its comr Surety within the 30 day p	mitments under this	s bond. Permittee and	l Surety have a joint a	ibility (due to and severable
By our signatures below	, we commit ourselves to t	he terms and the c	onditions of this bond:		
Signatur	e of Agent for Surety		Signature	e of Agent for Permittee	
Name of	Surety (Print or Type)	<u>.</u>	Name of I	Permittee (Print or Type))
M	ailing Address		Ŋ	Mailing Address	
City	State	Zip	City	State	Zip
()	<u> </u>		()		
Telephone Number	Date		Telephone Number	Date)



Illinois Department of Transportation

Office of Highways Project Implementation / Region 4 / District 6 126 East Ash Street / Springfield, Illinois 62704-4792

November 4, 2021

RE: Permit 6-35137 - Traffic Control Authorization Request Form

City of Mt. Sterling c/o Hutchison Engineering Attn: Anthony Miller 1801 W. Lafayette Ave. P. O. Box 820 Jacksonville, IL 62650

Dear Mr. Miller:

The Department has received a permit for District Serial No. 6-35137.

The Department requires a contact name and number of an individual who can be reached on a 24-hour basis during the proposed project. Therefore, the enclosed Traffic Control Authorization Request form must be completed and returned to the Department before final approval of this permit.

Work may not be started until you have received a fully approved copy of this permit.

If you should have any questions, please feel free to contact Kim Tribbet at (217) 782-7745.

Sincerely,

Jeffrey P. Myers, P.E. Region Four Engineer

Steve V. Beran, P.E., S.E.

District 6 Operations Engineer

SVB/KT/msf

Enclosure



Traffic Control Authorization Request

District	6			DDOM/N	
Project			County		
Marked Route	US 24		Contract Num	nber <u>6-35</u>	5137
_			Section		
Location on F	FAP 317(US 24) Main and Capit	tol Ave in Mt. Sterlin	g		
Inclusive Dates of	Work to	Work Hours	AM	□ PM to	AM DPM
Work Type	Maintenance	☐ Construction	□т	raffic	☐ Other
Describe Work _	WATER MAIN				
W					
Contractor or Age	ncy Performing Work				
	jineer: (Construction Foreman/Su				
Name		Telephone No() Office	() Home
(If traffic con	trol is to be employed between 5:00 p.m. a	nd 8:30 a.m. or on Saturday	, Sunday or holida	ys give additiona	al names and numbers)
Name		Telephone No. ()	()
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Name		Telephone No. ()	()
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Distribution:	District Operations/Traffia Engin	LOOF COLL	mitted by:		
Distribution.	District Operations/Traffic Engine Project Implementation Engineer	er			
	Field Engineer Resident Engineer	Арр	roved by:	(District Opera	tions/Traffic Engineer)
	ISP District				

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

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

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

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

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

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

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

METHOD OF MEASUREMENT: The unit of measurement is in hours.

BASIS OF PAYMENT: This work will be paid for at the contract unit price of \$15.00 per hour for each utilized certified TPG Program trainee (TRAINEES TRAINING PROGRAM GRADUATE). The estimated total number of hours, unit price, and total price must be included in the schedule of prices for the Contract submitted by Contractor prior to beginning work. The initial number of TPG trainees for which the incentive is available for this contract is 2.

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.

AUTOMATED FLAGGER ASSISTANCE DEVICES (BDE)

Effective: January 1, 2008

<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. Use of these devices shall be at the option of the Contractor.

<u>Equipment</u>. AFADs shall be according to the FHWA memorandum, "MUTCD - Revised Interim Approval for the use of Automated Flagger Assistance Devices in Temporary Traffic Control Zones (IA-4R)", dated January 28, 2005. The devices shall be mounted on a trailer or a moveable cart and shall meet the requirements of NCHRP 350, Category 4.

The AFAD shall be the Stop/Slow type. This device uses remotely controlled "STOP" and "SLOW" signs to alternately control right-of-way.

Signs for the AFAD shall be according to Article 701.03 of the Standard Specifications and the MUTCD. The signs shall be 24×24 in. (600×600 mm) having an octagon shaped "STOP" sign on one side and a diamond shaped "SLOW" sign on the opposite side. The letters on the signs shall be 8 in. (200 mm) high. If the "STOP" sign has louvers, the full sign face shall be visible at a distance of 50 ft (15 m) and greater.

The signs shall be supplemented with one of the following types of lights.

- (a) Flashing Lights. When flashing lights are used, white or red flashing lights shall be mounted within the "STOP" sign face and white or yellow flashing lights within the "SLOW" sign face.
- (b) Stop and Warning Beacons. When beacons are used, a stop beacon shall be mounted 24 in. (600 mm) or less above the "STOP" sign face and a warning beacon mounted 24 in. (600 mm) or less above, below, or to the side of the "SLOW" sign face. As an option, a Type B warning light may be used in lieu of the warning beacon.

A "WAIT ON STOP" sign shall be placed on the right hand side of the roadway at a point where drivers are expected to stop. The sign shall be 24 x 30 in. (600 x 750 mm) with a black legend and border on a white background. The letters shall be at least 6 in. (150 mm) high.

This device may include a gate arm or mast arm that descends to a horizontal position when the "STOP" sign is displayed and rises to a vertical position when the "SLOW" sign is displayed. When included, the end of the arm shall reach at least to the center of the lane being controlled. The arm shall have alternating red and white retroreflective stripes, on both sides, sloping downward at 45 degrees toward the side on which traffic will pass. The stripes shall be 6 in. (150 mm) in width and at least 2 in. (50 mm) in height.

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

AFADs shall be placed at each end of the traffic control, where a flagger is shown on the plans. The flaggers shall be able to view the face of the AFAD and approaching traffic during operation.

To stop traffic, the "STOP" sign shall be displayed, the corresponding lights/beacon shall flash, and when included, the gate arm shall descend to a horizontal position. To permit traffic to move, the "SLOW" sign shall be displayed, the corresponding lights/beacon shall flash, and when included, the gate arm shall rise to a vertical position.

If used at night, the AFAD location shall be illuminated according to Section 701 of the Standard Specifications.

When not in use, AFADs will be considered nonoperating 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.

80192

BLENDED FINELY DIVIDED MINERALS (BDE)

Effective: April 1, 2021

Revise the second paragraph of Article 1010.01 of the Standard Specifications to read:

"Different sources or types of finely divided minerals shall not be mixed or used alternately in the same item of construction, except as a blended finely divided mineral product according to Article 1010.06."

Add the following article to Section 1010 of the Standard Specifications:

"1010.06 Blended Finely Divided Minerals. Blended finely divided minerals shall be the product resulting from the blending or intergrinding of two or three finely divided minerals. Blended finely divided minerals shall be according to ASTM C 1697, except as follows.

- (a) Blending shall be accomplished by mechanically or pneumatically intermixing the constituent finely divided minerals into a uniform mixture that is then discharged into a silo for storage or tanker for transportation.
- (b) The blended finely divided mineral product will be classified according to its predominant constituent or the manufacturer's designation and shall meet the chemical requirements of its classification. The other finely divided mineral constituent(s) will not be required to conform to their individual standards."

80436

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
	One Project Manager,
Over \$50,000,000	Two Project Superintendents,
Over \$50,000,000	One Engineer, and
	One Clerk

- (2) Home Office and Unabsorbed Overhead. Payment for home office and unabsorbed overhead will be calculated as 8 percent of the total delay cost.
- (c) Extended Traffic Control. Traffic control required for an extended period of time due to the delay will be paid for according to Article 109.04.

When an extended traffic control adjustment is paid under this provision, an adjusted unit price as provided for in Article 701.20(a) for increase or decrease in the value of work by more than ten percent will not be paid.

Upon payment for a contract delay under this provision, the Contractor shall assign subrogation rights to the Department for the Department's efforts of recovery from any other party for monies paid by the Department as a result of any claim under this provision. The Contractor shall fully cooperate with the Department in its efforts to recover from another party any money paid to the Contractor for delay damages under this provision."

80384

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000 Revised: March 2, 2019

<u>FEDERAL OBLIGATION</u>. 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 by the Department in accordance with the requirements of 49 CFR Part 26 and listed in the Illinois Unified Certification Program (IL UCP) DBE Directory.

STATE OBLIGATION. This Special Provision will also be used by the Department to satisfy the requirements of the Business Enterprise for Minorities, Females, and Persons with Disabilities Act, 30 ILCS 575. When this Special Provision is used to satisfy state law requirements on 100 percent state-funded contracts, the federal government has no involvement in such contracts (not a federal-aid contract) and no responsibility to oversee the implementation of this Special Provision by the Department on those contracts. DBE participation on 100 percent state-funded contracts will not be credited toward fulfilling the Department's annual overall DBE goal required by the US Department of Transportation to comply with the federal DBE program requirements.

<u>CONTRACTOR ASSURANCE</u>. The Contractor makes the following assurance and agrees to include the assurance in each subcontract the Contractor signs with a subcontractor.

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 contracts funded in whole or in part with federal or state funds. 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:

- (a) Withholding progress payments;
- (b) Assessing sanctions;
- (c) Liquidated damages; and/or
- (d) Disqualifying the Contractor from future bidding as non-responsible.

OVERALL GOAL SET FOR THE DEPARTMENT. As a requirement of compliance with 49 CFR Part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a

good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 4.00 % 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. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

- (a) The bidder documents enough DBE participation has been obtained to meet the goal or,
- (b) The bidder documents a good faith effort has been made to meet the goal, even though the effort did not succeed in obtaining enough DBE participation to meet the goal.

<u>DBE LOCATOR REFERENCES.</u> Bidders shall consult the IL UCP DBE Directory as a reference source for DBE-certified companies. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217) 785-4611, or by visiting the Department's website at:

http://www.idot.illinois.gov/doing-business/certifications/disadvantaged-business-enterprise-certification/il-ucp-directory/index.

<u>BIDDING PROCEDURES</u>. Compliance with this Special Provision is a material bidding requirement and failure of the bidder to comply will render the bid not responsive.

The bidder shall submit a DBE Utilization Plan (form SBE 2026), and a DBE Participation Statement (form SBE 2025) for each DBE company proposed for the performance of work to achieve the contract goal, with the bid. If the Utilization Plan indicates the contract goal will not be met, documentation of good faith efforts shall also be submitted. The documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor is selected over a DBE for work on the contract. The required forms and documentation must 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 Utilization Plan if it does not meet the bidding procedures set forth herein and the bid will be declared not responsive. In the event the bid is declared not 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.

GOOD FAITH EFFORT PROCEDURES. 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 enough DBE participation has been obtained or document the good faith efforts of the bidder, in the event enough DBE participation has not been obtained, before the Department will 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 bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A. This means the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts the bidder has made. Mere pro forma efforts, in other words efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases and will be considered by the Department.
 - (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
 - (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Contractor might otherwise prefer to perform these work items with its own forces.
 - (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

- (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
 - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable. In accordance with the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.
- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
- (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines the bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided it is otherwise eligible for award. If the Department determines the

bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification will also include a statement of reasons for the adverse determination. If the Utilization Plan is not approved because it is deficient as a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no more than a five calendar day period to cure the deficiency.

(c) The bidder may request administrative reconsideration of an adverse determination by emailing the Department at "<u>DOT.DBE.UP@illinois.gov</u>" within the five calendar days after the receipt of the notification of the determination. The determination shall become final if a request is not made on or before the fifth calendar day. A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be reviewed by the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

<u>CALCULATING DBE PARTICIPATION</u>. The Utilization Plan values represent work anticipated to be performed 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 companies. 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 counting guidelines are provided in 49 CFR Part 26.55, the provisions of which govern over the summary contained herein.

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.

- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:
 - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
 - (2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.
- (e) DBE as a material supplier:
 - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
 - (2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.
 - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a DBE regular dealer or DBE manufacturer.

CONTRACT COMPLIANCE. Compliance with this Special Provision is an essential part of the contract. 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 goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Utilization Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal. All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the DBE Participation Commitment Statement.

- (a) <u>NO AMENDMENT</u>. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be emailed to the Department at <u>DOT.DBE.UP@illinois.gov</u>.
- (b) <u>CHANGES TO WORK</u>. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A or AER 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, a new Request for Approval of Subcontractor will not be required. However, the Contractor must document efforts to assure the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.
- (c) <u>SUBCONTRACT</u>. The Contractor must provide copies of 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.
- (d) <u>ALTERNATIVE WORK METHODS</u>. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractorinitiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
 - (1) The replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
 - (2) The DBE is aware its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
 - (3) The DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.

(e) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a) of this part. Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE in the Utilization Plan.

As stated above, the Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor, with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

For purposes of this paragraph, good cause includes the following circumstances:

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the Contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the Contractor's reasonable, nondiscriminatory bond requirements;
- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness:
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law.

- (6) The Contractor has determined the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides written notice to the Contractor of its withdrawal;
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the Contractor can self-perform the work for which the DBE contractor was engaged or so that the Contractor can substitute another DBE or non-DBE contractor after contract award.
 - When a DBE is terminated or fails to complete its work on the Contract for any reason, the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal. The good faith efforts shall be documented by the Contractor. If the Department requests documentation under this provision, the Contractor shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of the Contractor. The Department will provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.
- (f) FINAL PAYMENT. After the performance of the final item of work or delivery of material by a DBE and final payment therefore 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 on Department form SBE 2115 to the Resident Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes the work has not been satisfactorily completed. 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. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.
- (g) <u>ENFORCEMENT</u>. 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.

(h) <u>RECONSIDERATION</u>. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

LUMINAIRES, LED (BDE)

Effective: April 1, 2019 Revised: January 1, 2022

<u>Description</u>. This work shall consist of furnishing and installing light emitting diode (LED) luminaires. Work shall be according to Sections 801, 821, and 1067 of the Standard Specifications, except as modified herein.

<u>Submittals</u>. In addition to the requirements listed in Article 801.05(a), submittals for LED luminaires shall include the following.

- Completed manufacturer's luminaire ordering form with the full catalog number provided.
- Descriptive literature and catalog cuts for the luminaire, driver, and surge protective device.
- Lighting calculations generated with AGi32 software demonstrating compliance with the
 Luminaire Performance Table(s) shown in the contract. These calculations shall be
 performed to the following criteria: photopic units shall be used; calculations shall be
 performed to an accuracy matching the number of significant digits given in the Luminaire
 Performance Table(s); point-by-point illuminance, luminance, and veiling luminance ratios
 demonstrating the submitted luminaire meets the lighting metrics specified in the
 Luminaire Performance Table(s) using IES RP-8 methods.

Upon request by the Engineer, submittals for LED Luminaires shall also include any or all the following.

- IES file associated with each submitted luminaire in IES LM-63 format.
- TM-21 calculator spreadsheet (XLSX or PDF format) and if available, TM-28 report for the specified luminaire or luminaire family. Both reports shall be for 50,000 hours at an ambient temperature of 77 °F (25 °C).
- LM-79 report with National Voluntary Laboratory Accreditation Program (NVLAP) current
 at the time of testing in PDF format inclusive of the following: isofootcandle diagram with
 half candela contour and maximum candela point; polar plots through maximum plane and
 maximum cone; coefficient of utilization graph; candela table; and spectral distribution
 graph and chromaticity diagram.
- LM-80 report for the specified LED package in PDF format and if available, LM-84 report for the specified luminaire or luminaire family in PDF format. Both reports shall be conducted by a laboratory with NVLAP certification current at the time of testing.
- In Situ Temperature Measurement Test (ISTMT) report for the specified luminaire or luminaire family in PDF format.

- Vibration test report in accordance with ANSI C136.31 in PDF format.
- ASTM B117/ASTM D1654 (neutral salt spray) test and sample evaluation report in PDF format.
- ASTM G154 (ASTM D523) gloss test report in PDF format.
- LED drive current, total luminaire input wattage, and current over the operating voltage range at an ambient temperature of 77 °F (25 °C).
- Power factor (pf) and total harmonic distortion (THD) at maximum and minimum supply and at nominal voltage for the dimmed states of 70%, 50%, and 30% full power.
- Ingress protection (IP) test reports, conducted according to ANSI C136.25 requirements, for the driver and optical assembly in PDF format.
- Installation, maintenance, and cleaning instructions in PDF format, including recommendations on periodic cleaning methods.
- Documentation in PDF format that the reporting laboratory is certified to perform the required tests.

Roadway Luminaires. Revise Article 821.02(d) to read.

"(d) Light Source1067.06"

Revise the third paragraph of Article 821.03 to read.

"Each luminaire driver and/or driver arrangement shall be checked to ensure compatibility with the project power supply."

Replace the fifth paragraph of Article 821.03 with the following.

"No luminaire shall be installed before it is approved. When independent luminaire testing is required, full approval will not be given until complete test results which demonstrate compliance with the contract documents have been reviewed and accepted by the Engineer. Independent luminaire testing will be required, and shall be conducted, according to Article 1067.01(k)".

Revise the last paragraph of Article 821.03 to read.

"When installing or adjusting the luminaire, care shall be taken to avoid touching the lenses or allowing contaminants to be deposited on any part of the optical assembly. Each lens shall be free of all dirt, smudges, etc. Should the luminaire require cleaning, the luminaire manufacturer's cleaning instructions shall be strictly followed."

Revise Article 821.08 to read.

"821.08 Basis of Payment. This work will be paid for at the contract unit price per each for LUMINAIRE, LED, ROADWAY, of the output designation specified; LUMINAIRE, LED, HIGHMAST, of the output designation specified; LUMINAIRE, LED, UNDERPASS, WALLMOUNT, of the output designation specified; LUMINAIRE, LED, UNDERPASS, SUSPENDED, of the output designation specified; LUMINAIRE, LED, SIGN LIGHTING, of the output designation specified.

<u>Luminaires</u>. Revise Articles 1067.01 through 1067.06 to read.

- "1067.01 General. The size, weight, and shape of the luminaire shall be designed so as not to incite detrimental vibrations in its respective pole and it shall be compatible with the pole and arm. All electrical and electronic components of the luminaire shall comply with the requirements of Restriction of Hazardous Materials (RoHS) regulations. The luminaire shall be listed for wet locations by an NRTL and shall meet the requirements of UL 1598 and UL 8750.
 - (a) Labels. An internal label shall be provided indicating the luminaire is suitable for wet locations and indicating the luminaire is an NRTL listed product to UL1598 and UL8750. The internal label shall also comply with the requirements of ANSI C136.22.
 - An external label consisting of two black characters on a white background with the dimensions of the label and the characters as specified in ANSI C136.15 for HPS luminaires. The first character shall be the alphabetical character representing the initial lumen output as specified in Table 1 of Article 1067.06(c). The second character shall be the numerical character representing the transverse light distribution type as specified in IES RP-8 (i.e. Types 1, 2, 3, 4, or 5).
 - (b) Surge Protection. The luminaire shall comply the requirements of ANSI C136.2 for electrical transient immunity at the "Extreme" level (20KV/10KA) and shall be equipped with a surge protective device (SPD) that is UL1449 compliant with indicator light. An SPD failure shall open the circuit to protect the driver.
 - (c) Optical Assembly. The optical assembly shall have an IP66 or higher rating in accordance with ANSI C136.25. The circuiting of the LED array shall be designed to minimize the effect of individual LED failures on the operation of other LEDs. All optical components shall be made of glass or a UV stabilized, non-yellowing material.
 - (d) Housing. All external surfaces shall be cleaned in accordance with the manufacturer's recommendations and be constructed in such a way as to discourage the accumulation of water, ice, and debris.
 - (e) Driver. The driver shall be integral to the luminaire and shall be capable of receiving indefinite open and short circuit output conditions without damage.

The driver shall incorporate the use of thermal foldback circuitry to reduce output current under abnormal driver case temperature conditions and shall be rated for a lifetime of 100,000 hours at an ambient temperature exposure of 77 °F (25 °C) to the luminaire. If the driver has a thermal shut down feature, it shall not turn off the LEDs when operated at 104 °F (40 °C) or less.

The driver shall have an input voltage range of 120 to 277 volts (\pm 10%) or 347 to 480 volts (\pm 10%) according to the contract documents. When the driver is operating within the rated input voltage range and in an un-dimmed state, the power factor measurement shall be not less than 0.9 and the THD measurement shall be no greater than 20%.

The driver shall meet the requirements of the FCC Rules and Regulations, Title 47, Part 15 for Class A devices with regard to electromagnetic compatibility. This shall be confirmed through the testing methods in accordance with ANSI C63.4 for electromagnetic interference.

The driver shall be dimmable using the protocol listed in the Luminaire Performance Table shown in the contract.

(f) Photometric Performance. The luminaire shall be IES LM-79 tested by a laboratory holding accreditation from the NVLAP for IES LM-79 testing procedures. At a minimum the LM-79 report shall include a backlight/uplight/glare (BUG) rating and a luminaire classification system (LCS) graph showing lumen values and percent lumens by zone as described in IES RP-8. The uplight of the BUG rating shall be U=0.

The luminaire shall also meet the requirements of the Luminaire Performance Table shown in the contract.

(g) Finish. The luminaire shall have a baked acrylic enamel finish. The color of the finish shall be gray, bronze, or black to match the pole or tower on which the luminaire is mounted.

The finish shall have a rating of six or greater according to ASTM D1654, Section 8.0 Procedure A – Evaluation of Rust Creepage for Scribed Samples after exposure to 1000 hours of testing according to ASTM B117 for painted or finished surfaces under environmental exposure.

The luminaire finish shall have less than or equal to 30% reduction of gloss according to ASTM D523 after exposure of 500 hours to ASTM G154 Cycle 6 QUV® accelerated weathering testing.

- (h) Hardware. All hardware shall be stainless steel or of other corrosion resistant material approved by the Engineer.
- (i) Vibration Testing. All luminaires, with the exception of underpass and sign lighting luminaires, shall be subjected to and pass vibration testing requirements at "3G" minimum

zero to peak acceleration in accordance with ANSI C136.31 requirements using the same luminaire. To be accepted, the luminaire housing, hardware, and each individual component shall pass this test with no noticeable damage and the luminaire must remain fully operational after testing.

- (j) Wiring. All wiring in the luminaire shall be rated for operation at 600V, 221 °F (105 °C).
- (k) Independent Luminaire Testing. When a contract has 30 or more luminaires of the same manufacturer's catalog number, that luminaire shall be independently tested to verify it will meet the contract requirements. 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 catalog number. Testing is not required for temporary lighting luminaires.

Prior to testing the Contractor shall propose a properly accredited laboratory and a qualified independent witness, submitting their qualifications to the Engineer for approval. After approval, the Contractor shall coordinate the testing and pay all associated costs, including travel expenses, for the independent witness.

(1) Independent Witness. 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. If deficiencies are found during the physical inspection, the Contractor shall have all luminaires of that manufacturer's catalog number 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 driver of the luminaires and have them shipped to the laboratory.

The independent witness shall be present when testing is approved to be performed by the luminaire manufacturer. If the tests are performed by a laboratory independent of the luminaire manufacturer, distributor, and Contractor, the independent witness need not be present during the testing.

(2) Laboratory Testing. Luminaires shall be tested at an NVLAP accredited laboratory approved for each of the required tests. The testing shall include photometric, colorimetric, and electrical testing according to IES LM-79. 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 at the vertical angles. The vertical angles shall run from 0 to 180 degrees. There shall be a minimum of 40 lateral test planes listed in Fig. 1 of IES LM-31 plus the two planes containing the maximum candela on the left and right sides of the luminaire axis. Before testing, the luminaire when mounted on the goniometer shall be scanned for vertical and horizontal angles of maximum candela and these planes included in the test. The luminaire shall be checked for a bi-symmetric light distribution. Individual tests must be conducted for each hemisphere, quadrant, and left/right sides.

The results for each photometric and colorimetric test performed shall be presented in a standard IES LM-79 report that includes the 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 according to IES LM-79 as well as NEMA and ANSI standards. The report shall list luminaire characteristics including input amperes, watts, power factor, total harmonic distortion, and LED driver current for full and partial power.

- (3) Summary Test Report. 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 the 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 (form BDE 5650), photometric and electrical test reports, and point-by-point photometric calculations performed in AGi32 sorted by luminaire manufacturers catalog number. 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.
- (4) Approval of Independent Testing Results. Should any of the tested luminaires fail to satisfy the specifications and perform according to approved submittal information, all luminaires of that manufacturers catalog number 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, correcting, or replacing luminaires shall be repeated until luminaires for each manufacturers catalog number 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 and laboratory. All summary test reports, written reports, and the qualifications of the independent witness and laboratory shall be submitted for approval to the Engineer with a copy to the Bureau of Design and Environment, 2300 S Dirksen Parkway, Room 330 Springfield, IL 62764.

1067.02 Roadway Luminaires. Roadway luminaires shall be according to Article 1067.01 and the following.

The luminaire shall be horizontally mounted and shall be designed to slip-fit on a 2-3/8 in. (60 mm) outside diameter pipe arm with a stop to limit the amount of insertion to 7 in. (180 mm). It shall not be necessary to remove or open more than the access door to mount the luminaire.

The effective projected area (EPA) of the luminaire shall not exceed 1.6 sq ft (0.149 sq m) and the weight, including accessories, shall not exceed 40 lb (18.14 kg). If the weight of the luminaire is less than 20 lb (9.07 kg), weight shall be added to the mounting arm or a supplemental vibration damper installed as approved by the Engineer.

The luminaire shall be equipped with both internal and external leveling indicators. The external leveling indicator shall be clearly visible in daylight to an observer directly under the luminaire at a mounting height of 50 ft (15.2 m).

The luminaire shall be fully prewired to accept a seven-pin, twist-lock receptacle that is compliant with ANSI C136.41. All receptacle pins shall be connected according to TALQ Consortium protocol.

The luminaire shall be provided with an installed shorting cap that is compliant with ANSI C136.10.

1067.03 Highmast Luminaires. Highmast luminaires shall be according to Article 1067.01 and the following.

The luminaire shall be horizontally mounted and shall be designed and manufactured for highmast tower use. The EPA of the luminaire shall not exceed 3.0 sq ft (0.279 sq m) and the weight, including accessories, shall not exceed 85 lb (38.6 kg).

The optical assembly shall be capable of being rotated 360 degrees. A vernier scale shall be furnished on the axis of rotation for aiming the luminaire in relation to its mounting tenon arm. The scale shall be graduated in 5 degree increments or less. The luminaire shall be clearly marked at the vernier as to 'house-side' and 'street-side' to allow proper luminaire orientation.

1067.04 Underpass Luminaires. Underpass luminaries shall be according to Article 1067.01 and the following.

The underpass luminaire shall be complete with all supports, hardware, and appurtenant mounting accessories. The underpass luminaire shall be suitable for lighting a roadway underpass at an approximate mounting height of 15 ft (4.5 m) from a position suspended directly above the roadway edge of pavement or attached to a wall or pier. The underpass luminaire shall meet the requirements of ANSI C136.27.

It shall not be necessary to remove more than the cover, reflector and lens to mount the luminaire. The unit shall be suitable for highway use and shall have no indentations or crevices in which dirt, salt, or other corrosives may collect.

(a) Housing. The housing and lens frame shall be made of die cast aluminum or 16 gauge (1.5 mm) minimum thickness Type 304 stainless steel. All seams in the housing enclosure shall be welded by continuous welds.

The housing shall have an opening for installation of a 3/4 in. (19 mm) diameter conduit.

- (b) Lens and Lens Frame. The frame shall not overlap the housing when closed. The luminaire shall have a flat glass lens to protect the LEDs from dirt accumulation or be designed to prevent dirt accumulation. The optic assembly shall be rated IP 66 or higher.
- **1067.05 Sign Lighting Luminaires.** Sign lighting luminaries shall be suitable for lighting overhead freeway and expressway guide signs; and shall be according to Article 1067.01.
- **1067.06 Light Sources.** The light sources in all luminaires shall be LED according to Article 1067.01 and the following.
 - (a) The light source shall be according to ANSI C136.37 for solid state light sources used in roadway and area lighting.
 - (b) The light source shall have a minimum color rendering index (CRI) of 70 and a nominal correlated color temperature (CCT) of 4000 K.
 - (c) The rated initial luminous flux (lumen output) of the light source, as installed in the luminaire, shall be according to the following table for each specified output designation.

Output Designations and Initial Luminous Flux		(for information only)	
Output Designation	Initial Luminous Flux (Im)	Approximate High Pressure Sodium (HPS) Equivalent Wattage	
Α	2,200	35 (Low Output)	
В	3,150	50 (Low Output)	
С	4,400	70 (Low Output)	
D	6,300	100 (Low Output)	
E	9,450	150 (Low Output)	
F	12,500	200 (Med Output)	
G	15,500	250 (Med Output)	
Н	25,200	400 (Med Output)	
I	47,250	750 (High Output)	
J	63,300	1,000 (High Output)	
K	80,000+	1,000+ (High Output)	

Luminaires with an initial luminous flux less than or greater than the values listed in the above table may be acceptable if they meet the requirements given in the Luminaire Performance Table shown in the contract and approved by the Engineer."

PORTLAND CEMENT CONCRETE - HAUL TIME (BDE)

Effective: July 1, 2020

Revise Article 1020.11(a)(7) of the Standard Specifications to read:

"(7) Haul Time. Haul time shall begin when the delivery ticket is stamped. The delivery ticket shall be stamped no later than five minutes after the addition of the mixing water to the cement, or after the addition of the cement to the aggregate when the combined aggregates contain free moisture in excess of two percent by weight (mass). If more than one batch is required for charging a truck using a stationary mixer, the time of haul shall start with mixing of the first batch. Haul time shall end when the truck is emptied for incorporation of the concrete into the work. The maximum haul time shall be as follows.

Concrete Temperature at Point of Discharge,	Maximum Haul Time ^{1/} (minutes)	
°F (°C)	Truck Mixer or Truck Agitator	Nonagitator Truck
50 - 64 (10 - 17.5)	90	45
> 64 (> 17.5) - without retarder	60	30
> 64 (> 17.5) - with retarder	90	45

^{1/} To encourage start-up testing for mix adjustments at the plant, the first two trucks will be allowed an additional 15 minutes haul time whenever such testing is performed.

For a mixture which is not mixed on the jobsite, a delivery ticket shall be required for each load. The following information shall be recorded on each delivery ticket: (1) ticket number; (2) name of producer and plant location; (3) contract number; (4) name of Contractor; (5) stamped date and time batched; (6) truck number; (7) quantity batched; (8) amount of admixture(s) in the batch; (9) amount of water in the batch; and (10) Department mix design number.

For concrete mixed in jobsite stationary mixers, the above delivery ticket may be waived, but a method of verifying the haul time shall be established to the satisfaction of the Engineer."

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%"

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 2. 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.

VEHICLE AND EQUIPMENT WARNING LIGHTS (BDE)

Effective: November 1, 2021

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. The lights shall be in operation while the vehicle or equipment is engaged in construction operations."

WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012 Revised: November 1, 2021

The Contractor shall submit a weekly report of Disadvantaged Business Enterprise (DBE) trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) that are used for DBE goal credit.

The report shall be submitted 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

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 manufactured after December 31, 2019 shall be MASH-16 compliant. Category 1 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2024.

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 manufactured after December 31, 2019 shall be MASH-16 compliant. Category 2 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2024.

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-16 compliant. Category 3 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, 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 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-16 compliant is available, an NCHRP 350 or MASH-2009 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."

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

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

I. GENERAL

 Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (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).

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.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal 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).

- 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.
- 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. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 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 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, 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 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, 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 230, 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 (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 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 35 and 29 CFR 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.
- 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, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection

for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

- 2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who 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.
- 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, national origin, age or disability. The following procedures shall be followed:

- a. The contractor will conduct periodic inspections of project sites to insure 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. 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, 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, 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 there under. 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, 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 and 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. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor 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 contracting agency deems appropriate.
- 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 \$10,000 or more.

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, 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). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

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

a. All laborers and mechanics employed or working upon the site of the work, 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 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.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. 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 shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). 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 classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH–1321) shall 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. (1) The contracting officer shall 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 shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore 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 utilized 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) 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 shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. 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.
 - (3) 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 shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour 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.
 - (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall 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.
- c. 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 shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d. 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, 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.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, 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.

3. Payrolls and basic records

- a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, 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 section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) 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 section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall 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. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
 - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed 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 Regulations, 29 CFR part 3;
 - (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 of work performed, as specified in the applicable wage determination incorporated into the contract.
 - (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
 - (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, 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 may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed 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 Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall 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 the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall 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, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- d. 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. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 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.
- **9. Disputes concerning labor standards.** 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 he or she) 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 section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

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 watchmen 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.

- 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. 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 watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 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.
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or 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, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.
- **4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 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" 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:
- (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.
- 2. 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. 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.
- 5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

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 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.
- 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 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).
- 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 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 1, 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

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more — as defined in 2 CFR Parts 180 and 1200.

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.
- 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.
- 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.
- 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 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee 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 grantee or subgrantee 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.
- 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.
- 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. 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 Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- 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. 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) 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;
- (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: 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.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. 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)

- a. By signing and submitting this proposal, the prospective lower tier 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.
- 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 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 grantee or subgrantee 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 grantee or subgrantee 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.
- 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.
- 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 Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- 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.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

* * * * *

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 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.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
- a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.
- 5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.
- 6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

Contract Provision - Cargo Preference Requirements

In accordance with Title 46 CFR § 381.7 (b), the contractor 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.
- (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 Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
- (3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract."

Provisions (1) and (2) apply to materials or equipment that are acquired solely for the project. The two provisions do not apply to goods or materials that come into inventories independent of the project, such as shipments of Portland cement, asphalt cement, or aggregates, when industry suppliers and contractors use these materials to replenish existing inventories.