

110

Letting January 19, 2018

Notice to Bidders, Specifications and Proposal



**Illinois Department
of Transportation**

Springfield, Illinois 62764

**Contract No. 97563
CLINTON County
Section 13-00095-02-PV
Route FAS 784 (Ch 11)
Project X7Z9-424 ()
District 8 Construction Funds**

Prepared by

Checked by

F

(Printed by authority of the State of Illinois)



NOTICE TO BIDDERS

- 1. TIME AND PLACE OF OPENING BIDS.** Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 10:00 a.m. January 19, 2018 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. 97563
CLINTON County
Section 13-00095-02-PV
Project X7Z9-424 ()
Route FAS 784 (Ch 11)
District 8 Construction Funds**

Construction of a PCC roundabout and approaches at the intersection of Jamestown Road and Holy Cross Lane in Breese, Illinois.

- 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 readvertise the proposed improvement, and to waive technicalities.

By Order of the
Illinois Department of Transportation

Randall S. Blankenhorn,
Secretary

INDEX
FOR
SUPPLEMENTAL SPECIFICATIONS
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2018

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

ERRATA Standard Specifications for Road and Bridge Construction
(Adopted 4-1-16) (Revised 1-1-18)

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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 Name</u>	<u>Pg.</u>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80099		Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2014
80382	50	X Adjusting Frames and Grates	April 1, 2017	
80274	52	X Aggregate Subgrade Improvement	April 1, 2012	April 1, 2016
80192		Automated Flagger Assistance Device	Jan. 1, 2008	
80173	55	X Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
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
80366	57	X Butt Joints	July 1, 2016	
80386		Calcium Aluminate Cement for Class PP-5 Concrete Patching	Nov. 1, 2017	
* 80396		Class A and B Patching	Jan. 1, 2018	
80384	58	X Compensable Delay Costs	June 2, 2017	
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
80277	62	X Concrete Mix Design – Department Provided	Jan. 1, 2012	April 1, 2016
80261	63	X Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
80387		Contrast Preformed Plastic Pavement Marking	Nov. 1, 2017	
80029	66	X Disadvantaged Business Enterprise Participation	Sept. 1, 2000	July 2, 2016
* 80378	77	X Dowel Bar Inserter	Jan. 1, 2017	Jan. 1, 2018
80388		X Equipment Parking and Storage	Nov. 1, 2017	
80229		Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
80304		Grooving for Recessed Pavement Markings	Nov. 1, 2012	Nov. 1, 2017
80246	85	X Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	April 1, 2016
* 80347		Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits - Jobsite Sampling	Nov. 1, 2014	Jan. 1, 2018
80383		Hot-Mix Asphalt – Quality Control for Performance	April 1, 2017	Nov. 1, 2017
80376	86	X Hot-Mix Asphalt – Tack Coat	Nov. 1, 2016	
* 80392	87	X Lights on Barricades	Jan. 1, 2018	
80336		Longitudinal Joint and Crack Patching	April 1, 2014	April 1, 2016
* 80393	89	X Manholes, Valve Vaults, and Flat Slab Tops	Jan. 1, 2018	
80045		Material Transfer Device	June 15, 1999	Aug. 1, 2014
* 80394		Metal Flared End Section for Pipe Culverts	Jan. 1, 2018	
80165		Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
80349		Pavement Marking Blackout Tape	Nov. 1, 2014	April 1, 2016
80371	90	X Pavement Marking Removal	July 1, 2016	
* 80390	91	X Payments to Subcontractors	Nov. 2, 2017	
80377		Portable Changeable Message Signs	Nov. 1, 2016	April 1, 2017
80389	92	X Portland Cement Concrete	Nov. 1, 2017	
80359		Portland Cement Concrete Bridge Deck Curing	April 1, 2015	Nov. 1, 2017
80385	93	X Portland Cement Concrete Sidewalk	Aug. 1, 2017	
80300		Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	April 1, 2016
80328	94	X Progress Payments	Nov. 2, 2013	
34261		Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157		Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	

<u>File Name</u>	<u>Pg.</u>		<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
* 80306	95	X	Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	Jan. 1, 2018
* 80395			Sloped Metal End Section for Pipe Culverts	Jan. 1, 2018	
80340			Speed Display Trailer	April 2, 2014	Jan. 1, 2017
80127	105	X	Steel Cost Adjustment	April 2, 2014	Aug. 1, 2017
* 80391	108	X	Subcontractor Mobilization Payments	Nov. 2, 2017	
80317			Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	April 1, 2016
80298	109	X	Temporary Pavement Marking (NOTE: This special provision was previously named "Pavement Marking Tape Type IV".)	April 1, 2012	April 1, 2017
20338			Training Special Provision	Oct. 15, 1975	
* 80318			Traversable Pipe Grate for Concrete End Sections (Note: This special provision was previously named "Traversable Pipe Grate".)	Jan. 1, 2013	Jan. 1, 2018
80288			Warm Mix Asphalt	Jan. 1, 2012	April 1, 2016
80302	112	X	Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
80071	113	X	Working Days	Jan. 1, 2002	

The following special provisions are in the 2018 Supplemental Specifications and Recurring Special Provisions.

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location</u>	<u>Effective</u>	<u>Revised</u>
80368	Light Tower	Article 1069.08	July 1, 2016	
80369	Mast Arm Assembly and Pole	Article 1077.03(a)(1)	July 1, 2016	
80338	Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	Recurring CS #35	April 1, 2014	April 1, 2016
80379	Steel Plate Beam Guardrail	Articles 630.02, 630.05, 630.06, and 630.08	Jan. 1, 2017	
80381	Traffic Barrier Terminal, Type 1 Special	Article 631.04	Jan. 1, 2017	
80380	Tubular Markers	Articles 701.03, 701.15, 701.18, and 1106.02	Jan. 1, 2017	

GUIDE BRIDGE SPECIAL PROVISION INDEX/CHECK SHEET

Effective as of the: January 19, 2018 Letting

Pg #	√	File Name	Title	Effective	Revised
		GBSP 4	Polymer Modified Portland Cement Mortar	June 7, 1994	Apr 1, 2016
		GBSP 12	Drainage System	June 10, 1994	Jun 24, 2015
		GBSP 13	High-Load Multi-Rotational Bearings	Oct 13, 1988	Apr 1, 2016
		GBSP 14	Jack and Remove Existing Bearings	April 20, 1994	Jan 1, 2007
		GBSP 15	Three Sided Precast Concrete Structure	July 12, 1994	Dec 21, 2016
		GBSP 16	Jacking Existing Superstructure	Jan 11, 1993	Jan 1, 2007
		GBSP 17	Bonded Preformed Joint Seal	July 12, 1994	Jan 1, 2007
		GBSP 18	Modular Expansion Joint	May 19, 1994	Dec 29, 2014
		GBSP 21	Cleaning and Painting Contact Surface Areas of Existing Steel Structures	June 30, 2003	May 18, 2011
		GBSP 25	Cleaning and Painting Existing Steel Structures	Oct 2, 2001	Apr 22, 2016
		GBSP 26	Containment and Disposal of Lead Paint Cleaning Residues	Oct 2, 2001	Apr 22, 2016
		GBSP 28	Deck Slab Repair	May 15, 1995	Oct 15, 2011
		GBSP 29	Bridge Deck Microsilica Concrete Overlay	May 15, 1995	Oct 20, 2017
		GBSP 30	Bridge Deck Latex Concrete Overlay	May 15, 1995	Oct 20, 2017
		GBSP 31	Bridge Deck High-Reactivity Metakaolin (HRM) Conc Overlay	Jan 21, 2000	Oct 20, 2017
		GBSP 33	Pedestrian Truss Superstructure	Jan 13, 1998	Dec 29, 2014
		GBSP 34	Concrete Wearing Surface	June 23, 1994	Oct 4, 2016
		GBSP 35	Silicone Bridge Joint Sealer	Aug 1, 1995	Oct 15, 2011
		GBSP 45	Bridge Deck Thin Polymer Overlay	May 7, 1997	Feb 6, 2013
114	X	GBSP 51	Pipe Underdrain for Structures	May 17, 2000	Jan 22, 2010
		GBSP 53	Structural Repair of Concrete	Mar 15, 2006	Apr 1, 2016
		GBSP 55	Erection of Curved Steel Structures	June 1, 2007	
		GBSP 56	Setting Piles in Rock	Nov 14, 1996	Apr 1, 2016
		GBSP 59	Diamond Grinding and Surface Testing Bridge Sections	Dec 6, 2004	Mar 29, 2017
		GBSP 60	Containment and Disposal of Non-Lead Paint Cleaning Residues	Nov 25, 2004	Apr 22, 2016
		GBSP 61	Slipform Parapet	June 1, 2007	Apr 22, 2016
		GBSP 67	Structural Assessment Reports for Contractor's Means and Methods	Mar 6, 2009	Oct 5, 2015
		GBSP 71	Aggregate Column Ground Improvement	Jan 15, 2009	Oct 15, 2011
		GBSP 72	Bridge Deck Fly Ash or GGBF Slag Concrete Overlay	Jan 18, 2011	Oct 20, 2017
		GBSP 75	Bond Breaker for Prestressed Concrete Bulb-T Beams	April 19, 2012	
		GBSP 77	Weep Hole Drains for Abutments, Wingwalls, Retaining Walls And Culverts	April 19, 2012	Oct 22, 2013
		GBSP 78	Bridge Deck Construction	Oct 22, 2013	Dec 21, 2016
		GBSP 79	Bridge Deck Grooving (Longitudinal)	Dec 29, 2014	Mar 29, 2017
		GBSP 81	Membrane Waterproofing for Buried Structures	Oct 4, 2016	
		GBSP 82	Metallizing of Structural Steel	Oct 4, 2016	Oct 20, 2017
		GBSP 83	Hot Dip Galvanizing for Structural Steel	Oct 4, 2016	Oct 20, 2017
		GBSP 85	Micropiles	Apr 19, 1996	Oct 5, 2015
		GBSP 86	Drilled Shafts	Oct 5, 2015	Oct 4, 2016
		GBSP 87	Lightweight Cellular Concrete Fill	Nov 11, 2011	Apr 1, 2016
		GBSP 88	Corrugated Structural Plate Structures	Apr 22, 2016	
		GBSP 89	Preformed Pavement Joint Seal	Oct 4, 2016	
		GBSP 90	Three Sided Precast Concrete Structure (Special)	Dec 21, 2016	Mar 29, 2017
		GBSP 91	Crosshole Sonic Logging Testing of Drilled Shafts	Apr 20, 2016	
		GBSP 92	Thermal Integrity Profile Testing of Drilled Shafts	Apr 20, 2016	

<u>Pg #</u>	<u>√</u>	<u>File Name</u>	<u>Title</u>	<u>Effective</u>	<u>Revised</u>
		GBSP 93	Preformed Bridge Joint Seal	Dec 21, 2016	
		GBSP 94	Warranty for Cleaning and Painting Steel Structures	Mar 3, 2000	Nov 24, 2004

LIST ANY ADDITIONAL SPECIAL PROVISIONS BELOW

The following Guide Bridge Special Provisions have been incorporated into the 2016 Standard Specifications:

File Name	Title	Std Spec Location
GBSP32	Temporary Sheet Piling	522
GBSP38	Mechanically Stabilized Earth Retaining Walls	522
GBSP42	Drilled Soldier Pile Retaining Wall	522
GBSP43	Driven Soldier Pile Retaining Wall	522
GBSP44	Temporary Soil Retention System	522
GBSP46	Geotextile Retaining Walls	522
GBSP57	Temporary Mechanically Stabilized Earth Retaining Walls	522
GBSP62	Concrete Deck Beams	504
GBSP64	Segmental Concrete Block Wall	522
GBSP65	Precast Modular Retaining Wall	522
GBSP73	Cofferdams	2017 Supp
GBSP74	Permanent Steel Sheet Piling (LRFD)	522
GBSP76	Granular Backfill for Structures	2017 Supp
GBSP80	Fabric Reinforced Elastomeric	1028
GBSP84	Precast, Prestressed Concrete Beams	2017 Supp

The following Guide Bridge Special Provisions have been discontinued or have been superseded:

File Name	Title	Disposition:
GBSP70	Braced Excavation	Use TSRS per Sec 522
GBSP95	Bridge Deck Concrete Sealer	Use July 1, 2012 version for Repair projects only



Special Provisions

The following Special Provisions supplement the “Standard Specifications for Road and Bridge Construction”, Adopted April 1, 2016, the latest edition of the “Manual on Uniform Traffic Control Devices for Streets and Highways”, and the “Manual of Test Procedures of Materials” in effect on the date of invitation of bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included here in which apply to and govern the construction of F.A.S. 784 – County Highway 11 (Jamestown Road) & Holy Cross Lane, and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

LOCATION OF PROPOSED WORK:

The proposed work is located at the intersection of, and approaches to, Jamestown Road and Holy Cross Lane, in the City of Breese, Clinton County, Illinois. Jamestown Road is County Highway 11 (CH 11). Jamestown Road south of said intersection, and Holy Cross Lane west of said intersection, are both designated as F.A.S. 784. Improvements extend from a point along CH 11 just north of Ramps “A” and “C” at the U.S. 50 interchange, Sta. 26+24.64, northward to Sta. 40+00, a point just north of St. Joseph’s Hospital’s emergency entrance. Improvements along Holy Cross Lane begin just east of St. James Road at Sta. 100+00 and extend eastward to a point east of the third St. Joseph’s Hospital entrance at Sta. 112+75.

DESCRIPTION OF WORK:

Name: F.A.S. 784 – County Highway 11 (Jamestown Road) & Holy Cross Lane

Length: 2,680.36 feet (0.508 miles)

Location: North part of the City of Breese, Clinton County, Illinois

Proposed Improvement: The project will involve construction of a jointed concrete pavement roundabout and approaches to it at the intersection of Jamestown Road (C.H. 11) and Holy Cross Lane. The existing concrete pavement south of the proposed roundabout will be retained but with reconstruction of a median and curbing either side of this approach. Existing pavement north of the roundabout will be removed to a point and reconstructed with three (3) lane jointed concrete pavement. North of the approach to the roundabout, the existing asphalt pavement will be widened, milled, and overlain with HMA and tapered from the three (3) lane to the existing two (2) lane facility. The existing three (3) lanes of concrete pavement along Holy Cross Lane west of the roundabout will connect to a new concrete pavement approach to the roundabout. The approach to the roundabout on its east will be concrete and three (3) lanes to a point just beyond entrances to the Hospital. From these entrances east, HMA pavement will replace the existing oil and chip pavement and transition from three (3) lanes to two (2).

Work consists of traffic control for stage construction including construction of a temporary HMA runaround pavement; storm sewers; trench drains; topsoil excavation and placement, earth excavation, and embankment; erosion control measures; jointed concrete pavement; combination concrete curb and gutter; stabilized subbase – HMA; hot mix asphalt surface removal; HMA base; leveling binder, binder, and surface courses; a small pile supported retaining wall; and sidewalk and driveways.

STATUS OF UTILITIES:

Utilities Shown on Plans

The approximate locations of some utilities are depicted on the plans. Some utilities depicted were surveyed utilizing marks on the ground provided by companies while others are depicted based on maps and descriptions provided by companies. Approximate horizontal locations of utilities are all that is depicted and the depths of bury, and/or height above ground, of these utilities are not accurately known. The tolerance zone of 220 ILCS 50/2.8 applies to excavation work by the Contractor but does not apply to locations depicted on plans. Some utilities depicted on the plans may have been relocated beyond limits of proposed construction as defined in the Standard Specifications while others may be in the same horizontal location, but positioned deeper such that proposed construction will not conflict with them.

Utilities Not Shown on Plans

There may be known and unknown utilities that are not shown on plans present within the limits of proposed construction. This may be due to utility companies moving utilities or placing temporary utilities following correspondence with them and plan preparation.

Unanticipated Utilities

Known utilities that have been relocated, either within the tolerances of 220 ILCS 50/2.8 or not, shall not be considered unanticipated utilities and references describing them as such in the Standard Specifications shall not apply.

When a utility is listed as one that has facilities within the limits of proposed construction but is not depicted as a line on plan sheets of the plans, or may be in a different location than that shown on the plans, it shall be considered a known utility and it shall be the Contractor's responsibility to contact that utility company at least two (2) weeks before beginning excavation work. It shall not be considered an unanticipated utility. The reason for this is that despite efforts of the Local Agency and their agents to contact the utility company and obtain a field locate or plan drawings from them, the utility company has not responded in a timely fashion prior to bidding and Contract approvals. An additional reason for this is that utilities may have been relocated to different locations within the project limits and as depicted on the plans and plans cannot be updated prior to bidding.

Utilities that are known, require relocation, but are not relocated prior to construction work beginning in the area of the utility shall not be considered a utility in an unanticipated location. This is because it is anticipated these utilities can be relocated during construction without delaying the Contractor's operations.

It shall be the Contractor's responsibility to contact companies, have them locate the depth of their facilities, make arrangements for adjustments if necessary, and carry on operations accordingly. The Contractor shall call J.U.L.I.E. before beginning work. The following companies are known to have utility facilities within the project limits. The anticipated actions, or involvement, for each utility known to be within project limits, are provided.

<u>Utility Company & Date Plans Provided</u>	<u>Type of Utility</u>	<u>Status of Anticipated Involvement</u>
City of Breese 500 North First Street Breese, Illinois 62230 618-526-7151 Don Voss, Public Works Mgr. Dale Detmer, Utility Plant Operations Manager Hard copies of plans provided	Water Mains	No relocations required.
	Sanitary Sewer Mains	No relocations required.
	Storm Sewers	Proposed improvements to modify these systems.
	Buried Electric (Power)	Requires relocation of buried electric, transformers, and street lights beyond the shared use paths and pavement

to City, December, 2016		along the east side of Jamestown.
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<u>Utility Company & Date Plans Provided</u>	<u>Type of Utility</u>	<u>Status of Anticipated Involvement</u>
<p>City of Breese 500 North First Street Breese, Illinois 62230 618-526-7151</p> <p>Hard copy of plans provided to City, December, 2016</p>	Street Lights	<p>Streets lights along Jamestown Road entail poles and buried lines. These will likely be shut off and relocation will follow roadway construction.</p> <p>Street lights along the south side of Holy Cross Lane entail wood poles and overhead electric. The City will remove the poles during construction before the Contractor excavates in this area.</p> <p>At this time, the City has indicated that they will undertake relocations/adjustments during construction but just ahead of the Contractor operations. Of note, the City may need to trench buried conduits into the exposed subgrade of the roundabout and approach pavements for lighting cabling and/or buried electric.</p>
<p>Ameren IP 1050 West Boulevard PO Box 428, MC P-10 Belleville, Illinois 62222 618-236-4365</p> <p>Ron Crannage, Senior Field Engineering Representative</p> <p>Hard copy of plans provided to Ameren, January, 2017.</p>	Buried natural gas	<p>No relocations required.</p> <p>The 3" main along the east side of Jamestown Road was moved beyond proposed ROW into an Ameren IP easement in 2014.</p>
<p>Clinton County Electric Cooperative, Inc. 475 North Main Street PO Box 40 Breese, Illinois 62230-0040</p> <p>Ahren Langhauser, Technical Services Supervisor</p> <p>Hard-copy of plans provided to CCEC December, 2016.</p>	Overhead Electric (OHE-Power)	<p>Currently, CCEC's OHE (power) is on the north side of Holy Cross Lane and along the west side of Jamestown Road.</p> <p>At this time it is not known what CCEC's plans are as the poles along Holy Cross Lane must be relocated or changed. The poles along Jamestown Road will not be in construction limits except at the intersection to Holy Cross Lane.</p> <p>At this time, CCEC has indicated that they will undertake relocations/adjustments during</p>

		construction but just ahead of Contractor operations.
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<u>Utility Company & Date Plans Provided</u>	<u>Type of Utility</u>	<u>Status of Anticipated Involvement</u>
AT&T 3526 State Route 161 Centralia, Illinois 62801 Todd Isaak Plans provided to AT&T, Centralia, January, 2017.	Buried Fiber Optic (FO) and Copper lines.	The FO and copper lines to a pedestal in the southwest corner of the intersection will be required to be relocated. FO lines along the south of Holy Cross Lane will have to be relocated. At this time, AT&T has indicated that they will undertake relocations/adjustments during construction but just ahead of Contractor operations.
Charter Communications 941 Charter Commons Town and Country, Missouri 63017 Lisa Ward/Garry Warren Plans provided via email to Charter, January, 2017.	Cable TV Fiber Optic (Internet)	Cable TV is overhead on poles that will have be relocated by other utility companies. Charter has never provided information pertaining to existing internet lines. At this time, it is anticipated that Charter will undertake relocation/adjustments during construction.
IHRN (Northern Illinois University Broadband Development Corp.) & G4S Technology, LLC Steve Fedeczko, Don Simple, and Chris Roberts Plans provided via email to IHRN and G4S, January, 2017.	Fiber Optic (FO) for St. Joseph's Hospital	Fiber optic (FO) is not shown on the plans. At this time it is anticipated that IHRN will undertake relocation/adjustments during construction.

The above information represents the best information of the County, City, Department, and consultant to the County/City and is only included for the convenience of the Bidder. The applicable provisions of Articles 107.37-107.40, of the Standard Specifications for Road and Bridge Construction, as modified herein, shall apply as well as modifications made to said provisions by the Bureau of Design and Environment (BDE) special provisions and other special provisions.

TRAFFIC CONTROL PLAN:

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

At the preconstruction meeting, the Contractor shall furnish the name of the individuals in his direct employ who is to be responsible for the actual installation and maintenance of the traffic control for this project. If the actual installations and maintenance are to be accomplished by a subcontractor, consent shall be requested of the Engineer at the time of the preconstruction meeting according to Article 108.01 of the Standard Specifications. This shall not relieve the Contractor of the foregoing requirement for the responsible individual in his/her direct employ. The Contractor shall provide the Department the name of its representative who will be responsible for the administration of the Traffic Control Plan.

The Contractor shall furnish, erect, maintain, and remove all warning signs, flags, barricades, and lights according to Article 107.14 and Section 701 of the Standard Specifications, the latest edition of the Manual of Uniform Traffic Control Devices for Construction and Maintenance Operations (MUTCD), this Special Provision, and/or as directed by the Engineer. This work shall also include required traffic control for pedestrians and the applicable Highway Standards shall apply. Note that the barricades and drums shown on the stage construction plan sheets do not represent the full number required and the Contractor shall be responsible for providing the necessary number required.

Attention is called to Articles 107.09, 107.14, 107.15, and Section 701 of the Standard Specifications for Road and Bridge Construction and the following traffic control related Highway Standards:

701001	701006	701011	701311	701501	701502	701701
701801	701901	704001	BLR 21-9	BLR 22-7		

There shall be advance signing prior to closure according to applicable Highway Standards.

SEQUENCE OF OPERATIONS:

The Contractor(s) construction operations shall be in accordance with the construction staging plan sheets, said plan sheet notes, applicable Special Provisions and Standard Specifications, and additional descriptions herein.

Detailed staging was prepared in order to separate traffic from work zones for a safer work area, provide good access to the Hospital during construction, provide larger work zone areas for the Contractor to improve quality and ease of construction, provide details for partial closures of entrances and streets, and to clarify stage construction requirements for bidders so all are bidding on the same requirements.

The Contractor may propose minor alterations to the construction staging shown in the plans, however, the Contractor will not be allowed to eliminate runarounds and the construction of the entire circulatory path within the Stage 2A work zone. The Engineer may or may not approve the minor alterations proposed by the Contractor.

The operations for each stage are described in the plans. Plan schedules list approximate quantities associated with each stage. Below are descriptions of allowable closures and anticipated and allowable working days for various stages of work. Note that working days required are total working days for a particular item of work minus days not affecting the total construction time.

Drainage:

The bulk of storm sewer work can occur in Stage 1A or Stage 1B. The trench drain construction for the Hospital entrances shall coincide with construction of new entrances in Stage 2A (see Stage 2A).

Note that this work could be undertaken during cold weather.

Anticipated working days: 28.

Stage 1A:

Stage 1A details primarily removal of raised median areas and placement of temporary HMA pavement south of the intersection of Jamestown Road and Holy Cross Lane in preparation for routing traffic on the runaround.

Note that this work requires hot-mix asphalt (HMA) material.

Entrances and streets closed: None.

Entrances and streets with half-lane closures: None.

Entrances with alternate two-way entrance(s): None.

Anticipated working days: 3.

Stage 1B:

Stage 1B details primarily removal of curbing south of the roundabout, either side of Jamestown Road, for subsequent runaround construction and final pavement widening. Stage 1B shall also entail storm sewer work where it can be undertaken, construction of runarounds and some widening north of the roundabout as this is needed for subsequent stage traffic, and the retaining wall in the northwest corner of the roundabout.

Note that this work requires HMA material.

Entrances and streets closed: None.

Entrances and streets with half-lane closures: Sta. 111+03.25, Rt.

Entrances with alternate two-way entrance(s): None.

Anticipated working days: 24.

Stage 2A:

Stage 2A details primarily the construction of the majority of the roundabout and approaches.

Because this work involves disruption of the Hospital entrances and traffic patterns, the Contractor shall not exceed the allowable working days for this work.

Note that this work requires HMA material.

Entrances and streets closed: Holy Cross Lane west of Jamestown Road and east of St. James Road.

Three (3) entrances to the Hospital's south-most lot along Holy Cross Lane. Sta. 103+03.89, Rt.

Entrances and streets with half-lane closures: Sta. 33+95.05 Lt., Sta. 34+40.60 Lt., Sta. 37+26.05 Lt.

Entrances with alternate two-way entrance(s): None.

Anticipated working days: 43.

Allowable working days: 43.

Stage 2B:

Stage 2B entails primarily removal of the main runaround to allow construction of the last portion of PCC pavement on Holy Cross Lane east of Jamestown Road. During Stage 2B, traffic is routed onto the newly constructed roundabout pavement. Stage 2B entails removal of temporary pavement and median construction on Jamestown Road at the south end of the improvements.

Note that this work requires HMA material.

Entrances and streets closed: None.

Entrances and streets with half-lane closures: Sta. 111+03.25, Rt.

Entrances with alternate two-way entrance(s): None.

Anticipated working days: 9.

Stage 2C:

Stage 2C entails primarily construction of transitional pavement between PCC pavement and existing bituminous pavement on Holy Cross Lane, east of Jamestown Road, mostly under traffic. Stage 2C also entails HMA surfacing of Jamestown Road north of Holy Cross Lane, under traffic, construction of the curb along the right side of Jamestown Road where the Main Runaround connected to Jamestown Road, and any shared-use path construction. Because the Jamestown Road lanes are shifted westward during Stage 2C, temporary entrance ramps for continuous access to the Hospital's ER entrance can be constructed during this Stage.

Entrances and streets closed: None.

Entrances and streets with half-lane closures: Sta. 111+03.25, Rt.

Entrances with alternate two-way entrance(s): Sta. 36+76.89, Rt.

Anticipated working days: 10.

Stage 2D:

Stage 2D entails primarily removal of the last runaround pavement, construction of curb where the second runaround connects to the roundabout, final HMA surfacing, grading, and shared-use path construction. Stage 2D also involves final pavement marking work and final seeding.

Entrances and streets closed: None.

Entrances and streets with half-lane closures: None.

Entrances with alternate two-way entrance(s): None.

Anticipated working days: 17.

The Contractor shall expedite their work to minimize closures and inconveniences to residents and customers of businesses. Stages shall be consecutively worked on, generally. For example, Stage 2D shall not precede Stage 1A. As noted herein, minor alterations may be proposed by the Contractor and reviewed by the Engineer. Sidewalk closure signs shall be installed fore and aft of construction areas, per the Highway Standards, where work adjacent to sidewalks and/or sidewalk removal work is being performed.

TRAFFIC CONTROL AND PROTECTION, SPECIAL:

This work shall conform to the applicable portions of Section 701 of the Standards Specifications, these Special Provisions, and the Traffic Control Plan herein. This item of work shall consist of furnishing, installing, maintaining, relocating, and removing all traffic control devices used for the purpose of regulating, warning or directing the traffic during the construction of this project.

All traffic control devices used in this project shall conform to the plans, special provisions, traffic control standards, Standard Specifications for Traffic Control items, and the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways. No modification of these requirements will be allowed without prior written approval of the Engineer.

Traffic control devices shall include all temporary traffic control and regulatory signs as described herein, and their supports, temporary pavement markings, barricades with sand bags, plastic drums, channelizing devices, warning lights, arrow boards if necessary, flaggers, or any other device used for the purpose of regulating, warning or guiding traffic through the construction zone and guiding traffic around the construction.

The Contractor shall be responsible for the proper location, installations and arrangement of all traffic control devices as shown on the plans or as directed by the Engineer. This work shall also include required traffic control for pedestrians and the applicable Highway Standards shall apply. Attention shall be given to advance warning signs during construction operations in order to keep land assignment consistent with barricade placement at all times.

The Contractor, when directed by the Engineer shall remove all traffic control devices which were furnished, installed and maintained by him/her under this contract, and such devices shall remain in place until specific authorization for relocation or removal is received from the Engineer.

The Contractor shall contact the Engineer at least 72 hours in advance of beginning work, to allow for coordination between the traffic Control Plan and the various items of work required.

This work will be paid for at the Contract unit price per LUMP SUM for TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

TRAFFIC CONTROL AND PROTECTION, STANDARD 701501:

This work shall conform to the applicable portions of Section 701 of the Standards Specifications and the Traffic Control Plan herein.

All work associated with TRAFFIC CONTROL AND PROTECTION, STANDARD 701501 shall be paid for separately from TRAFFIC CONTROL AND PROTECTION. Standard 701501 work is separated from TRAFFIC CONTROL AND PROTECTION and paid for separately as it is intended to be utilized for hot-mix asphalt work at transitions that do not require full road closure and that can be finished such that there are no open trenches across or adjacent to streets at the end of each day's work operations. Standard 701501 requirements shall be utilized by the Contractor when conditions warrant, on different days and at as many different locations as required, and shall be paid for at the Contract unit price per LUMP SUM for TRAFFIC CONTROL AND PROTECTION, STANDARD 701501 at the locations required. The Contractor shall not receive additional compensation in the event that TRAFFIC CONTROL AND PROTECTION, STANDARD 701501 is utilized more than one (1) time. In the event details of TRAFFIC CONTROL AND PROTECTION, STANDARD 701501 are not utilized, this pay item work shall be deleted from the Contract.

ELEVATION & ALIGNMENT AND CONSTRUCTION STAKING:

The Contractor shall assume responsibility for constructing all work generally to the elevations and grades specified in the plans and cross sections in accordance with Article 105.09 of the Standard Specifications. The Engineer will, in accordance with Article 105.09, more specifically provide the following, one (1) time:

1. Benchmarks in convenient locations for the Contractor.
2. Lathes or nails at all temporary construction easement points deemed necessary by the Engineer.
3. Lathes at the center of inlets, center of manholes, at the end flowlines of structures, and along various storm sewer alignments will be provided for rough excavation for drainage structures. Offset lathes and hub stakes will be provided for the above mentioned with "cut" or "fill" depths to flowline inverts, from the elevation of the hub stakes.
4. Lathes with existing ground elevations and proposed final surface elevations every 50' along baselines, and radius centers along the runarounds.
5. Lathes and hub stakes offset at the back of PCC pavement/curbing every transverse contraction joint location, depressed curb opening, and radius points and radius centers, between Sta. 30+71.29 and Sta. 33+59.57 along Jamestown Road and between Sta. 103+44.28 and Sta. 106+24.89 along Holy Cross Lane, through the roundabout circulatory and approach areas.
6. Lathes and hub stakes offset at the back of PCC pavement/curbing every 25', depressed curb opening, and radius points and radius centers, beyond the stations noted in Note 4. above, along Jamestown Road and Holy Cross Lane.

7. Lathes with existing ground elevations and proposed final surface elevations every 25' along the Holy Cross Lane baseline where new HMA pavement over aggregate bases will be constructed beyond PCC pavement/curbing.
8. PK nails in existing pavement at 50' centers along Jamestown Road north of where proposed PCC curb ends with existing pavement elevation and proposed "fill" elevations listed on a spreadsheet provided to the Contractor following milling operations.
9. Lathes and hub stakes offset at the back of PCC pavement/curb every 25', at entrances and the Hospital lot with curbing.
10. Lathes and hub stakes at the corners of the proposed retaining wall center of pipes.
11. Lathes and hub stakes at key points along proposed PCC curb along the proposed retaining wall.
12. Lathes with existing ground elevations and proposed final surface elevations every 25' along the shared-use path baseline in locations where the shared-use path veers away from the roadway and a vertical alignment for the shared-use path is provided.

Staking for Item 11, the proposed retaining wall, and Item 8, following milling work, will be refreshed as needed. In the event the Contractor damages staking, the Contractor shall reimburse the County/Engineer for re-staking.

Other items of work may be staked for the Contractor as determined by the Engineer. The Contractor shall anticipate that only the work listed above will be staked for him/her.

It is noted that electronic CADD files and/or triangulated irregular network (TIN) will not be provided to the Contractor due to the nature of this project and due to the staking by the County/Engineer. Temporary drainage pipes for runarounds and entrances without curbing will not be staked.

Due to the constant slope of the circulatory pavement between the outer radius of the roundabout and the 6.12 curbing (2%) and the constant slope of the apron between the 6.12 and 9.12 curbing (4%), these transverse joints, at back of curb, inside the circulatory, and extending through the truck apron circulatory, will not be staked.

STORM WATER POLLUTION PREVENTION PLAN:

The plans include the specific erosion control plans. The Contractor shall abide by the requirements of said plan, as required by the IEPA, to comply with the National Pollutant Discharge Elimination System (NPDES) requirements.

A Notice of Intent (NOI) will be submitted to the IEPA for approval of a permit by the Engineer following award of the project by the Department. Copies of the NOI will be made available to the Contractor. The Contractor is required to adhere to the requirements of said permit, details shown on the plans, agency forms included in bidding documents, highway standards, requirements of this Special Provision, and directions of the Engineer throughout the project. The Contractor shall not receive additional compensation for compliance with said requirements beyond the bid unit prices. The Contractor will be required to assist with the Notice of Termination (NOT) close-out. A Contractor's Certification Statement is included herein and is made part of the Contract. The Contractor shall sign and date the certification sheet after award by the State.

TEMPORARY DRAINAGE:

This work shall not be paid for separately and no separate pay item for it is provided in the Contract. This special provision is included for the purpose of alleviating potential for flooding during construction.

The Contractor shall perform their operations to cause runoff to be channeled to existing inlets and storm systems and to locations where the existing storm sewers are removed for extension. Proposed work upstream of proposed ditches and storm systems shall not be undertaken until the downstream, proposed ditches and storm systems are constructed and can accept flows. The Contractor shall protect subgrades and bases from inundation from runoff not falling immediately onto the surfaces of said subgrades and bases by employing excelsior rolls, silt fences, or other means the Contractor deems fit.

No separate and/or additional compensation will be provided to the Contractor for the measures noted herein.

RELOCATE EXISTING MAILBOX:

This work shall be in general accordance with Article 107.20 of the Standard Specifications, the plans, the Highway Standards, and as modified by this Special Provision.

As noted in Article 107.20, the Contractor shall remove and protect existing mailboxes and non-mail boxes, such as newspaper boxes, that interfere with operations and place them in a temporary location accessible to daily delivery of mail throughout construction. Prior to moving, the Contractor shall contact the parties associated with said boxes, including the Post Office. The temporary supports shall be adequate to support the box loads and not be paid for separately. The Contractor shall remove and relocate said mailboxes as many times as necessary throughout construction. The mailboxes shall be erected in their original condition, in their final position by the Contractor upon completion of their operations.

All labor, equipment, and materials required for this work shall be paid for at the Contract unit price per EACH for RELOCATE EXISTING MAILBOX.

REMOVE & SALVAGE EXISTING LANDSCAPING BLOCKS:

This work shall involve removing, salvaging, and storing landscaping blocks for a private landowner.

The Contractor shall carefully remove landscaping blocks and transport them without damage to a location on the property of the landowner from whence the blocks came. The Contractor shall carefully and manually excavate around the existing blocks that are buried and carry them in similar fashion to said location. The blocks shall be stacked on said property in a manner that facilitates transport by the property owner at a later time. In the event that the property owner provides clear direction that they do not want the blocks to the Engineer, the Contractor shall then have ownership of the blocks to salvage offsite or dispose of offsite in accordance with Article 202.03.

The location of the blocks in question is around the existing sign that will remain in place on property northwest of the proposed roundabout adjoining the proposed retaining wall. It is not known how deep the tiers of blocks go below the existing ground.

All labor, equipment, and materials required for this work will not be paid for separately but shall be included in the Contract unit price per CUBIC YARD for EARTH EXCAVATION.

CHAIN LINK FENCE REMOVAL:

This work shall be in general accordance with Article 664 of the Standard Specifications, the plans, the Highway Standards, and as modified by this Special Provision.

Any existing foundations for posts, regardless of depth, shall be fully removed by the Contractor and the void filled with suitable earth material and compacted in eight (8) inch lifts to 95 percent standard lab density for the fill

material. All posts, fence, wire, turnbuckles, and other appurtenances shall be removed completely from the site. The removed material shall become the property of the Contractor and disposed of offsite in accordance with Article 202.03.

All labor, equipment, and materials required for this work shall be paid for at the Contract unit price per FOOT for CHAIN LINK FENCE REMOVAL.

SELECT GRANULAR BACKFILL, SPECIAL:

This work shall be in accordance with Section 208, Article 550.07, and Article 602.12 of the Standard Specifications, the plans, and as modified by this Special Provision.

This work includes all backfilling for storm sewers of all sizes and for manholes, inlets, and drainage structures above bedding, haunching, and initial backfilling that will be within two (2) feet of pavement, curb, sidewalk, driveway pavements, hot-mix asphalt, and other surfaces as defined in the plans. It is desirable to separate this backfilling from that commonly associated with "Trench Backfill" in order to avoid confusion and to prevent the utilization of sand, or fine aggregate.

This work also includes other backfilling on the project other than for manholes, inlets, and drainage structures as denoted by use of this Pay Item. Requirements of this Special Provision shall apply for this other work.

References to "Fine Aggregate" in Section 208 and Article 1003.04 of the Standard Specifications for Road and Bridge Construction shall be replaced with "Coarse Aggregate". Section 1004 rather than 1003.04 shall be utilized. Coarse aggregate of the type described in Article 1004.05 (a) may be utilized. Article 1004.06 (b) requirements shall apply. Article 1004.05 (c) shall be revised such that only gradation CA 6 shall be utilized.

The second paragraph of Article 602.12 shall be revised such that no sand shall be used as backfill between the sides of the excavation and the outer surfaces of the structures and only coarse aggregate described in the previous paragraph of this Special Provision shall be used.

Frozen backfill material shall not be placed in any excavation. All backfill material shall be compacted by Method 1 of Article 550.07 in lifts no greater than eight (8) inches by mechanical means, e.g. manually-pushed vibratory compactor, to a minimum of 95 percent of standard lab density. No backfill shall be placed over any ponded or frozen water.

All labor, equipment, and materials required for this work shall be paid for at the Contract unit price per CUBIC YARD for SELECT GRANULAR BACKFILL, SPECIAL. Backfilling around drainage structures will not be paid for separately and shall be included in the cost of the manholes, inlets, and drainage structures, per 602.12.

BACKFILLING AND MUD SLABS at INLETS:

This work shall be in general accordance with Section 602 of the Standard Specifications, the plans, and as modified by this Special Provision.

All excavation required for INLETS of standard and non-standard types shall be included in the unit price cost for the associated drainage structure pay item and not paid for separately, per Article 602.12 of the Standard Specifications. Article 602.12 shall be revised such that the only material allowed for backfilling between the outer surface of the drainage structure and sides of excavation is CA 6 material and placed and compacted to levels conforming to BEDDING, HAUNCHING, & INITIAL BACKFILL FOR STORM SEWERS and SELECT GRANULAR BACKFILL, SPECIAL: Special Provisions.

The Contractor may utilize mud slabs constructed of concrete for stabilizing forms for poured inlets. No separate and/or additional compensation will be provided to the Contractor for the work noted herein.

BEDDING, HAUNCHING, & INITIAL BACKFILL FOR STORM SEWERS:

This work shall be done in accordance with Section 208 and Article 550.07 of the Standard Specifications for Road and Bridge Construction, the plans, and as modified by this Special Provision.

All bedding, haunching, and initial backfill for storm sewers and storm sewer, or drainage, structures such as inlets, manholes, and junction boxes shall be "Coarse Aggregate". Haunching shall be that backfill to the height of the center of the pipe. Initial backfill shall be that backfill placed above the top of the pipe to a height of at least one (1) foot above said top as referred to in Articles 550.03 and 550.07 of the Standard Specifications.

References to "Fine Aggregate" in Section 208 and Article 1003.04 of the Standard Specifications for Road and Bridge Construction shall be replaced with "Coarse Aggregate". Section 1004 rather than 1003.04 shall be utilized. Coarse aggregate of the type described in Article 1004.05 (a) may be utilized. Article 1004.05 (b) requirements shall apply. Article 1004.05 (c) shall be revised such that only gradation CA 6 shall be utilized. Frozen bedding, haunching, and initial backfill material shall not be placed in any excavation.

All trenches for storm sewer shall have bedding, haunching, and initial backfill including those beyond the two (2) foot distance from sidewalk, pavement, etc. regardless of the type of pipe being utilized except for Reinforced Concrete Pipe (RCP).

All bedding shall be placed in no greater than four (4) inch lifts. All haunching and initial backfill shall be compacted by Method 1 of Article 550.07 in lifts no greater than eight (8) inches by mechanical means, e.g. manually-pushed vibratory compactor, to a minimum of 95 percent of standard lab density. No bedding shall be placed over any ponded and frozen water.

All labor, equipment, and materials required for this work shall not be paid for separately but shall be included in the unit price for STORM SEWERS, of the size specified and in the unit prices for the drainage structures specified.

REMOVE EXISTING PCBC OPENING

This work shall be in general accordance with Section 602 of the Standard Specifications, applicable Highway Standards, the plans, and as modified by this Special Provision.

Plates were installed covering openings in the side of precast box culverts for backfilling. These may not be in the exact location shown on the plans but will be within five (5) feet either side of the plan locations. The Contractor shall anticipate and include in his/her unit price for this item, exploratory excavation, in order to find the openings.

The Contractor shall carefully excavate next to the existing box culverts to expose the openings. The Contractor shall not damage existing culverts during said excavation or during removal of the plate and reconnection. The County will retain ownership of the plates and the Contractor shall carefully salvage and store the plates on site, for the County to claim and pickup. In the event that the County does not claim these, the Contractor shall take responsibility for the plates and remove these from the site for salvage or the Contractor's yard.

The cost of all labor and equipment required for this work will not be paid for separately, but shall be included in the total unit bid prices for STORM SEWER.

REMOVAL OF TEMPORARY STORM SEWER PLUGS:

This work shall conform to the applicable portions of Section 550 of the Standard Specifications, the plans, and these Special Provisions.

Temporary plugs were installed in tees and pipe ends at various locations along the project on previous projects in the limits of this project. These may not be in the exact location shown on the plans but will be within five (5)

feet either side of the plan locations. The Contractor shall anticipate and include in his/her unit price for this item, exploratory excavation, in order to find the plugs.

The Contractor shall carefully excavate next to the existing storm sewer piping to expose the plugs. The Contractor shall not damage existing piping during said excavation or during removal of the plug and reconnection. The Contractor shall dispose of plugs outside of the trench, in order to avoid subsequent settlement, in accordance with applicable Local, State, and Federal laws.

The cost of all labor and equipment required for this work will not be paid for separately, but shall be included in the total unit bid prices for STORM SEWER.

CUT EXISTING STORM SEWER:

This work shall conform to the applicable portions of Section 550 of the Standard Standard Specifications, the plans, and these Special Provisions.

At various locations along existing storm sewers, new connections are required that do not require a manhole or inlet to make the connection. To avoid the efforts of exposing and cutting around the full section of piping for installation of manholes or inlets, cuts shall be made in the sides of existing pipe for insertion of new pipe, as a "tee", and secured with a concrete collar.

The Contractor shall carefully excavate next to the existing storm sewer piping. The Contractor shall not damage existing piping during excavation or during removal of the plug and reconnection. The Contractor shall dispose of material removed out of the trench in order to avoid subsequent settlement, in accordance with applicable Local, State, and Federal laws.

The cost of all labor and equipment required for this work will not be paid for separately, but shall be included in the total unit bid prices for STORM SEWER.

INLETS with TYPE 3V FRAME AND GRATE:

This work shall be in general accordance with Section 602 of the Standard Specifications, Highway Standards 602301, 602306, and 604011, the plans, and as modified by this Special Provision.

The Contractor shall properly align the 3V grates in the frame before placing pavement.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per EACH for INLETS, of the type specified, with TYPE 3V FRAME AND GRATE.

INLETS, TYPE B:

This work shall be in general accordance with Section 602 of the Standard Specifications, Highway Standard 602306, the plans, and as modified by this Special Provision.

The plans have details which detail the use of a flat slab top instead of a corbel section. These may be utilized by the Contractor in locations where clearance is limited. In some locations, plan elevations coincide with use of a flat slab top.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per EACH for INLETS, TYPE B, with the type of frame and grate specified.

INLETS with SPECIAL FRAME AND GRATE

This work shall be in general accordance with Section 602 of the Standard Specifications, applicable Highway Standard, the plans, and as modified by this Special Provision.

The plans call out the special frame and grates to be utilized.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per EACH for INLETS, of the type specified, with SPECIAL FRAME AND GRATE.

SANITARY MANHOLES TO BE RECONSTRUCTED:

This work shall be in general accordance with Section 603 of the Standard Specifications for Road and Bridge Construction, the Standard Specifications for Water and Sewer Main Construction in Illinois, latest edition, the plans, and as modified by this Special Provision.

This work involves adjusting existing sanitary sewer manholes to the finished surface elevations. The top of the adjusted manholes shall be flush with final surface. Any joints in pavement around sanitary sewer manholes are paid for separately. The Contractor can utilize precast adjusting rings. The Contractor shall not receive additional compensation for excavating around manholes, any number of adjusting rings, grout, mastic, and other items necessary to complete this work. All backfill and backfilling operations shall conform to that required by the Special Provision entitled SELECT GRANULAR BACKFILL, SPECIAL and the Contractor shall not receive additional compensation for any amount of backfill material required for this work.

The Contractor is responsible for removing any and all debris that falls into the existing sanitary sewer manhole during his/her operations. The Contractor shall utilize appropriate equipment for personnel removing said material at no additional cost to the Contract.

All labor, equipment, and materials required for this work shall be paid for at the Contract unit price per EACH for SANITARY MANHOLES TO BE RECONSTRUCTED.

INLETS TO BE ADJUSTED WITH NEW FRAME AND GRATE (SPECIAL):

This work shall be in general accordance with Section 603 of the Standard Specifications for Road and Bridge Construction, applicable Highway Standards, the plans, and as modified by this Special Provision.

This work involves excavating around existing inlets, lifting slabs if existent, placing blocks and grout, removing the existing frame and grate, and providing a new frame and grate. The Plans provide approximate existing and final elevations of these inlets.

The Contractor shall carefully excavate next to the existing storm sewer piping and inlet to expose the tops of the inlets. The Contractor shall not damage the existing piping and inlet during said excavation. The Contractor shall dispose of removed material beyond the overdig, in order to avoid subsequent settlement, or dispose of the material, in accordance with Article 202.03.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per EACH for INLETS TO BE ADJUSTED WITH NEW SPECIAL FRAME AND GRATE.

PIPE DRAINS:

This work shall be in general accordance with Section 601 of the Standard Specifications, the plans, and as modified by this Special Provision.

This work shall involve furnishing and installing outlet piping for drains along proposed retaining walls and buildings. This work is also related to drilling into the side of installed manholes for the connection of pipe drains.

The Contractor shall carefully excavate next to the existing storm sewer piping and inlet to expose the sides of the inlets and manholes. The Contractor shall not damage the existing piping and inlet during said excavation. The Contractor shall dispose of removed material beyond the overdig in order to avoid subsequent settlement, or dispose of the material, in accordance with Article 202.03.

The connections to other pipe drains and wall drains shall be made watertight with approved fittings included in the pay length for PIPE DRAINS. The pipe material may be ductile iron pipe (DIP) or polyvinyl chloride (PVC). DIP shall conform to:

1. AWWA C151,
2. Class 53 requirements,
3. have a wall thickness corresponding to the Class noted,
4. be tar coated and cement lined,
5. have push-on joints conforming to ASTM F477,
6. have a pressure rating per ASTM D3139 per the Standard Specifications,

PVC shall conform to:

1. AWWA C900 requirements,
2. DR 18 pipe requirements,
3. have 150 pressure rating,
4. have push on pressure fittings or mechanical joints with rubber (SBR) gaskets,

The Contractor shall utilize a core drill, or other means approved by the Engineer, to cut into the side of the inlet and manhole. All material inside the inlet and manhole from cutting shall be removed.

The same requirements for bedding and backfilling for STORM SEWERS described in BEDDING, HAUNCHING, & INITIAL BACKFILL FOR STORM SEWERS shall apply. All excavation shall be included in the unit price for PIPE DRAINS of the size specified, and all backfilling and backfill material shall conform to that described in SELECT GRANULAR BACKFILL, SPECIAL herein.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per FOOT for PIPE DRAINS.

CONCRETE COLLAR:

This work shall be in general accordance with Article 542.08 of the Standard Specifications, plan details, and as modified by this Special Provision.

This work involves placing concrete a minimum thickness around connections as detailed in the plans and between different pipe types and connections to existing pipes. Class SI concrete shall be used. Plan details show a connection for larger diameter pipe and dimensions may be reduced in the field for PIPE DRAIN connections. Forming of collar faces at some or all faces will be required. The Contractor will not receive additional compensation for excavation and quantities of concrete required beyond those indicated in plan details.

All labor, including excavation work, equipment, and materials required for this work shall be paid for at the Contract unit price per CUBIC YARD for CONCRETE COLLAR.

TRENCH DRAIN:

This work shall be in general accordance with Section 503, Section 602, and Articles 1006.14 and 1006.15 of the Standard Specifications, the plans, and as modified by this Special Provision.

This work involves excavating areas and subsequent construction of a cast-in-place, formed structure, and placement of reinforcement, which will support ductile iron grates of the type shown in the plans. Pre-cast structures for this work will not be allowed due to the grates and joints that are to be utilized – the joint that would result between the edge of a precast structure and pavement is undesirable as infiltration of water, subsequent ice formation, and subsequent separation has resulted in previous utilized precast trench drains. The insides of the excavated trench areas shall be constructed in accordance with details shown in the plans and shall have smooth walls determined solely by the Engineer.

Trench drains are paid for as EACH rather than FOOT because each separate trench drain has different depths along the entire length of the trench drains and pipe connections are different.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per EACH for TRENCH DRAIN.

AGGREGATE FOR TEMPORARY ACCESS:

This work shall be in general accordance with Article 402.10 of the Standard Specifications, the plans, and as modified by this Special Provision.

This work is required to maintain existing access to excavated areas at entrances and along streets to remain open during staging.

References in Article 402.07, referenced by Article 402.10, to Article 1004.04 shall be modified such that the aggregate shall be the same type and gradation as SUBBASE GRANULAR MATERIAL, TYPE A utilized throughout the project. The material does not have to be deposited by a spreader however the Contractor shall spread and grade the material at a constant cross slope such that the surface is smooth. The material shall be compacted by proof rolling with loaded trucks to the satisfaction of the Engineer.

The Contractor shall be responsible for maintaining the temporary access to the satisfaction of the Engineer throughout the periods that it is in place. There is sufficient quantity in the plans for material and the Contractor shall furnish, haul, place, spread, and compact said material in graded areas and in subgrade areas that have experienced pumping at the discretion of the Engineer as many times as the Engineer requires throughout construction.

Only material placed shall be considered for payment. Material remaining in trucks or stockpiles, not placed, shall not be measured for payment. Rough graded areas, voids due to removals, and other conditions cause measurement of material placed inherently difficult. The Contractor and Engineer shall roughly measure the volume of the placed material and apply plan rates of application for aggregate to establish the tonnage used in each location.

The Contractor shall remove from the site all aggregate after it is no longer required. This material shall not be used for other Pay Items as it may have earth material mixed with it upon removal.

All labor, equipment, and materials required for this work shall be paid for at the Contract unit price per TON for AGGREGATE FOR TEMPORARY ACCESS.

TEMPORARY SURFACING IN MEDIAN SOUTH OF ROUNDABOUT:

South of the roundabout, within the median area, EARTH EXCAVATION and SUB-BASE GRANULAR MATERIAL, TYPE A, 12" may be eliminated depending on the condition and depth of the material under the existing curb and median surface. The Engineer shall make this determination. If earthen material is present in any quantity or depth, the full quantities of EARTH EXCAVATION and SUB-BASE GRANULAR MATERIAL, TYPE A, 12" of the plans shall be undertaken and placed by the Contractor.

In the event full quantities are undertaken and placed, the Contractor shall anticipate that the material excavated will be suitable for structural fill and that it cannot go on the ground surfaces due to there being aggregate and other material.

TOPSOIL EXCAVATION AND PLACEMENT:

This work shall be in general accordance with Section 211 of the Standard Specifications, the plans, and as modified by this Special Provision. Topsoil obtained onsite will not be required to conform to Article 1081.05. Any topsoil brought from offsite areas, though this is not anticipated, will also not be required to conform to Article 1081.05.

This work is defined on the plans as all excavation of material defined as topsoil, from the surface to the prescribed depth indicated on the plans. This excavated material is anticipated to be topsoil containing a high organic content, however, the actual quantity and depth of organic material may vary significantly.

Regardless of whether the Contractor agrees to Plan quantities for this item of work, Article 211.07 sections (a) and (b) shall be modified as noted in **EARTH EXCAVATION**'s modifications to Article 202.07.

The Contractor shall remove all unused earthen material from the site once grades, lines, and levels have been achieved. There will be no payment for removal of excess, unused material from the site once the Plan grades, lines, and levels have been achieved. The excess, unused material shall become the property of the Contractor once Plan grades, lines, and levels have been achieved.

All labor and equipment required for this work shall be included in the Contract unit price per TOPSOIL EXCAVATION AND PLACEMENT.

EARTH EXCAVATION:

This work shall be in general accordance with Section 202 of the Standard Specifications, the plans, and as modified by this Special Provision.

This work will involve excavating material below topsoil excavation areas, paid for as TOPSOIL EXCAVATION AND PLACEMENT, and existing pavement and base removal areas, paid for as REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL, and either stockpiling it or bulldozing it to area where it will be used as fill, or embankment.

Plans anticipate that all material associated with EARTH EXCAVATION is stable and suitable (see the last paragraph of 202.03) and can be utilized for embankment, either structural or non-structural, however, not all EARTH EXCAVATION material will be considered stable and suitable.

No material from REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL shall be considered EARTH EXCAVATION material (see **REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL**).

EARTH EXCAVATION material that can be used as structural fill embankment is material that is free of organic and deleterious material, including, but not limited to, grass and tree roots, organic content greater than ten (10) percent, soil with liquid limits higher than fifty (50) percent, soil with plasticity index less than twelve (12), soil with standard dry density less than ninety (90) pounds per cubic foot (90 pcf), material with clay content less than

fifteen (15) percent, sand and sand loams, any recycled asphalt pavement (RAP), any boulders or broken concrete, shale, sand, and sand loam. Refer also to the EMBANKMENT Special Provision.

Material excavated from existing storm sewer trenches will not be considered EARTH EXCAVATION material. This is because this material is likely to have sand, rock, and other unstable material. Material excavated from proposed storm sewer trenches can be considered EARTH EXCAVATION material as most of these are in areas where existing trenches are not present. The plan schedules list the estimated material that can be considered EARTH EXCAVATION and can be obtained from proposed storm sewer trenches but this is not included in estimation of plan quantities. The Contractor shall incorporate suitable EARTH EXCAVATION material obtained from storm sewer trenches on the project and this material shall only be removed from the site, as property of the Contractor, once Plan grades, lines, and levels have been achieved. It is estimated that with utilization of material excavated from proposed storm sewer trenches, the Contractor will not require FURNISHED EXCAVATION material, from offsite areas.

In addition to performing the required IDOT Project Procedures Guide requirements for compaction testing, the Engineer will also perform the above mentioned testing for the suitability of EARTH EXCAVATION material.

EARTH EXCAVATION material that is unstable/unsuitable as structural fill may be utilized by the Contractor in areas requirement embankment of a non-structural nature and it may be mixed with topsoil excavation material for placement in prescribed areas, as shown on the plans.

Article 202.07 (b) regarding payment for each time earthwork is moved for stage construction shall be eliminated. The Bidder/Contractor shall include in their Bid unit price all costs for any stockpiling of excavated material that must be placed in a subsequent stage.

Regardless of whether the Contractor agrees to Plan quantities for this item of work, Article 202.07 shall be modified due to the significant, potential costs to the Engineer/Local Agency, the variability of earthwork quantities (e.g. shrinkage factor, utilization of storm sewer trench material in embankment), and the variability of how the Contractor moves and places material (e.g. loss of moisture). In no circumstance will the Engineer be required to survey existing ground lines or finished surface and/or utilize a digital terrain model (dtm) for re-establishing Plan earthwork quantities.

The Contractor shall accumulate and present detailed information that earthwork quantities to be excavated, including topsoil, are significantly lower than, and/or that those to be placed are significantly higher than, estimated quantities in the plans, prior to undertaking the work, in the event the Contractor wants to pursue additional compensation. This information will be evaluated with the Contractor in order to determine equitable compensation. If the Contractor does not agree to Plan quantities and provide information noted, and then proceeds with work, then Plan quantities shall be used for payment regardless of any discrepancies that become apparent after work ensues.

The Contractor shall remove all unused earthen material from the site once grades, lines, and levels have been achieved. There will be no payment for removal of excess, unused material from the site once the Plan grades, lines, and levels have been achieved. The excess, unused material shall become the property of the Contractor once Plan grades, lines, and levels have been achieved.

All labor and equipment required for this work shall be paid for at the Contract unit price per CUBIC YARD for EARTH EXCAVATION.

REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL

This work shall be in general accordance with Section 202 of the Standard Specifications, the plans, and as modified by this Special Provision.

Most of this work/material involves removal of the existing base course, typically aggregate, to depths shown in the plan typical. It shall also involve removal of deficient, or unsuitable earthen material for AGGREGATE SUBGRADE IMPROVEMENT when determined to be required. Neither of the materials described may be utilized in embankments and must be removed from the site.

Regardless of whether the Contractor agrees to Plan quantities for this item of work, EARTH EXCAVATION's modifications to Article 202.07 shall apply for this Pay Item.

The Contractor shall remove all unused earthen material from the site once grades, lines, and levels have been achieved. There will be no payment for removal of excess, unused material from the site once the Plan grades, lines, and levels have been achieved. The excess, unused material shall become the property of the Contractor once Plan grades, lines, and levels have been achieved.

All labor and equipment required for this work shall be paid for at the Contract unit price per CUBIC YARD for REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL.

SUBGRADE PREPARATION:

This work shall be in general accordance with Section 301 of the Standard Specifications, the plans, the Highway Standards, and as modified by this Special Provision.

The third paragraph of Article 301.07 shall be revised to read:

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

Add the following subparagraph (c) to Article 301.07:

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

This work will not be paid for separately and shall be included in the cost of the various other items of work associated with it.

The Engineer may decide to waive disruption of the exposed subgrade by diking in consideration that the existing subgrade has been consolidated by years of pavement and vehicular loadings. The Engineer will perform the standard laboratory testing and IBV testing of the subgrades in accordance with Section 301 of the Standard Specifications. It is realized that in some areas, the existing pavement and/or aggregate will prevent the ability to test the density. The Engineer shall perform both a density and IBV test at the frequencies listed in tabular form below, which will supersede the Project Procedures Guide frequencies. Note that in some of the following locations, EMBANKMENT is being tested rather than exposed subgrade (see also EMBANKMENT).

<u>Location</u>	<u>Frequency</u>
South of proposed roundabout, curb/pavement widening – both sides of Jamestown Road.	One (1) test location every two hundred (200) feet where curb is removed and replaced.
South of roundabout where existing pavement has been removed and new PCC pavement is constructed.	Two (2) test locations.

<u>Location</u>	<u>Frequency</u>
Southwest quadrant of roundabout.	Four (4) test locations a minimum of fifteen (15) feet apart.
Southeast quadrant of roundabout.	Three (3) test locations a minimum of fifteen (15) feet apart.
Northwest quadrant of roundabout, including near the retaining wall.	Five (5) test locations – including one (1) in the parking lot, a minimum of fifteen (15) feet apart.
North of roundabout where existing pavement has been removed and new PCC pavement is constructed.	Four (4) test locations.
Northeast quadrant of roundabout.	Four (4) test locations a minimum of fifteen (15) feet apart.
Jamestown Road, Sta. 34+50 – 38+50 – both sides of Jamestown Road.	One (1) test location every one hundred (100) feet within pavement widening.
Holy Cross Lane – west of roundabout.	Three (3) test locations.
Holy Cross Lane – east of roundabout, where proposed PCC pavement is placed.	Four (4) test locations – two (2) in locations where existing PCC pavement is removed and two (2) in locations where new curb and PCC pavement is placed.
Holy Cross Lane – east of roundabout, east of PCC pavement, within HMA areas.	Four (4) test locations.
Main Runaround – South of Holy Cross Lane	Two (2) test locations, evenly spaced.
Main Runaround – North of Holy Cross Lane	Two (2) test locations, evenly spaced.
Second Runaround	Three (3) test locations, evenly spaced.
Hospital – South parking lot widening.	Two (2) test locations, evenly spaced.
Hospital – ER entrance.	Two (2) test locations, left and right within the entrance.

That prescribed test locations shall not negate the responsibility of the Contractor to achieve adequate compaction throughout the exposed surfaces receiving bases and pavement.

The Contractor shall not receive additional compensation for complying with requirements of this Special Provision and shall include the costs for compliance in associated unit price items of work.

AGGREGATE SUBGRADE IMPROVEMENT:

This work shall be in general accordance with Sections 311 and 1004 of the Standard Specifications, the plans, and as modified by this Special Provision.

This work involves furnishing, placing, and compacting gradation CA1 (3") coarse aggregate material, in accordance with Section 1004 requirements.

This work is predominately in the roundabout circulatory area where existing pavement is to be removed and proposed pavement structure is higher than the existing, exposed subgrade. Rather than place thin layers of earth material on top of the subgrade beneath the constant depth subbase under the PCC pavement which would be difficult to compact, aggregate material shall be utilized. Quantities in the plans reflect mostly this roundabout circulatory area.

In several of these areas, where the existing base course has been removed, as REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL, the plan typical details the depth to which the existing base course is to be removed and the subsequent placement of material associated with AGGREGATE SUBGRADE IMPROVEMENT.

This work and material shall also be implemented elsewhere on the project where the Engineer deems the exposed subgrade is insufficient for supporting subsequent pavement material and loading. In addition to additional quantities of aggregate for these areas requiring remediation, additional quantities of REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL, as the material should not be utilized as embankment (structural fill) elsewhere on the project.

All material, labor, and equipment required for this work shall be paid for at the Contract unit price per TON for AGGREGATE SUBGRADE IMPROVEMENT.

EMBANKMENT:

This work shall be in general accordance with Sections 204 and 205 of the Standards Specifications, the plans, and as modified by this Special Provision. This Special Provision defines embankment, or fill, as a class of material, including both structural and non-structural fill.

Structural fill embankment is any material that will be placed under paved surfaces and consists of EARTH EXCAVATION material. Non-structural fill embankment can consist of EARTH EXCAVATION material not used as structural fill embankment and TOPSOIL EXCAVATION material. The Plan typical sections detail where structural and non-structural fill material are to be placed.

Embankment material obtained from EARTH EXCAVATION, onsite, and from FURNISHED EXCAVATION, offsite, shall be checked by the Engineer in accordance with Section 204.02 at frequencies determined by the Engineer before placement as structural fill embankment.

In areas where existing pavement has been removed, consolidated underlying layers, and shows no visible pumping, Article 205.03's re-compaction requirements may be modified such that the only operation that occurs is proof-rolling, however, the Bidder/Contractor shall anticipate the full requirements of Article 205.03 and include this in their applicable Bid unit prices.

Article 205.06 requirements shall be modified such that all lifts shall be compacted to 95 percent of the standard laboratory density. The Engineer shall perform density testing at the frequencies listed in tabular form under SUBGRADE PREPARATION, which shall supersede the Project Procedures Guide frequencies.

Reference is made to EARTH EXCAVATION's modifications to Article 202.07.

There will be no payment for removal of excess, unused material from the site once the Plan grades, lines, and levels have been achieved. The unused material shall become the property of the Contractor once the Plan grades, lines, and levels have been achieved.

All material, labor, and equipment required for this work shall be paid for at the Contract unit price per CUBIC YARD for EARTH EXCAVATION and FURNISHED EXCAVATION.

FURNISHED EXCAVATION:

This work shall be in general accordance with Section 204 of the Standards Specifications, the plans, and as modified by this Special Provision. This Special Provision defines furnished excavation as a class of material.

It is estimated that with utilization of material excavated from proposed storm sewer trenches, the Contractor will not require FURNISHED EXCAVATION material from offsite areas, however, the Bidder/Contractor shall anticipate some quantity of FURNISHED EXCAVATION may be required from an area offsite. In the event that onsite material is sufficient and the Contractor does not need material for embankment from offsite areas, the Contractor shall not receive payment for any FURNISHED EXCAVATION.

Material obtained for FURNISHED EXCAVATION offsite shall be checked by the Engineer in accordance with Section 204.02 at frequencies determined by the Engineer before placement as structural fill embankment.

Regardless of whether the Contractor agrees to Plan quantities for this item of work, Article 204.07 sections (a) and (b) shall be modified as noted in EARTH EXCAVATION's modifications to Article 202.07.

The Contractor shall remove all unused earthen material from the site once grades, lines, and levels have been achieved. There will be no payment for removal of excess, unused material from the site once the Plan grades, lines, and levels have been achieved. The excess, unused material shall become the property of the Contractor once Plan grades, lines, and levels have been achieved.

All material, labor, and equipment required for this work shall be paid for at the Contract unit price per CUBIC YARD for FURNISHED EXCAVATION.

COMBINATION CURB AND GUTTER REMOVAL, PAVEMENT REMOVAL, and CONCRETE MEDIAN SURFACE REMOVAL:

This work shall be in general accordance with Section 440 of the Standard Specifications, the plans, and as modified by this Special Provision. This work shall involve removal of hatched areas shown on the plans and other pavements that are hot-mix asphalt and concrete, including driveway pavements.

The Contractor shall saw minimum three (3) inch deep sawcuts along curb and gutter and median removal edges in order to remove these items so as not to damage adjoining pavement to remain. Deeper sawcuts shall be made where tie bars are present. The Contractor shall anticipate that there are tie bars along all curb and median pavement.

Thicknesses of the existing pavements, curb, and medians in all locations are not known and reference in Article 440.03 to plans depicting known thicknesses will not be applicable. The Contractor shall anticipate that median surfacing is as difficult to remove as concrete pavement.

All material removed from pavements, including that milled off of existing HMA surfaces, shall become the property of the Contractor.

Parking bumper blocks shall be carefully removed, salvaged and/or disposed of as part of PAVEMENT REMOVAL before the actual pavement removal in the parking lot northwest of the proposed roundabout. Three (3) blocks are anticipated. These blocks shall be carefully stacked on the property with the parking lot as directed

by the property owner so that the owner can utilize these if so desired. In the event that the property owner provides clear direction that they do not want the bumper blocks to the Engineer, the Contractor shall then have ownership of the blocks to salvage offsite or dispose of offsite.

All material, labor, and equipment required for this work shall be paid for at the Contract unit price per FOOT for COMBINATION CURB AND GUTTER REMOVAL, per SQUARE YARD for PAVEMENT REMOVAL, and per SQUARE FOOT for MEDIAN SURFACE REMOVAL of the types specified.

CORRUGATED MEDIAN REMOVAL:

This work shall be in general accordance with Section 440 of the Standard Specifications, the plans, and as modified by this Special Provision.

Thicknesses of the existing pavements, curb, and medians in all locations are not known and reference in Article 440.03 to plans depicting known thicknesses will not be applicable. The Contractor shall anticipate that median surfacing is as difficult to remove as concrete pavement.

All material removed from pavements, including that milled off of existing HMA surfaces, shall become the property of the Contractor.

All material, labor, and equipment required for this work shall be paid for at the Contract unit price per SQUARE FOOT for CORRUGATED MEDIAN REMOVAL.

STABILIZED SUBBASE – HOT-MIX ASPHALT, 4 ½”

This work shall be in general accordance with Section 312 of the Standard Specifications, the plans, and as modified by this Special Provision.

Other types of stabilized subbases, such as CAM (cementitious aggregate mixture), will not be considered substitutes for the HOT-MIX ASPHALT. No CAM, lean concrete mixture, lime modified, lime stabilized, or any other cementitious material shall be utilized directly under the PCC pavement and curb. All cementitious and lime stabilized subbases will be prohibited due to multiple difficulties of having a “rigid” subbase under PCC pavement and curb (potential for crack propagation from the subbase into the pavement, inability to align sawcuts, inability for PCC pavement to flex, etc.).

The maximum compacted thickness of each lift shall be five (5) inches and the Article 312.05 reference to four (4) inches will not be applicable. The minimum lift thicknesses of 406.06 (d) shall apply.

As noted in PORTLAND CEMENT CONCRETE PAVEMENT (JOINTED), the circulatory pavement shall be poured separate from the truck apron pavement and curb, on a separate day. Similarly, the STABILIZED SUBBASE beneath the PCC pavement and curb of the circulatory portion of the roundabout shall be placed after that for the circulatory, on a separate day, after the inner curb of the circulatory is constructed.

The difficulties of placing hot-mix asphalt to tolerances that result in adequate thicknesses of overlaying curb and PCC pavement are acknowledged. Due to this, the only tolerance in thickness requirement shall be the requirement for a minimum of four (4) inches of material throughout. Section 312 does not have thickness tolerance requirements and any reference or IDOT requirement for Article 407.10’s “Tolerance in Thickness” shall not be applicable.

In the event that it becomes apparent that the resulting PCC curb and pavement minimum thicknesses will not be sufficient following placement of STABILIZED SUBBASE, the Contractor will be allowed to utilize hot-mix asphalt surface removal (cold milling) in order to achieve required PCC thicknesses. The Bidder/Contractor may anticipate performing this surface removal with inclusion of costs for this work in their Bid unit price, however,

following award, if it is determined that milling is needed, the Contractor will not receive separate, additional compensation for milling work.

Any surface removal shall be undertaken in accordance with Section 440 of the Standard Specifications. Straightedge testing will be modified due to the circumstances.

The entire surface of the stabilized subbase shall be flushed with water such that it is sufficiently damp prior to placement of PCC curb and pavement to facilitate PCC curing.

All material, labor, and equipment required for this work shall be paid for at the Contract unit price per SQUARE YARD for STABILIZED SUBBASE – HOT-MIX ASPHALT, 4 ½”.

COMBINATION CONCRETE CURB AND GUTTER:

This work shall be in general accordance with Section 606 of the Standard Specifications, the plans, the Highway Standards, and as modified by this Special Provision.

The Contractor's attention is called to the joint requirements in Article 606 of the Standard Specifications, including the use of polysulfide sealer. Urethane-based sealants shall not be utilized. All transverse curb joints shall be sealed. Joints required adjacent to typical inlets as detailed in Highway Standard 606001 shall be installed.

Transverse Joint Placement

In no circumstance shall joints in curb and pavement not line up. “Dead headed” joints shall not occur in order to avoid crack propagation into curb or into pavement.

Staking will be at transverse joints in pavement and curb to facilitate alignment of sawn joints. In the event that curb is poured separate than pavement, the sawn joints shall align with those in pavement. Where curb adjoins HMA pavement and not PCC pavement, joints in curb shall be placed at even stations and at every 12.5’ between even stations. This is in anticipation of future PCC paving between curbing. Where curb will be constructed next to areas where the existing PCC pavement will remain in place, the transverse joints shall align with existing transverse joints in the PCC pavement.

The transverse expansion joints shown on the Highway Standards shall be placed left and right of inlets, however, the Standard shall be modified such that these curb joints shall align with transverse joints in PCC pavement and shall not “dead head”. The maximum distances for placement of these type curb joints of the Highway Standard shall not be followed. This is in order to avoid crack propagation form “dead headed” joints.

Tie Bars

Epoxy-coated tie bars per the Highway Standard shall be installed in the curbs per the Highway Standards. Similar tie bars shall be installed into existing pavement that remains in place for new curb as denoted on the plan typical sections. Preformed bar inserts shall not be utilized due to the inability to achieve adequate bonds.

As noted in Article 606.07, when curb is poured monolithic with adjoining pavement, see also Sequence of Pours, tie bars between curb and adjoining pavement can be omitted.

For splitter islands, tie bars shall be omitted in curb through sections where sidewalk will adjoin curb.

Dowel Bars

Epoxy-coated dowel bars shall be installed in curbs at all transverse joints, including those fore and aft of inlets where expansion joints will also be installed. Two (2) dowels shall be placed at each transverse joint in curb.

As noted in the Specifications, attention is called to requirements for cutting the supporting dowel bar cages.

It is realized typical IDOT treatment is to omit dowels in the curb at transverse joints, however, adequate load transfer cannot occur when vehicles occasionally travel on curb without the dowels.

Where proposed curb is to abut existing curb, two (2) holes shall be drilled and cleaned in the end of the existing curb, cleaned, grouted or injected with chemical adhesive, and epoxy coated dowels inserted.

Curb Template Modifications

Throughout, curbs with gutter pans that slope down to the adjoining pavement shall be utilized as detailed in the plans. These were not differentiated as "special" from typical curbing due to there being a large quantity of these modified curbs and because the additional costs for these was not considered significant. The Bidder/Contractor shall include any additional costs for forming modified curbs in the Bid unit price for the typical Pay Item such that there is a single price for both.

Sequence of Pours

The circulatory pavement shall be poured separate from the truck apron pavement and curb, on a separate day. The curbs either side of the circulatory pavement may be poured monolithic with the adjoining pavement as long as the Contractor demonstrates their ability to form the gutter pan at a different slope than the adjoining pavement and the ability to form the back of curb transitions to achieve ADA slopes as outlined in the plans. In the event that back of curb transitions are too steep, the Contractor will be required to remove said curb at the edge of pavement line, reinstall tie bars, and repour the curb at no additional cost to the Contract. As noted in 606.07, when curb is poured monolithically with adjoining pavement, the longitudinal joint at the edge of pavement (EOP) will not have to be sawn and sealed. For the roundabout, this sawing would be difficult due to the cut being on a constant radius and due to the curb face.

When the Contractor pours curb as a separate pour, the edge of pavement (EOP) between pavement and gutter pan does not have to be sawn and sealed as a cold joint will result and sawing it could create undesirable slivers of concrete.

Curb for the splitter/approach islands shall be poured separate from the adjoining pavements. Sidewalk and median surfaces in the interior of the curb for the splitter/approach islands shall not be monolithic with the splitter/approach islands. This is in order to facilitate repairs to the sidewalks and median surfacing and the potential removal of the median surfacing in the future.

Vibratory screed type machines will not be allowed to pour pavement and curb monolithically.

Curing Protection

All curb shall be covered with curing compound unless protective coat is required. Additionally, all curb shall be thoroughly wetted and then covered with polyethylene sheeting and/or wetted burlap regardless of temperature or weather per 1020.12. The coverings shall remain in place until sawing can occur and sawing operations should be configured so as much concrete as possible shall remain covered. All coverings shall be replaced following sawing and shall remain for the curing period. In cold weather, when blankets are required for protection, polyethylene and/or burlap may be omitted or used in tandem.

The entire surface of the stabilized subbase shall be flushed with water such that it is sufficiently damp prior to placement of PCC curb and pavement to facilitate PCC curing.

Cracking

Any curb section with single or multiple uncontrolled longitudinal cracks of any length which are greater than one sixteen (1/16) inches in width shall be removed in its entirety and repoured. Any transverse cracks that occur at distances from planned transverse contraction joint locations similar to those described with Portland Cement Concrete Pavement (Jointed) shall require the same prescribed removal of sections of curb and gutter.

Bar Pull-Out Testing

The Contractor shall conduct testing of curb tie bars in accordance with Article 420.05, referenced in Article 606.07, and provide test equipment.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per FOOT for COMBINATION CONCRETE CURB AND GUTTER of the type specified.

PORTLAND CEMENT CONCRETE PAVEMENT (JOINTED):

This work shall be in general accordance with Sections 420 and 606 of the Standard Specifications, the plans, the Highway Standards, and as modified by this Special Provision. "(Jointed)" requires the placement of transverse contraction joints at spacings prescribed by the plans.

All transverse and longitudinal pavement joints shall be sealed unless an exception is noted, per Article 420.12 and applicable Highway Standards.

Equipment

It is anticipated that Contractors will need to pour lanes and curbing separately and utilize truss type vibratory screeds, self-propelled by means of cables attached to side forms. Truss type vibratory screeds may be used and references in Article 1103.13 (b) (2) shall not be applicable. These shall conform to Article 1103.17 (g) requirements. Parabolic type screeds shall not be used. Mechanical concrete spreaders and floats will not be required and references to such in 420.03 are to be ignored. Vibratory screed type machines will not be allowed to pour pavement and curb monolithically.

Transverse Joint Placement

In no circumstance shall joints in curb and pavement not line up. "Dead headed" joints shall not occur in order to avoid crack propagation into curb or into pavement. Joints shall be within three (3) inches of locations denoted in the plans. In the event joints are not at prescribed locations, the Contractor shall remove pavement either side of the joints and repour panels to the next transverse joints fore and aft of the replacement.

The Engineer shall have sole discretion as to the final placement of joints. The Contractor will not receive additional compensation for field changes to these joints and other joints called for in the pavement, including the transverse contraction joints, as all material, work, and equipment for these shall be included in the unit price cost for PORTLAND CEMENT CONCRETE PAVEMENT, of the thickness specified, (JOINTED).

Tie Bars and Longitudinal Joints

Epoxy-coated tie bars per the Highway Standard shall be installed along sawn longitudinal joints, including curb joints, per the Highway Standards and plans. Similar tie bars shall be installed into existing pavement that remains in place for new curb as denoted on the plan typical sections. Preformed bar inserts shall not be utilized due to the inability to achieve adequate bonds.

Tie bars shall be installed between lanes even if these are poured monolithic. The middle of these bars shall be marked and sawn and sealed joints installed, as sawn longitudinal joints. When lanes are not poured monolithically, tie bars shall still be inserted along the longitudinal joints created between the lanes, with drilling and epoxy similar to curb joints, however, these joints will not be required to be sawn and sealed due to the potential for slivers of concrete.

As noted in Article 606.07, when curb is poured monolithic with adjoining pavement, see also Sequence of Pours, tie bars between curb and adjoining pavement can be omitted.

Sawing on Radius

For this project longitudinal joints, primarily mid-lane joints, must be sawn on radii. Difficulties of sawing with a straight blade along a radius are noted. The Contractor shall utilize strings to mark out sawcut lines on a curve. The Contractor shall employ methods that produce joints that are no greater than three (3) inches maximum from

the proposed, intended curves, as marked. This three (3) inch tolerance shall extend to the left and to the right of the marked joint. For the truck apron, this results in maximum lengths of straight cuts no greater than thirteen (13) to fourteen (14) feet. In the event the tolerance is exceeded, the entire panel, or panels, between contraction joints either side of the intended longitudinal joint shall be removed and rebuilt by the Contractor at no additional cost to the Contract.

Dowel Bars and Transverse Contraction Joints

Epoxy-coated dowel bars shall be installed at all transverse contraction joints. Contraction joints are not to be confused with transverse construction joints. As noted in the Specifications, attention is called to requirements for cutting the supporting dowel bar cages.

The existing face of existing Portland cement concrete pavement shall be sawn approximately one (1) to three (3) inches from the existing end for drilling and grouting contraction joint dowel bars at twelve (12) inch centers in order to form a contraction joint. No additional compensation for this particular work will be paid for.

Transverse Construction Joints

Due to the inability of tie bars to provide load transfer across a transverse joint and the inability to create a clean, straight joint at the end of the pour, the transverse construction joints of the Highway Standards shall not be utilized.

In the event the Contractor's paving operations need to terminate, the Contractor shall place material slightly beyond a proposed, planned transverse contraction joint location but said material shall not exceed fifteen (15) feet from the preceding transverse contraction joint before that of the termination. The Contractor shall saw the hardened pavement full depth at the transverse contraction joint location just before where the last material is placed and remove all pavement material beyond said contraction joint.

Sequence of Pours

The circulatory pavement shall be poured separate from the truck apron pavement and curb, on a separate day. In no circumstance shall the circulatory and aprons be poured at the same day or even consecutive days.

It is recommended that the Contractor construct the circulatory and truck apron pavements from the exterior of the roundabout and work inward from the exterior. The circulatory pavement can be constructed at a constant slope up from the exterior. Conversely, if paving were begun from the interior and pours made in a sequence moving outward, there is more potential for the resulting exterior elevations being too low for the approaches.

Where pavement is proposed to "peak", or have its highest point or "crown", typically at the baseline, pavement shall be sloped per the typical sections of the plans either side of this high point. A sawn longitudinal joint, sawn if both sides are poured with a machine capable of a grade-break and not sawn if either side of said joint is poured separately, per the Highway Standards and plans shall be placed at the baseline throughout. The Contractor will not be allowed to pour the pavement in the event that the Contractor proposes to utilize a parabolic screed or simply "float" the high point into the pour. The reason for this is that undrainable, flat slopes may result with this treatment.

Curing Protection

All pavement shall be covered with curing compound unless protective coat is required. Additionally, all pavement shall be thoroughly wetted and then covered with polyethylene sheeting and/or wetted burlap regardless of temperature or weather per 1020.12. The coverings shall remain in place until sawing can occur and sawing operations should be configured so as much concrete as possible shall remain covered. All coverings shall be replaced following sawing and shall remain for the curing period. In cold weather, when blankets are required for protection, polyethylene and/or burlap may be omitted or used in tandem.

The entire surface of the stabilized subbase shall be flushed with water such that it is sufficiently damp prior to placement of PCC curb and pavement to facilitate PCC curing.

Cracking

Attention is called to Article 420.05 (c) regarding uncontrolled cracking.

Bar Pull-Out Testing

The Contractor shall conduct testing of lane tie bars, when not covered by a monolithic pour, in accordance with Article 420.05, referenced in Article 606.07, and provide test equipment.

Finish

Metal combing shall not be used and a Type B finish is all that shall be done per Article 420.09. This is due to there being different pavement widths throughout.

Surface Testing

Surface testing shall be per Article 420.10 and its reference to Article 407.09. All pavement for this project shall be classified as Miscellaneous Pavement which can be tested with a sixteen (16) foot straightedge. Testing shall not occur until seven (7) days of curing.

PCC pavement shall be considered from Sta. 33+40 to Sta. 34+75, Sta. 102+23 to Sta. 103+60, and Sta. 106+07 to 109+84. All other pavement shall be considered HMA. Pavement in the roundabout approaches and in the circulatory and truck apron areas and areas south of the roundabout shall not be included in surface testing due to the necessary requirements for longitudinal slopes in these areas.

Uncontrolled Cracking

In addition to the requirements pertaining to uncontrolled cracking in Article 420.05 (c) (1), the following requirements shall be adhered to.

No transverse joint, sawn or trowelled that is created to stop evidenced cracking or that is employed following cracking, shall remain in pavement that does not have load transfer devices – in this case, dowels. No uncontrolled transverse crack that is not relatively straight and within one and one half (1.5) inches of the marked transverse joint, at a dowelled transverse joint, shall remain. For the aforementioned situations, pavement shall be removed either side of said joint to the next adjoining dowelled transverse joints and replaced, by the Contractor, at no additional cost to the Contract.

All replacement transverse joints in one lane are required to align with transverse joints in adjoining lanes. This is to avoid “dead head” joints and to avoid the propensity for these joints to propagate into the adjoining longitudinal lane. This may require removal and replacement of pavement in the adjoining lane, by the Contractor, at no additional cost to the Contract.

It is realized that removal around existing dowelled joints may be more time consuming for the Contract than simply sawing fore or aft of said dowelled joints. For these situations, the longitudinal panels shall be no greater than twelve and one half (12.5) feet apart for all replacements. When sawing beyond dowelled joint is performed, all sawn faces shall receive drilled and grouted dowels, aligned level as per Standard Specifications. Where existing pavement is sawn and new pavement poured up against it (with dowels), the resulting joint does not have to be sawn and sealed.

Note that undertaking sawing within the prescribed timeframe of four (4) to twenty four (24) hours or any other prescribed actions of the Standard Specifications or actions originating with the Contractor following hardening does not absolve the Contractor of the responsibility of repairing uncontrolled cracking as prescribed. The Contractor will not receive additional compensation for required repairs.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per SQUARE YARD for PORTLAND CEMENT CONCRETE PAVEMENT (JOINTED) of the thickness specified.

CONCRETE MEDIAN SURFACE:

This work shall be in general accordance with Section 606 of the Standard Specifications, the plans, and as modified by this Special Provision.

Due to the tendency for separation of surfacing at high point joints, the Contractor shall install tie bars at the baseline which shall define the “peak”, or high point, along the splitter islands/medians as shown on the plan intersection details. This joint shall be constructed similar to that for the sawn longitudinal joints at the “high point” or “crown” in pavement. The bottom of the tie bars shall be a minimum of two (2) inches from the underlying base.

As noted in Article 606.09, transverse joints, devoid of dowels, in the median surface shall generally align with those in adjoining pavement and curb, except in areas where the resulting joint spacing would be too large. Plans detail the layout of transverse joints. As noted in Article 606.09, these transverse joints shall be sawn and sealed.

Curing Protection

All surface shall be covered with curing compound unless protective coat is required. Additionally, all pavement shall be thoroughly wetted and then covered with polyethylene sheeting and/or wetted burlap regardless of temperature or weather per 1020.12. The coverings shall remain in place until sawing can occur and sawing operations should be configured so as much concrete as possible shall remain covered. All coverings shall be replaced following sawing and shall remain for the curing period. In cold weather, when blankets are required for protection, polyethylene and/or burlap may be omitted or used in tandem.

The entire surface of the underlying aggregate shall be flushed with water such that it is sufficiently damp prior to placement of surfacing to facilitate PCC curing.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per SQUARE FOOT for CONCRETE MEDIAN SURFACE of the thickness specified.

PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT:

This work shall be in general accordance with Section 423 of the Standard Specifications, the plans, and as modified by this Special Provision.

The pedestrian walking areas across driveways, typically at 2% or less, shall be poured as a separate, formed pour, on a separate day, as the adjoining pavement. This shall be in addition to stage construction of the driveways. The Contractor shall incorporate these costs in their Contract unit bid price.

Curing Protection

All pavement shall be covered with curing compound unless protective coast is required. Additionally, all pavement shall be thoroughly wetted and then covered with polyethylene sheeting and/or wetted burlap regardless of temperature or weather per 1020.12. The coverings shall remain in place until sawing can occur and sawing operations should be configured so as much concrete as possible shall remain covered. All coverings shall be replaced following sawing and shall remain for the curing period. In cold weather, when blankets are required for protection, polyethylene and/or burlap may be omitted or used in tandem.

The entire surface of the base shall be flushed with water such that it is sufficiently damp prior to placement of PCC curb and pavement to facilitate PCC curing.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per SQUARE YARD for PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT of the thickness specified.

AGGREGATE SHOULDER REMOVAL:

This work shall be in general accordance with Section 481 of the Standard Specifications, the plans, and as modified by this Special Provision.

The Contractor shall remove from the site all aggregate shoulder material after it is no longer being required. This material shall not be used for other Pay Items as it may have earth material mixed with it upon removal.

All labor, equipment, and materials required for this work shall be paid for at the Contract unit price per CUBIC YARD for AGGREGATE SHOULDER REMOVAL.

PORTLAND CEMENT CONCRETE SIDEWALK:

This work shall be in general accordance with Section 424 of the Standard Specifications, the plans, and as modified by this Special Provision. This pay item is utilized for constructing shared-use paths.

Article 424.04's mention of constructing thicker sidewalks at entrances shall not apply as sidewalk shall be separate from driveway pavement.

The entire surface of the aggregate base shall be flushed with water such that it is sufficiently damp prior to placement of PCC curb and pavement to facilitate PCC curing.

Plans detail additional sawn and sealed, tied longitudinal joints at the center of the width of shared-use paths due to the tendency for uncontrolled, longitudinal cracking occurring in sidewalks wider than six (6) feet, the maximum panel width per the Standard Specifications.

Epoxy-coated tie bars shall be installed in the center of shared-use paths per the plans. Preformed bar inserts shall not be utilized due to the inability to achieve adequate bonds. Tie bars shall be supported on chairs and/or cages such that there is a minimum of two (2) inches of concrete between the bottom of the tie bars and the base. Bar pullout tests shall not be performed.

Curing Protection

All surface shall be covered with curing compound unless protective coat is required. Additionally, all pavement shall be thoroughly wetted and then covered with polyethylene sheeting and/or wetted burlap regardless of temperature or weather per 1020.12. The coverings shall remain in place until sawing can occur and sawing operations should be configured so as much concrete as possible shall remain covered. All coverings shall be replaced following sawing and shall remain for the curing period. In cold weather, when blankets are required for protection, polyethylene and/or burlap may be omitted or used in tandem.

The entire surface of the underlying aggregate shall be flushed with water such that it is sufficiently damp prior to placement of surfacing to facilitate PCC curing.

Uncontrolled cracks that occur in sidewalk will require all sections with said cracks to be removed and replaced by the Contractor. The Contractor will not receive additional compensation for these repairs.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per SQUARE FOOT for PORTLAND CEMENT CONCRETE SIDEWALK.

DETECTABLE WARNINGS:

This work shall be in accordance with Section 424 of the Standard Specifications, the plans, and as modified by this Special Provision.

Detectable warnings shall not be imprinted into the sidewalk. Fiberglass, plastic systems, and modular block systems that are positioned and sometimes secured with adhesive will not be allowed. Only systems utilizing cementitious panels secured with grout or placed in wet concrete approved by the City will be allowed.

Detectable warnings shall be positioned up to the back of curb/expansion joint. This treatment is converse to some typical placements that require in a thin sliver of sidewalk between the curb/expansion joint and the warning. These thin widths of concrete sometimes crack and spall off.

The Contractor shall provide sufficient weight that does not damage the surface of the warnings in order to hold down detectable warnings during curing. The Contractor shall weight warnings down until sufficient curing.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per SQUARE FOOT for DETECTABLE WARNINGS.

PARAPET RAILING:

This work shall be in general accordance with Section 509 of the Standard Specifications, the plans, and as modified by this Special Provision.

It is recommended that fabrication of the railing occur following construction of the retaining wall and installation of the anchor devices for the railing, whether the anchor devices are cast-in-place or not. This is in consideration of possible field changes to walls by the Contractor's operations.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per FOOT for PARAPET RAILING.

ANTI-GRAFFITI PROTECTION SYSTEM:

Description. This work shall consist of the furnishing and application of an anti-graffiti coating to the surfaces designated in the plans.

General Requirements. The anti-graffiti protection system shall consist of a permanent, color stable, UV, stain, chemical, and abrasion resistant coating. The removal of the graffiti from the protected surfaces shall be accomplished by applying a separate removal agent as recommended by the manufacturer of the permanent coating. The removal agent shall have the capability of completely removing all types of paints and stains. After graffiti removal there shall be no damage to the anti-graffiti coating or the surface to which it is applied. Additionally, there shall be no evidence of ghosting, shadowing, or staining of the protected surface.

Qualifications. The anti-graffiti protection system shall be a product that has been commercially available for a period of at least 5 years. Samples of the proposed material shall be supplied to the Engineer for testing. The Contractor shall apply the material to a test patch following the manufacturer's recommendation. After the manufacturer's recommended curing period is over, the Engineer will apply various types of graffiti materials to the coating. After three days the removal agent shall be used to remove the graffiti. If after graffiti removal the anti-graffiti coating is clean and undamaged with no evidence of ghosting, shadowing, or staining, then the anti-graffiti coating is approved for use.

Surface Preparation. Prior to application of the anti-graffiti coating all designated surfaces shall be cleaned of all loose debris, previous coatings, and all foreign matter by a method as recommended by the coating manufacturer and approved by the Engineer. All surfaces shall be thoroughly clean, dry, and free of dust that might prevent

penetration of the coating. Glossy, glazed, and slick troweled surfaces should be lightly etched or abraded before application of the coating. Concrete surfaces shall be properly sealed according to the manufacturer's recommendations so that application of the system does not produce any noticeable long term change in the color of the surfaces being treated. A technical representative of the manufacturer shall be present to approve surface preparation and application of the anti-graffiti protection system.

Weather Conditions. Coatings shall not be applied in the rain, snow, fog, or mist, nor shall they be applied if these conditions are expected within twelve hours of application. Coatings shall not be applied when surface or air temperature is less than 40⁰ F nor greater than 100⁰ F or is expected to exceed these temperatures within twelve hours of application.

Application. The manufacturer's product data sheets and application guides shall be submitted to the Engineer prior to coating application. All information contained in the data sheets and application guides shall be strictly followed. All coatings shall be applied in the presence of the Engineer. The wet film thickness will be measured by the Engineer and shall be according to the manufacturer's recommendation.

In a contrasting color, of the same anti-graffiti system, the name of the system used and the date of application shall be stenciled in letters not to exceed 2 inches high. The location of the stencil shall be near one end of the work at the bottom of the surface to be protected. For projects greater than 3,228 sq. ft. the stencil shall be periodically repeated once for every 3,228 sq. ft. near the bottom at locations designated by the Engineer.

The coatings shall be applied before fill placement to insure adequate coverage and to avoid contact with soil during application.

Cleaning Agent. The Contractor shall supply the Engineer with an initial quantity of the removal agent and written instructions for its use, as recommended by the manufacturer for graffiti removal. The amount shall be furnished at the rate of 1 quart per 200 sq. ft. of treated surface area.

Method of Measurement. This work will be measured in place per square foot of surface area upon which the anti-graffiti protection system has been applied and accepted by the Engineer.

Basis of Payment. This work shall be paid for at the contract unit price per square foot for ANTI-GRAFFITI PROTECTION SYSTEM, which price shall be payment in full for the cleaning of designated surfaces, the application of the anti-graffiti coating, supplying the manufacturer's technical representative, and supplying the initial quantity of cleaning agent.

HOT-MIX ASPHALT SURFACE REMOVAL:

This work shall be in general accordance with Article 406.08 of the Standard Specifications, the plans, and as modified by this Special Provision.

The material produced from milling shall become the property of the County and shall be hauled to the County's yard in Carlyle, Illinois. All costs for this work shall be included in the Bidder/Contractor's Bid unit price.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per SQUARE YARD for HOT-MX ASPHALT SURFACE REMOVAL – BUTT JOINT, for HOT-MIX ASPHALT SURFACE REMOVAL, 1 ½", and for HOT-MIX ASPHALT SURFACE REMOVAL, 3".

HOT-MIX ASPHALT PROFILE GRADE CONTROL:

This Special Provision shall apply to all placement of hot-mix asphalt (HMA) that affects the final surface crossslopes and profile grades (at the crown, or high point of the pavement). In general, this might only apply for surface course placement. However, controlling final surface crossslopes and profile grades for inlays with a thin,

total thickness may warrant implementing grade controls prior to final surfacing. Similarly, control of widening thicknesses at edges of pavement, may warrant implementation of said grade controls.

Article 406.06, within "HMA Binder and Surface Course", is referenced by other sections pertaining to HMA to address placement. Article 406.06 shall be modified, herein. It is realized that HMA placement is typically controlled by grade reference devices ("ski's").

For this project, the Contractor shall utilize a preset grade control stringline set to proposed final grade elevations at centerline. In curb sections, constructed curb may be utilized for establishing milling depths, inlay depths, widening, binders, and surface course placement depths in order to achieve proposed profile grades and crosslopes.

The Contractor shall not receive additional compensation for utilization of grade controls. All labor, equipment, and material required for this work shall be paid for included in the HMA Pay Items associated with the Article 406.06 requirements.

HOT-MIX ASPHALT BASE COURSE, (VARIABLE DEPTH):

This work shall be in general accordance with Section 355 of the Standard Specifications, the plans, and as modified by this Special Provision.

Plan typicals show how the total depth from the top of the HMA surface course and the bottom of the widening and the final remain constant. The leveling binder and base course thicknesses will vary but the total thickness from the top of the HMA surface course to the bottom of the widening shall remain constant in terms of payment to the Contractor. The HMA items of varying thickness vary due to the proposed profile grade and crosslope changes from the existing profile grade, at the crown and along existing crosslopes of the pavement. See also HOT-MIX ASPHALT PROFILE GRADE CONTROL.

Requirements for Article 407.10's "Tolerance in Thickness" shall not be applicable, as this is a tonnage item and the depth varies. Depth checks shall be taken, regardless.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per TON for HOT-MIX ASPHALT BASE COURSE, (VARIABLE DEPTH).

LEVELING BINDER:

This work shall be in general accordance with Section 406 of the Standard Specifications, the plans, and as modified by this Special Provision. See also the Bureau of Materials and Physical Research (BMPR) Special Provision entitled **HOT-MIX ASPHALT MIXTURE IL-9.5FG**.

Table 1 in Article 406.07 shall be modified such that "Density Requirements" shall not be "To the satisfaction of the Engineer" but shall be as specified in Articles 1030.05 (d) (3), (d) (4), and (d) (7).

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per TON for LEVELING BINDER of the type specified in the plans.

LANDSCAPING GRAVEL:

This work shall be in general accordance with Article 1004 of the Standard Specifications, the plans, and as modified by this Special Provision.

The Contractor shall procure and supply a 1"-3" washed, earth-tone gravel that can be river-produced devoid of fractured or angular surfaces from an approved Illinois supplier. Gravel shall be delivered to the site and spread evenly in a four (4) inch minimum to six (6) inch maximum thickness in the interior of the roundabout's truck apron

bounded by nine (9) inch curbing. The top surface of the gravel shall be generally smooth throughout the interior of the roundabout.

Requirements for Article 407.10's "Tolerance in Thickness" shall not be applicable. Depth checks will be made, regardless.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per SQUARE YARD for LANDSCAPING GRAVEL.

PAINT CURB:

This work shall be in general accordance with Article 780 of the Standard Specifications, the plans, and as modified by this Special Provision.

The nominal six (6) inches of the top of the high back portions of curb and nominal six (6) inches of the front of the high back portions of curb shall be painted. Both the back and face of curb areas contribute to the per foot unit measurement and no separate linear foot measurement will be made for the back and face. The flag, or pan, of the curbs shall not be painted. The Contractor shall demonstrate their ability to paint said areas to the Engineer without overspray onto adjoining surfaces that are not to be painted before beginning work. In the event that the Contractor's method is not satisfactory to the Engineer, the Engineer may require the Contractor to manually paint the curbs with brushes.

The Contractor shall remove any spilled paint and overspray on paved, aggregate, and earthen surfaces to the satisfaction of the Engineer by water blasting or other approved methods, at no additional cost to the Contract.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per FOOT for PAINT CURB.

REMOVE RIGHT-OF-WAY MARKERS:

This work shall be in general accordance with Articles 107.20, 501, and 666 of the Standard Specifications, the plans, and as modified by this Special Provision. This applies to markers called out for removal on the Plans.

The Contractor will not have to protect existing markers until the new markers associated with FURNISHING AND ERECTING RIGHT OF WAY MARKERS are installed as new markers will be located electronically and the existing ones will be in the way of construction operations.

The entire marker of unknown depth shall be removed entirely. The holes in earth and rock resulting from marker removal shall be filled with material from around the hole and EARH EXCAVATION material free of organic and deleterious material and compacted by manual or mechanical means to the satisfaction of the Engineer such that future settlement is minimized. Excess material may be mounded over the holes to a maximum height of one (1) foot to account for future settlement.

All excavation work, backfilling material, labor, equipment, and material required for this work shall be paid for at the Contract unit price per EACH for REMOVE RIGHT-OF-WAY MARKERS.

SUBMITTAL OF EEO/LABOR DOCUMENTATION

Effective: April 2016

This work shall be done in accordance with Check Sheets No. 1, 3 and 5 of the IDOT Supplemental Specifications and Recurring Special Provisions and the "Weekly DBE Trucking Reports (BDE)" Special Provision, except as here-in modified.

PAYROLL AND STATEMENT OF COMPLIANCE:

Certified payroll, (FORM SBE 48 OR AN APPROVED FACSIMILE) and the Statement of Compliance, (FORM SBE 348) shall be submitted by two methods:

1. By Mail (United States Postal Service): The ORIGINAL of the certified payroll and the Statement of Compliance for the Prime Contractor and each Subcontractor shall be submitted by mail to the Regional Engineer for District 8.
2. Electronically: Scan both the ORIGINAL of the certified payroll and the Statement of Compliance to the same PDF file and email to the District at the email address designated by the District EEO Officer.

SBE 48 and SBE 348 forms shall be submitted weekly and will be considered late if received after midnight seven (7) business days after the payroll ending date.

WEEKLY DBE TRUCKING REPORT:

The Weekly DBE Trucking Report, (FORM SBE 723) shall be submitted electronically. Scan the form to a PDF file and email to the District at the email address designated by the District EEO Officer.

SBE 723 forms shall be submitted weekly and will be considered late if received after midnight ten (10) business days following the reporting period.

MONTHLY LABOR SUMMARY & MONTHLY CONTRACT ACTIVITY REPORTS:

The Monthly Labor Summary Report (MLSR) shall be submitted by one of two methods:

1. For contractors having IDOT contracts valued in the aggregate at \$250,000 or less, the report may be typed or clearly handwritten using Form D8 PI0148. Submit the ORIGINAL report by mail to the Regional Engineer for District Eight. Contractors also have the option of using the method #2 outlined below.
2. For contractors having IDOT contracts valued in the aggregate at more than \$250,000, the report must be submitted in a specific "Fixed Length Comma Delimited ASCII Text File Format". This file shall be submitted by e-mail using specific file formatting criteria provided by the District EEO Officer. Contractors must submit a sample text file to District 8 for review at least fourteen (14) days prior to the start of construction.

The Monthly Contract Activity Report (MCAR) may be typed or clearly handwritten using Form D8 PI0149.

The Monthly Labor Summary Report and the Monthly Contract Activity Report shall be submitted concurrently. If the method of transmittal is method #1 above then both the MLSR and the MCAR shall be mailed together in the same envelope. If the method of transmittal is method #2 above then the MCAR shall be scanned to a .pdf file and attached to the email containing the MLSR .txt file.

The MLSR and MCAR must be submitted for each consecutive month, for the duration of the project, and will be considered late if received after midnight ten (10) calendar days following the reporting period.

REQUEST FOR APPROVAL OF SUBCONTRACTOR:

The ORIGINAL and one copy of the Request for Approval of Subcontractor (FORM BC 260A) shall be submitted to the District at the IDOT Preconstruction Conference.

SUBSTANCE ABUSE PREVENTION PROGRAM CERTIFICATION:

The ORIGINAL and one copy of the Substance Abuse Prevention Program Certification (FORM BC 261) shall be submitted to the District at the IDOT Preconstruction Conference.

The Contractor is required to follow submittal procedures as provided by the EEO Officer at the preconstruction conference and to follow all revisions to those procedures as issued thereafter.

If a report is rejected, it is the contractor's responsibility to make required adjustments and/or corrections and resubmit the report. Reports not submitted and accepted within the established timeframes will be considered late.

Disclosure of this information is necessary to accomplish the statutory purpose as outlined under 23CFR part 230 and 41CFR part 60.4 and the Illinois Human Rights Act. Disclosure of this information is REQUIRED. **Failure to comply with this special provision may result in the withholding of payments to the contractor, and/or cancellation, termination, or suspension of the contract in whole or part.**

This Special Provision must be included in each subcontract agreement.

ALL HARD COPY FORMS TO BE SUBMITTED TO:

Region 5 Engineer
Illinois Department of Transportation
ATTN: EEO/LABOR OFFICE
1102 Eastport Plaza Drive
Collinsville, IL 62234-6198

Compliance with this Special Provision shall be included in the cost of the contract and no additional compensation will be allowed for any costs incurred.

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:

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

HOT-MIX ASPHALT MIXTURE IL-9.5FG

Effective: July 1, 2005
 Revised: July 15, 2013

Description. This work shall consist of constructing fine graded hot-mix asphalt (HMA) surface course or leveling binder with an IL-9.5FG mixture. Work shall be according to Sections 406, 407 and 1030 of the Standard Specifications, except as modified herein.

Equipment. Add the following to Article 406.03

- (i) Non-Vertical Impact Roller.....1101.01

Materials. Revise Article 1003.03(c) of the Standard Specifications to read:

“(c) Gradation. The fine aggregate gradation for all HMA shall be FA 1, FA 2, FA 20, FA 21, or FA 22. For mixture IL-9.5FG, the fine aggregate fraction shall consist of at least 67 percent manufactured sand meeting FA 20, FA 21 or FA 22 gradation. The manufactured sand shall be stone sand, slag sand, steel slag sand, or combinations thereof.”

Mixture Design. Add the following to the table in Article 1030.04(a)(1):

“High ESAL, MIXTURE COMPOSITION (% PASSING) ^{1/}		
Sieve Size	IL-9.5FG	
	min	max
1 1/2 in (37.5 mm)		
1 in. (25 mm)		
3/4 in. (19 mm)		
1/2 in. (12.5 mm)		100
3/8 in. (9.5 mm)	90	100
#4 (4.75 mm)	65	80
#8 (2.36 mm)	50	65
#16 (1.18 mm)	25	40
#30 (600 μm)	15	30
#50 (300 μm)	8	15
#100 (150 μm)	6	10
#200 (75 μm)	4	6.5
Ratio Dust/Asphalt Binder		1.0

Revise the table in Article 1030.04(b)(1) of the Standard Specifications to read:

"VOLUMETRIC REQUIREMENTS High ESAL					
	Voids in the Mineral Aggregate (VMA), % minimum				Voids Filled with Asphalt Binder (VFA), %
N _{design}	IL-25.0	IL-19.0	IL-12.5	IL-9.5	
50	12.0	13.0	14.0	15 ^{1/}	65 - 78
70					65 - 75 ^{2/}
90					
105					

- 1/ The VMA for IL-9.5FG shall be a minimum of 15.0 percent.
 2/ The VFA range for IL-9.5FG shall be 65 - 78 percent."

Quality Control/Quality Assurance (QC/QA). Revise the second table in Article 1030.05(d)(4) to read:

DENSITY CONTROL LIMITS			
Mixture Composition		Parameter	Individual Test
IL-4.75		N _{design} = 50	93.0 – 97.4% ^{1/}
IL-9.5FG	Lifts < 1.25 in. (32 mm)	N _{design} 50 - 105	90.0 – 95.0% ^{1/}
	Lifts ≥ 1.25 in. (32 mm)	N _{design} 50 - 105	92.0 – 96.0%
IL-9.5, IL-12.5		N _{design} ≥ 90	92.0 – 96.0 %
IL-9.5, IL-9.5L, IL-12.5		N _{design} < 90	92.5 – 97.4 %
IL-19.0, IL-25.0		N _{design} ≥ 90	93.0 – 96.0 %
IL-19.0, IL-19.0L, IL-25.0		N _{design} < 90	93.0 – 97.4 %
All Other		N _{design} = 30	93.0 ^{2/} - 97.4 %

- 1/ Density shall be determined by cores or by correlated, approved thin lift nuclear gauge
 2/ 92.0 % when placed as first lift on an unimproved subgrade.

CONSTRUCTION REQUIREMENTS

Leveling Binder. Revise the table and second paragraph of Article 406.05(c) of the Standard Specifications to read:

"Leveling Binder	
Nominal, Compacted, Leveling Binder Thickness, in. (mm)	Mixture Composition
≤ 1 1/4 (32)	IL 4.75, IL-9.5, IL-9.5 FG, or IL-9.5L
> 1 1/4 to 2 (32 to 50)	IL-9.5, IL-9.5FG, IL-9.5L, or IL-12.5

The density requirements of Article 406.07 (c) shall apply for leveling binder, machine method, when the nominal, compacted thickness is: 3/4 in. (19 mm) or greater for IL-9.5FG and IL 4.75 mixtures, 1 1/4 in. (32 mm) or greater for IL-9.5 and IL-9.5L mixtures, and 1 1/2 in. (38 mm) or greater for IL-12.5 mixtures.”

Compaction. Revise Table 1 in Article 406.07(a) of the Standard Specifications to read:

"TABLE 1 - MINIMUM ROLLER REQUIREMENTS FOR HMA ^{4/}				
	Breakdown Roller (one of the following)	Intermediate Roller	Final Roller (one or more of the following)	Density Requirement
Level Binder: (When the density requirements of Article 406.05(c) do not apply.)	P ^{3/}	--	V _S , P ^{3/} , T _B , T _F , 3W	To the satisfaction of the Engineer.
Level Binder: (When placed at ≤ 1 1/4 (32 mm) and density requirements of Article 406.05 (c) apply.)	V _N , T _B , 3W	P ^{3/}	V _S , T _B , T _F	As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7).
Level Binder ^{1/} >1 1/4 in. (32 mm) Binder and Surface ^{1/}	V _D , P ^{3/} , T _B , 3W	P ^{3/}	V _S , T _B , T _F	As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7).
Bridge Decks ^{2/}	T _B	--	T _F	As specified in Articles: 582.05 and 582.06.

- 1/ If the average delivery at the job site is 85 ton/hr (75 metric ton/hr) or less, any roller combination may be used provided it includes a steel wheeled roller and the required density and smoothness is obtained.
- 2/ One T_B may be used for both breakdown and final rolling on bridge decks 300 ft (90 m) or less in length, except when the air temperature is less than 60 °F (15 °C).
- 3/ A vibratory roller (V_D) may be used in lieu of the pneumatic-tired roller on mixtures containing polymer modified asphalt binder.
- 4/ For mixture IL-4.75 a minimum of two T_B and one T_F roller shall be provided. Both the T_B and T_F rollers shall be a minimum of 280 lb/in. (49 N/mm). P and V rollers will not be permitted.

Add the following to EQUIPMENT DEFINITION

V_N - Non-Vertical Impact roller operated in a mode that will provide non-vertical impacts and operate at a speed to produce not less than 10 impacts/ft (30 impacts/m).

Rollers. Add the following to Article 1101.01 of the Standard Specifications:

- h) The non-vertical impact roller shall be self-propelled and provide a smooth operation when starting, stopping or reversing directions. Non-vertical impact drum(s) amplitude and frequency shall be approximately the same in each direction and meet the following minimum requirements: drum diameter 48 in. (1200 mm), length of drum 66 in. (1650 mm), unit static force on drum(s) 125 lb/in. (22 N/m), adjustable eccentrics, and reversible eccentrics on non-driven drum(s). The total applied force and the direction it is applied for various combinations of VPM and eccentric positions shall be shown on decals on the roller or on a chart maintained with the roller. The roller shall be equipped with water tanks and sprinkling devices, or other approved methods, which shall be used to wet the drums to prevent material pickup.

Basis of Payment. Add the following two paragraphs after the third paragraph of Article 406.14 of the Standard Specifications:

"Mixture IL-9.5FG will be paid for at the contract unit price per ton (metric ton) for LEVELING BINDER (HAND METHOD), IL-9.5FG, of the Ndesign specified; LEVELING BINDER (MACHINE METHOD), IL-9.5FG, of the Ndesign specified; or HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, of the Ndesign specified.

Mixture IL-9.5FG in which polymer modified asphalt binders are required will be paid for at the contract unit price per ton (metric ton) for POLYMERIZED LEVELING BINDER (HAND METHOD), IL-9.5FG, of the Ndesign specified; POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-9.5FG, of the Ndesign specified; or POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, of the Ndesign specified."

HMA IL-9 5 FG



Storm Water Pollution Prevention Plan



Route FAS 784 - C.H. 11	Marked Route Jamestown Rd. & Holy Cross Ln.	Section 13-00095-02-PV
Project Number RS-0784(104)	County Clinton	Contract Number 97563

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

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

Print Name Daniel L. Behrens	Title County Highway Engineer	Agency Clinton County Highway Dept.
Signature 	Date 10-12-17	

I. Site Description

A. Provide a description of the project location (include latitude and longitude):

The proposed work is located in the City of Breese just north of U.S. 50 at the intersection of County Highway 11 (Jamestown Road) and Holy Cross Lane. Jamestown Road to said intersection is FAS 784. Holy Cross Lane west of said intersection is FAS 784. 38.62, -89.52.

B. Provide a description of the construction activity which is subject of this plan:

The project involves construction of a roundabout. The project will involve installation of storm sewers, stripping of topsoil, aggregate base course, hot-mix asphalt, curbing, and concrete pavement. Much of the earthwork is along the east side of Jamestown Road. Exposed areas will be protected with controls. All runoff from the project passes into a box culvert, previously installed, along the east side of Jamestown Road.

C. Provide the estimated duration of this project:

The project is estimated to require 135 working days, barring inclement weather.

D. The total area of the construction site is estimated to be 6.7 acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is 6.7 acres.

E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:

NCRS Curve Number of 85 (Approx. 3.56 ac. of grass and 3.14 ac. of impervious areas)

F. List all soils found within project boundaries. Include map unit name, slope information and erosivity:

21% of the soil is Cowden silt loam (112), 1-2% slopes, Kfact=0.49; 58% is Oconee-Darmstadt (916A), 1-2% slopes, K fact=0.37; Oconee-Darmstadt (916B2), 2-5%, Kfact=0.37. The K factor is a measure of erosivity with a range of 0.02 - 0.69, the higher number being more erosive.

G. Provide an aerial extent of wetland acreage at the site:

There is none at this site.

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

The existing topography is relatively flat and most every disturbed area will drain into propose ditch grading and storm sewer systems within which erosion controls can be concentrated. The main area which could produce the most runoff with silt is along the south side of the final Holy Cross Lane sidewalk east of the roundabout. Erosion protection will be provided at this location.

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

During Stage 1B, there will be significant earthmoving operations east of Jamestown Road and south of Holy Cross Lane, east of the proposed roundabout to build up temporary runarounds. During Stage 1B there will be 3:1 sideslopes along the temporary runaround pavement which will be erosive into the temporary ditches.

During Stage 2A, much of the actual roundabout construction will take place and during this stage, there will be exposed subgrades of relatively flat slopes and there will not be much potential for exposed material to pass into existing and proposed storm sewer inlets. Runarounds will still be in place during Stage 2A.

During Stage 2B, the runarounds will be removed and there will be significant grading operations during which the temporary 3:1 slopes will be eliminated and new slopes up next to new pavement will be constructed.

During Stages 2C-2D, erosion blankets will be in place and not much potential for erosion will occur.

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

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

The City of Breese owns the existing and proposed storm sewers and is responsible for their maintenance as well as that for the ditches within the County right-of-way. The ditches of the interchange are maintained by IDOT.

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

There are no MS4 communities in the vicinity of the project.

M. The following is a list of receiving water(s) and the ultimate receiving water(s) for this site. The location of the receiving waters can be found on the erosion and sediment control plans:

The ditches and storm sewers drain into the US 50 interchange from whence flows pass through City-owned ditches, on to Shoal Creek southeast of the City of Breese, and then on to the Kaskaskia River.

N. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes, highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc.

Most all of the areas within temporary construction easements and existing right-of-way will be disturbed and will require erosion controls.

O. The following sensitive environmental resources are associated with this project, and may have the potential to be impacted by the proposed development:

- Floodplain
- Wetland Riparian
- Threatened and Endangered Species
- Historic Preservation
- 303(d) Listed receiving waters for suspended solids, turbidity, or siltation
- Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity, or siltation
- Applicable Federal, Tribal, State or Local Programs
- Other

1. 303(d) Listed receiving waters (fill out this section if checked above):

a. The name(s) of the listed water body, and identification of all pollutants causing impairment:

b. Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event:

c. Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body:

d. Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body:

2. TMDL (fill out this section if checked above)

a. The name(s) of the listed water body:

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

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

P. The following pollutants of concern will be associated with this construction project:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Soil Sediment | <input checked="" type="checkbox"/> Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) |
| <input checked="" type="checkbox"/> Concrete | <input checked="" type="checkbox"/> Antifreeze / Coolants |
| <input checked="" type="checkbox"/> Concrete Truck waste | <input checked="" type="checkbox"/> Waste water from cleaning construction equipment |
| <input checked="" type="checkbox"/> Concrete Curing Compounds | <input type="checkbox"/> Other (specify) _____ |
| <input type="checkbox"/> Solid waste Debris | <input type="checkbox"/> Other (specify) _____ |
| <input type="checkbox"/> Paints | <input type="checkbox"/> Other (specify) _____ |
| <input type="checkbox"/> Solvents | <input type="checkbox"/> Other (specify) _____ |
| <input checked="" type="checkbox"/> Fertilizers / Pesticides | <input type="checkbox"/> Other (specify) _____ |

II. Controls

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in I.C. above and for all use areas, borrow sites, and waste sites. For each measure discussed, the Contractor will be responsible for its implementation as indicated. The Contractor shall provide to the Resident Engineer a plan for the implementation of the measures indicated. The Contractor and subcontractors, will notify the Resident Engineer of any proposed changes, maintenance, or modifications to keep construction activities compliant with the Permit ILR10. Each such Contractor has signed the required certification on forms which are attached to, and are a part of, this plan:

- A. **Erosion and Sediment Controls:** At a minimum, controls must be coordinated, installed, and maintained to:
1. Minimize the amount of soil exposed during construction activity;
 2. Minimize the disturbance of steep slopes;
 3. Maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible;
 4. Minimize soil compaction and, unless infeasible, preserve topsoil.
- B. **Stabilization Practices:** Provided below is a description of interim and permanent stabilization practices, including site- specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II(B)(1) and II(B)(2), stabilization measures shall be initiated **immediately** where construction activities have temporarily or permanently ceased, but in no case more than **one (1) day** after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of fourteen (14) or more calendar days.
1. Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
 2. On areas where construction activity has temporarily ceased and will resume after fourteen (14) days, a temporary stabilization method can be used.

The following stabilization practices will be used for this project:

- | | |
|---|--|
| <input type="checkbox"/> Preservation of Mature Vegetation | <input checked="" type="checkbox"/> Erosion Control Blanket / Mulching |
| <input type="checkbox"/> Vegetated Buffer Strips | <input type="checkbox"/> Sodding |
| <input type="checkbox"/> Protection of Trees | <input type="checkbox"/> Geotextiles |
| <input checked="" type="checkbox"/> Temporary Erosion Control Seeding | <input type="checkbox"/> Other (specify) _____ |
| <input type="checkbox"/> Temporary Turf (Seeding, Class 7) | <input type="checkbox"/> Other (specify) _____ |
| <input type="checkbox"/> Temporary Mulching | <input type="checkbox"/> Other (specify) _____ |
| <input checked="" type="checkbox"/> Permanent Seeding | <input type="checkbox"/> Other (specify) _____ |

Describe how the stabilization practices listed above will be utilized during construction:

Due to the speed of construction and the time of construction anticipated (early spring, 2018), it is anticipated that no sooner than the temporary erosion control seeding is placed that grading will occur on top of it. Blankets above will help with some germination along the temporary runarounds.

Describe how the stabilization practices listed above will be utilized after construction activities have been completed:

Obviously, permanent seeding will be stabilized with blankets upon completion of pavements.

- C. **Structural Practices:** Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include but are not limited to: perimeter erosion barrier, earth dikes, drainage swales, sediment traps, ditch checks, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

The following stabilization practices will be used for this project:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Perimeter Erosion Barrier | <input type="checkbox"/> Rock Outlet Protection |
|---|---|

- | | |
|--|--|
| <input checked="" type="checkbox"/> Temporary Ditch Check | <input type="checkbox"/> Riprap |
| <input checked="" type="checkbox"/> Storm Drain Inlet Protection | <input type="checkbox"/> Gabions |
| <input type="checkbox"/> Sediment Trap | <input type="checkbox"/> Slope Mattress |
| <input type="checkbox"/> Temporary Pipe Slope Drain | <input type="checkbox"/> Retaining Walls |
| <input type="checkbox"/> Temporary Sediment Basin | <input type="checkbox"/> Slope Walls |
| <input type="checkbox"/> Temporary Stream Crossing | <input type="checkbox"/> Concrete Revetment Mats |
| <input type="checkbox"/> Stabilized Construction Exits | <input type="checkbox"/> Level Spreaders |
| <input type="checkbox"/> Turf Reinforcement Mats | <input type="checkbox"/> Other (specify) _____ |
| <input type="checkbox"/> Permanent Check Dams | <input type="checkbox"/> Other (specify) _____ |
| <input type="checkbox"/> Permanent Sediment Basin | <input type="checkbox"/> Other (specify) _____ |
| <input type="checkbox"/> Aggregate Ditch | <input type="checkbox"/> Other (specify) _____ |
| <input type="checkbox"/> Paved Ditch | <input type="checkbox"/> Other (specify) _____ |

Describe how the structural practices listed above will be utilized during construction:

The temporary ditch checks will be spaced along the bottoms of temporary and final ditches. Storm drain inlet protections will be in place even before grading begins and throughout construction.

Describe how the structural practices listed above will be utilized after construction activities have been completed:

All of the structural practices noted above will remain in place throughout construction and until grasses cover earthen areas.

D. Treatment Chemicals

Will polymer flocculents or treatment chemicals be utilized on this project: Yes No

If yes above, identify where and how polymer flocculents or treatment chemicals will be utilized on this project.

E. Permanent Storm Water Management Controls: Provided below is a description of measures that will be installed during the construction process to control volume and pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water act.

- Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

The practices selected for implementation were determined on the basis of the technical guidance in Chapter 41 (Construction Site Storm Water Pollution Control) of the IDOT Bureau of Design & Environment Manual. If practices other than those discussed in Chapter 41 are selected for implementation or if practices are applied to situations different from those covered in Chapter 41, the technical basis for such decisions will be explained below.

- Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Description of permanent storm water management controls:

The only flow attenuation will be at the ultimate discharge of the storm sewer system where existing riprap was installed on a previous drainage project.

F. Approved State or Local Laws: The management practices, controls, and provisions contained in this plan will be

in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans, site permits, storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI, to be authorized to discharge under the Permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials:

None beyond those described in the Plans and herein are required by the city of Breese.

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

1. The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:
 - Approximate duration of the project, including each stage of the project
 - Rainy season, dry season, and winter shutdown dates
 - Temporary stabilization measures to be employed by contract phases
 - Mobilization time frame
 - Mass clearing and grubbing/roadside clearing dates
 - Deployment of Erosion Control Practices
 - Deployment of Sediment Control Practices (including stabilized construction entrances/exits)
 - Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
 - Paving, saw-cutting, and any other pavement related operations
 - Major planned stockpiling operations
 - Time frame for other significant long-term operations or activities that may plan non-storm water discharges such as dewatering, grinding, etc.
 - Permanent stabilization activities for each area of the project
2. The Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:
 - Vehicle Entrances and Exits - Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
 - Material delivery, Storage, and Use - Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
 - Stockpile Management - Identify the location of both on-site and off-site stockpiles. Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
 - Waste Disposal - Discuss methods of waste disposal that will be used for this project.
 - Spill Prevention and Control - Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.).
 - Concrete Residuals and Washout Wastes - Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
 - Litter Management - Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
 - Vehicle and Equipment Cleaning and Maintenance - Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
 - Dewatering Activities - Identify the controls which will be used during dewatering operations to ensure sediments will not leave the construction site.
 - Polymer Flocculants and Treatment Chemicals - Identify the use and dosage of treatment chemicals and provide the Resident Engineer with Material Safety Data Sheets. Describe procedures on how the chemicals will be used and identify who will be responsible for the use and application of these chemicals. The selected individual must be trained on the established procedures.
 - Additional measures indicated in the plan.

III. Maintenance

When requested by the Contractor, the Resident Engineer will provide general maintenance guides to the Contractor for the practices associated with this project. The following additional procedures will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. It will be Contractor's responsibility to attain maintenance guidelines for any manufactured BMPs which are to be installed and maintained per manufacture's specifications.

During construction, the Contractor shall:
Inspect construction entrances to control off site vehicle tracking and clean existing streets and maintain entrances per IDOT Standard Specifications Section 107.
Inspect control measures once a week or as needed, and following any storm event of 0.50" or greater (or 5" snowfall) during the construction period.
Maintain control measures in good working order, or replace and initiate repairs within 24 hours.
Remove and dispose of sediment retained by temporary ditch checks.
Remove and dispose of sediment from any silt fences, if utilized, when silt is 1/3 the fence height, repair tears, secure attachments to posts, and secure posts firmly into the ground, as needed.
Inspect temporary and permanent seeding for bare spots, washouts, and healthy growth.
The site Contractor shall select as many as three individuals responsible for inspections, maintenance, and repair activities and fill out inspection and maintenance reports. These personnel will receive training from the site Contractor.

IV. Inspections

Qualified personnel shall inspect disturbed areas of the construction site which have not yet been finally stabilized, structural control measures, and locations where vehicles and equipment enter and exit the site using IDOT Storm Water Pollution Prevention Plan Erosion Control Inspection Report (BC 2259). Such inspections shall be conducted at least once every seven (7) calendar days and within twenty-four (24) hours of the end of a storm or by the end of the following business or work day that is 0.5 inch or greater or equivalent snowfall.

Inspections may be reduced to once per month when construction activities have ceased due to frozen conditions. Weekly inspections will recommence when construction activities are conducted, or if there is 0.5" or greater rain event, or a discharge due to snowmelt occurs.

If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer shall notify the appropriate IEPA Field Operations Section office by e-mail at: epa.swnoncomp@illinois.gov, telephone or fax within twenty-four (24) hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Non-Compliance" (ION) report for the identified violation within five (5) days of the incident. The Resident Engineer shall use forms provided by IEPA and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of non-compliance shall be signed by a responsible authority in accordance with Part VI. G of the Permit ILR10.

The Incidence of Non-Compliance shall be mailed to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn: Compliance Assurance Section
1021 North Grand East
Post Office Box 19276
Springfield, Illinois 62794-9276

Additional Inspections Required:

V. Failure to Comply

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



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

Route FAS 784- C.H. 11	Marked Route Jamestown Rd. & Holy Cross Ln.	Section 13-00095-02-PV
Project Number RS-0784(104)	County Clinton	Contract Number 97563

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

I certify under penalty of law that I understand the terms of the Permit No. ILR10 that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

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

- Contractor
- Sub-Contractor

Print Name 	Signature
Title 	Date
Name of Firm 	Telephone
Street Address 	City/State/Zip

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

All.

ADJUSTING FRAMES AND GRATES (BDE)

Effective: April 1, 2017

Add the following to Article 602.02 of the Standard Specifications:

- “(s) High Density Expanded Polystyrene Adjusting Rings
with Polyurea Coating (Note 4) 1043.04
(t) Expanded Polypropylene (EPP) Adjusting Rings (Note 5) 1043.05

Note 4. High density expanded polystyrene adjusting rings with polyurea coating shall meet the design load requirements of AASHTO HS20/25. The rings may be used to adjust the frames and grates of drainage and utility structures up to a maximum of 6 in. (150 mm). They shall be installed and sealed underneath the frames according to the manufacturer’s specifications.

Note 5. Riser rings fabricated from EPP may be used to adjust the frames and grates of drainage and utility structures up to a maximum of 6 in. (150 mm). An adhesive meeting ASTM C 920, Type S, Grade N5, Class 25 shall be used with EPP adjustment rings. The top ring of the adjustment stack shall be a finish ring with grooves on the lower surface and flat upper surface. The joints between all manhole adjustment rings and the frame and cover shall be sealed using the approved adhesive. In lieu of the use of an adhesive, an internal or external mechanical frame-chimney seal may be used for watertight installation. EPP adjustment rings shall not be used with heat shrinkable infiltration barriers.”

Add the following to Section 1043 of the Standard Specifications:

“**1043.04 High Density Expanded Polystyrene Adjusting Rings with Polyurea Coating.** High density expanded polystyrene adjustment rings with polyurea coating shall be designed and tested to meet or exceed an HS25 wheel load according to the AASHTO Standard Specifications for Highway Bridges (AASHTO M306 HS-25). The raw material suppliers shall provide certifications of quality or testing using the following ASTM standards, and upon request, certify that only virgin material was used in the manufacturing of the expanded polystyrene rings.

Physical Property	Test Standard	Value	
		3.0 lb/cu ft	4.5 lb/cu ft
Compression Resistance at 10% deformation	ASTM D 1621	50 - 70	70 - 90
at 5% deformation		45 - 60	60 - 80
at 2% deformation		15 - 20	20 - 40
Flexural Strength	ASTM D 790	90 - 120	130 - 200
Water Absorption	ASTM D 570	2.0%	1.7%
Coefficient of Linear Expansion	ASTM D 696	2.70E-06 in./in./°F	2.80E-06 in./in./°F
Sheer Strength	ASTM D 732	55	80

Tensile Strength	ASTM D 1623	70 - 90	130 - 140
Water Vapor Transmission	ASTM C 355	0.82 – 0.86 perm – in.	

High density expanded polystyrene adjustment rings with polyurea coating shall have no void areas, cracks, or tears. The actual diameter or length shall not vary more than 0.125 in. (3 mm) from the specified diameter or length. Variations in height are limited to ± 0.063 in. (± 1.6 mm). Variations shall not exceed 0.25 in. (6 mm) from flat (dish, bow, or convoluting edge) or 0.125 in. (3 mm) for bulges or dips in the surface.

1043.05 Expanded Polypropylene (EPP) Adjusting Rings. The EPP adjusting rings shall be manufactured using a high compression molding process to produce a minimum finished density of 7.5 lb/cu ft (120 g/l). The EPP rings shall be made of materials meeting ASTM D 3575 and ASTM D 4819-13. The grade adjustments shall be designed and tested according to the AASHTO Standard Specifications for Highway Bridges (AASHTO M 306 HS-25).

Grade rings shall contain upper and lower keyways (tongue and groove) for proper vertical alignment and sealing. The top ring, for use directly beneath the cast iron frame, shall have keyways (grooves) on the lower surface with a flat upper surface.

Adhesive or sealant used for watertight installation of the manhole grade adjustment rings shall meet ASTM C 920, Type S, Grade NS, Class 25, Uses NT, T, M, G, A, and O.

EPP adjustment rings shall have no void areas, cracks, or tears. The actual diameter or length shall not vary more than 0.125 in. (3 mm) from the specified diameter or length. Variations in height are limited to ± 0.063 in. (± 1.6 mm). Variations shall not exceed 0.25 in. (6 mm) from flat (dish, bow, or convoluting edge) or 0.125 in. (3 mm) for bulges or dips in the surface.”

80382

AGGREGATE SUBGRADE IMPROVEMENT (BDE)

Effective: April 1, 2012

Revised: April 1, 2016

Add the following Section to the Standard Specifications:

SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT

303.01 Description. This work shall consist of constructing an aggregate subgrade improvement.

303.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate	1004.07
(b) Reclaimed Asphalt Pavement (RAP) (Notes 1, 2, and 3)	1031

Note 1. Crushed RAP, from either full depth or single lift removal, may be mechanically blended with aggregate gradations CS 01, CS 02, and RR 01 but shall not exceed 40 percent of the total product. The top size of the RAP shall be less than 4 in. (100 mm) and well graded.

Note 2. RAP having 100 percent passing the 1 1/2 in. (37.5 mm) sieve and being well graded, may be used as capping aggregate in the top 3 in. (75 mm) when aggregate gradations CS 01, CS 02, or RR 01 are used in lower lifts.

Note 3. The RAP used for aggregate subgrade improvement shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".

303.03 Equipment. The vibratory machine shall be according to Article 1101.01, or as approved by the Engineer.

303.04 Soil Preparation. The stability of the soil shall be according to the Department's Subgrade Stability Manual for the aggregate thickness specified.

303.05 Placing Aggregate. The maximum nominal lift thickness of aggregate gradations CA 02, CA 06, or CA 10 shall be 12 in. (300 mm). The maximum nominal lift thickness of aggregate gradations CS 01, CS 02, and RR 01 shall be 24 in. (600 mm).

303.06 Capping Aggregate. The top surface of the aggregate subgrade shall consist of a minimum 3 in. (75 mm) of aggregate gradations CA 06 or CA 10. When the contract specifies that a granular subbase is to be placed on the aggregate subgrade improvement, the 3 in. (75 mm) of capping aggregate shall be the same gradation and may be placed with the underlying aggregate subgrade improvement material.

303.07 Compaction. All aggregate lifts shall be compacted to the satisfaction of the Engineer. If the moisture content of the material is such that compaction cannot be obtained, sufficient water shall be added so that satisfactory compaction can be obtained.

303.08 Finishing and Maintenance of Aggregate Subgrade Improvement. The aggregate subgrade improvement shall be finished to the lines, grades, and cross sections shown on the plans, or as directed by the Engineer. The aggregate subgrade improvement shall be maintained in a smooth and compacted condition.

303.09 Method of Measurement. This work will be measured for payment according to Article 311.08.

303.10 Basis of Payment. This work will be paid for at the contract unit price per cubic yard (cubic meter) or ton (metric ton) for AGGREGATE SUBGRADE IMPROVEMENT or at the contract unit price per square yard (square meter) for AGGREGATE SUBGRADE IMPROVEMENT, of the thickness specified."

Add the following to Section 1004 of the Standard Specifications:

"1004.07 Coarse Aggregate for Aggregate Subgrade Improvement. The aggregate shall be according to Article 1004.01 and the following.

- (a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete. In applications where greater than 24 in. (600 mm) of subgrade material is required, gravel may be used below the first 12 in (300 mm) of subgrade.
- (b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials.
- (c) Gradation.
 - (1) The coarse aggregate gradation for total subgrade thickness less than or equal to 12 in. (300 mm) shall be CA 2, CA 6, CA 10, or CS 01.

The coarse aggregate gradation for total subgrade thickness more than 12 in. (300 mm) shall be CS 01 or CS 02 as shown below or RR 01 according to Article 1005.01(c).

COARSE AGGREGATE SUBGRADE GRADATIONS					
Grad No.	Sieve Size and Percent Passing				
	8"	6"	4"	2"	#4
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20
CS 02		100	80 ± 10	25 ± 15	

COARSE AGGREGATE SUBGRADE GRADATIONS (Metric)					
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Grad No.	Sieve Size and Percent Passing				
	200 mm	150 mm	100 mm	50 mm	4.75 mm
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20
CS 02		100	80 ± 10	25 ± 15	

(2) The 3 in. (75 mm) capping aggregate shall be gradation CA 6 or CA 10.”

80274

BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE)

Effective: November 2, 2006

Revised: August 1, 2017

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

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

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

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

- Where: CA = Cost Adjustment, \$.
- BPI_P = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).
- BPI_L = Bituminous Price Index, as published by the Department for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price, \$/ton (\$/metric ton).
- %AC_V = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the % AC_V will be determined from the adjusted job mix formula. For bituminous materials applied, a performance graded or cutback asphalt will be considered to be 100% AC_V and undiluted emulsified asphalt will be considered to be 65% AC_V.
- Q = Authorized construction Quantity, tons (metric tons) (see below).

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

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

- Where: A = Area of the HMA mixture, sq yd (sq m).
D = Depth of the HMA mixture, in. (mm).
G_{mb} = Average bulk specific gravity of the mixture, from the approved mix design.

V = Volume of the bituminous material, gal (L).
SG = Specific Gravity of bituminous material as shown on the bill of lading.

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

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

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

80173

BUTT JOINTS (BDE)

Effective: July 1, 2016

Add the following to Article 406.08 of the Standard Specifications.

“(c) Temporary Plastic Ramps. Temporary plastic ramps shall be made of high density polyethylene meeting the properties listed below. Temporary plastic ramps shall only be used on roadways with permanent posted speeds of 55 mph or less. The ramps shall have a minimum taper rate of 1:30 (V:H). The leading edge of the plastic ramp shall have a maximum thickness of 1/4 in. (6 mm) and the trailing edge shall match the height of the adjacent pavement \pm 1/4 in. (\pm 6 mm).

The ramp will be accepted by certification. The Contractor shall furnish a certification from the manufacturer stating the temporary plastic ramp meets the following requirements.

Physical Property	Test Method	Requirement
Melt Index	ASTM D 1238	8.2 g/10 minutes
Density	ASTM D 1505	0.965 g/cc
Tensile Strength @ Break	ASTM D 638	2223 psi (15 MPa)
Tensile Strength @ Yield	ASTM D 638	4110 psi (28 MPa)
Elongation @ Yield ^{1/} , percent	ASTM D 638	7.3 min.
Durometer Hardness, Shore D	ASTM D 2240	65
Heat Deflection Temperature, 66 psi	ASTM D 648	176 °F (80 °C)
Low Temperature Brittleness, F ₅₀	ASTM D 746	<-105 °F (<-76 °C)

1/ Crosshead speed -2 in./minute

The temporary plastic ramps shall be installed according to the manufacturer's specifications and fastened with anchors meeting the manufacturer's recommendations. Temporary plastic ramps that fail to stay in place or create a traffic hazard shall be replaced immediately with temporary HMA ramps at the Contractor's expense.”

80366

COMPENSABLE DELAY COSTS (BDE)

Effective: June 2, 2017

Revise Article 107.40(b) of the Standard Specifications to read:

“(b) Compensation. Compensation will not be allowed for delays, inconveniences, or damages sustained by the Contractor from conflicts with facilities not meeting the above definition; or if a conflict with a utility in an unanticipated location does not cause a shutdown of the work or a documentable reduction in the rate of progress exceeding the limits set herein. The provisions of Article 104.03 notwithstanding, compensation for delays caused by a utility in an unanticipated location will be paid according to the provisions of this Article governing minor and major delays or reduced rate of production which are defined as follows.

- (1) Minor Delay. A minor delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two hours, but not to exceed two weeks.
- (2) Major Delay. A major delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two weeks.
- (3) Reduced Rate of Production Delay. A reduced rate of production delay occurs when the rate of production on the work in conflict with the utility in an unanticipated location decreases by more than 25 percent and lasts longer than seven calendar days.”

Revise Article 107.40(c) of the Standard Specifications to read:

“(c) Payment. Payment for Minor, Major, and Reduced Rate of Production Delays will be made as follows.

- (1) Minor Delay. Labor idled which cannot be used on other work will be paid for according to Article 109.04(b)(1) and (2) for the time between start of the delay and the minimum remaining hours in the work shift required by the prevailing practice in the area.

Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4).

- (2) Major Delay. Labor will be the same as for a minor delay.

Equipment will be the same as for a minor delay, except Contractor-owned equipment will be limited to two weeks plus the cost of move-out to either the Contractor’s yard or another job and the cost to re-mobilize, whichever is less.

Rental equipment may be paid for longer than two weeks provided the Contractor presents adequate support to the Department (including lease agreement) to show retaining equipment on the job is the most economical course to follow and in the public interest.

- (3) Reduced Rate of Production Delay. The Contractor will be compensated for the reduced productivity for labor and equipment time in excess of the 25 percent threshold for that portion of the delay in excess of seven calendar days. Determination of compensation will be in accordance with Article 104.02, except labor and material additives will not be permitted.

Payment for escalated material costs, escalated labor costs, extended project overhead, and extended traffic control will be determined according to Article 109.13.”

Revise Article 108.04(b) of the Standard Specifications to read:

“(b) No working day will be charged under the following conditions.

- (1) When adverse weather prevents work on the controlling item.
- (2) When job conditions due to recent weather prevent work on the controlling item.
- (3) When conduct or lack of conduct by the Department or its consultants, representatives, officers, agents, or employees; delay by the Department in making the site available; or delay in furnishing any items required to be furnished to the Contractor by the Department prevents work on the controlling item.
- (4) When delays caused by utility or railroad adjustments prevent work on the controlling item.
- (5) When strikes, lock-outs, extraordinary delays in transportation, or inability to procure critical materials prevent work on the controlling item, as long as these delays are not due to any fault of the Contractor.
- (6) When any condition over which the Contractor has no control prevents work on the controlling item.”

Revise Article 109.09(f) of the Standard Specifications to read:

- “(f) Basis of Payment. After resolution of a claim in favor of the Contractor, any adjustment in time required for the work will be made according to Section 108. Any adjustment in the costs to be paid will be made for direct labor, direct materials, direct equipment, direct jobsite overhead, direct offsite overhead, and other direct costs allowed by the resolution. Adjustments in costs will not be made for interest charges, loss of anticipated profit, undocumented loss of efficiency, home office overhead and unabsorbed overhead

other than as allowed by Article 109.13, lost opportunity, preparation of claim expenses and other consequential indirect costs regardless of method of calculation.

The above Basis of Payment is an essential element of the contract and the claim cost recovery of the Contractor shall be so limited.”

Add the following to Section 109 of the Standard Specifications.

“109.13 Payment for Contract Delay. Compensation for escalated material costs, escalated labor costs, extended project overhead, and extended traffic control will be allowed when such costs result from a delay meeting the criteria in the following table.

Contract Type	Cause of Delay	Length of Delay
Working Days	Article 108.04(b)(3) or Article 108.04(b)(4)	No working days have been charged for two consecutive weeks.
Completion Date	Article 108.08(b)(1) or Article 108.08(b)(7)	The Contractor has been granted a minimum two week extension of contract time, according to Article 108.08.

Payment for each of the various costs will be according to the following.

- (a) Escalated Material and/or Labor Costs. When the delay causes work, which would have otherwise been completed, to be done after material and/or labor costs have increased, such increases will be paid. Payment for escalated material costs will be limited to the increased costs substantiated by documentation furnished by the Contractor. Payment for escalated labor costs will be limited to those items in Article 109.04(b)(1) and (2), except the 35 percent and 10 percent additives will not be permitted.
- (b) Extended Project Overhead. For the duration of the delay, payment for extended project overhead will be paid as follows.
 - (1) Direct Jobsite and Offsite Overhead. Payment for documented direct jobsite overhead and documented direct offsite overhead, including onsite supervisory and administrative personnel, will be allowed according to the following table.

Original Contract Amount	Supervisory and Administrative Personnel
Up to \$5,000,000	One Project Superintendent
Over \$ 5,000,000 - up to \$25,000,000	One Project Manager, One Project Superintendent or Engineer, and One Clerk
Over \$25,000,000 - up to \$50,000,000	One Project Manager, One Project Superintendent, One Engineer, and

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

(2) Home Office and Unabsorbed Overhead. Payment for home office and unabsorbed overhead will be calculated as 8 percent of the total delay cost.

(c) Extended Traffic Control. Traffic control required for an extended period of time due to the delay will be paid. For working day contracts the payment will be made according to Article 109.04. For completion date contracts, an adjustment will be determined as follows.

Extended Traffic Control occurs between April 1 and November 30:

$$\text{ETCP Adjustment (\$)} = \text{TE} \times (\% / 100 \times \text{CUP} / \text{OCT})$$

Extended Traffic Control occurs between December 1 and March 31:

$$\text{ETCP Adjustment (\$)} = \text{TE} \times 1.5 (\% / 100 \times \text{CUP} / \text{OCT})$$

Where: TE = Duration of approved time extension in calendar days.

% = Percent maintenance for the traffic control, % (see table below).

CUP = Contract unit price for the traffic control pay item in place during the delay.

OCT = Original contract time in calendar days.

Original Contract Amount	Percent Maintenance
Up to \$2,000,000	65%
\$2,000,000 to \$10,000,000	75%
\$10,000,000 to \$20,000,000	85%
Over \$20,000,000	90%

When an ETCP 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."

CONCRETE MIX DESIGN – DEPARTMENT PROVIDED (BDE)

Effective: January 1, 2012

| Revised: April 1, 2016

| For the concrete mix design requirements in Article 1020.05(a) of the Standard Specifications, the Contractor has the option to request the Engineer determine mix design material proportions for Class PV, PP, RR, BS, DS, SC, and SI concrete. A single mix design for each class of concrete will be provided. Acceptance by the Contractor to use the mix design developed by the Engineer shall not relieve the Contractor from meeting specification requirements.

80277

CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

Effective: June 1, 2010

Revised: November 1, 2014

The reduction of emissions of particulate matter (PM) for off-road equipment shall be accomplished by installing retrofit emission control devices. The term “equipment” refers to diesel fuel powered devices rated at 50 hp and above, to be used on the jobsite in excess of seven calendar days over the course of the construction period on the jobsite (including rental equipment).

Contractor and subcontractor diesel powered off-road equipment assigned to the contract shall be retrofitted using the phased in approach shown below. Equipment that is of a model year older than the year given for that equipment’s respective horsepower range shall be retrofitted:

Effective Dates	Horsepower Range	Model Year
June 1, 2010 ^{1/}	600-749	2002
	750 and up	2006
June 1, 2011 ^{2/}	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006
June 1, 2012 ^{2/}	50-99	2004
	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006

1/ Effective dates apply to Contractor diesel powered off-road equipment assigned to the contract.

2/ Effective dates apply to Contractor and subcontractor diesel powered off-road equipment assigned to the contract.

The retrofit emission control devices shall achieve a minimum PM emission reduction of 50 percent and shall be:

- a) Included on the U.S. Environmental Protection Agency (USEPA) *Verified Retrofit Technology List* (<http://www.epa.gov/cleandiesel/verification/verif-list.htm>), or verified by the California Air Resources Board (CARB) (<http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>); or
- b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit

device manufacturer that the emission control device provides a minimum PM emission reduction of 50 percent.

Note: Large cranes (Crawler mounted cranes) which are responsible for critical lift operations are exempt from installing retrofit emission control devices if such devices adversely affect equipment operation.

Diesel powered off-road equipment with engine ratings of 50 hp and above, which are unable to be retrofitted with verified emission control devices or if performance certifications are not available which will achieve a minimum 50 percent PM reduction, may be granted a waiver by the Department if documentation is provided showing good faith efforts were made by the Contractor to retrofit the equipment.

Construction shall not proceed until the Contractor submits a certified list of the diesel powered off-road equipment that will be used, and as necessary, retrofitted with emission control devices. The list(s) shall include (1) the equipment number, type, make, Contractor/rental company name; and (2) the emission control devices make, model, USEPA or CARB verification number, or performance certification from the retrofit device manufacturer. Equipment reported as fitted with emissions control devices shall be made available to the Engineer for visual inspection of the device installation, prior to being used on the jobsite.

The Contractor shall submit an updated list of retrofitted off-road construction equipment as retrofitted equipment changes or comes on to the jobsite. The addition or deletion of any diesel powered equipment shall be included on the updated list.

If any diesel powered off-road equipment is found to be in non-compliance with any portion of this special provision, the Engineer will issue the Contractor a diesel retrofit deficiency deduction.

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices 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. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

Diesel Retrofit Deficiency Deduction

When the Engineer determines that a diesel retrofit deficiency exists, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

The deficiency will be based on lack of diesel retrofit emissions control.

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected.

Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

80261

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000

Revised: July 2, 2016

FEDERAL OBLIGATION. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR Part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified 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.

CONTRACTOR ASSURANCE. The Contractor makes the following assurance and agrees to include the assurance in each subcontract that 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 that 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 that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform 20.00 % 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 that enough DBE participation has been obtained to meet the goal or,
- (b) The bidder documents that 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.

DBE LOCATOR REFERENCES. 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>.

BIDDING PROCEDURES. Compliance with this Special Provision is required prior to the award of the contract and the failure of the low bidder to comply will render the bid not responsive.

In order to assure the timely award of the contract, the low bidder shall submit:

- (a) The bidder shall submit a DBE Utilization Plan on completed Department forms SBE 2025 and 2026.
 - (1) The final Utilization Plan must be submitted within five calendar days after the date of the letting in accordance with subsection (a)(2) of Bidding Procedures herein.

- (2) To meet the five day requirement, the bidder may send the Utilization Plan electronically by scanning and sending to DOT.DBE.UP@illinois.gov or faxing to (217) 785-1524. The subject line must include the bid Item Number and the Letting date. The Utilization Plan should be sent as one .pdf file, rather than multiple files and emails for the same Item Number. It is the responsibility of the bidder to obtain confirmation of email or fax delivery.

Alternatively, the Utilization Plan may be sent by certified mail or delivery service within the five calendar day period. If a question arises concerning the mailing date of a Utilization Plan, the mailing date will be established by the U.S. Postal Service postmark on the certified mail receipt from the U.S. Postal Service or the receipt issued by a delivery service when the Utilization Plan is received by the Department. It is the responsibility of the bidder to ensure the postmark or receipt date is affixed within the five days if the bidder intends to rely upon mailing or delivery to satisfy the submission day requirement. The Utilization Plan is to be submitted to:

Illinois Department of Transportation
Bureau of Small Business Enterprises
Contract Compliance Section
2300 South Dirksen Parkway, Room 319
Springfield, Illinois 62764

The Department will not accept a Utilization Plan if it does not meet the five day submittal requirement and the bid will be declared not responsive. In the event the bid is declared not responsive due to a failure to submit a Utilization Plan or failure to comply with the bidding procedures set forth herein, 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. The Department reserves the right to invite any other bidder to submit a Utilization Plan at any time for award consideration.

- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of Utilization Plan approval or disapproval under the procedures of this Special Provision.
- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. For bidding purposes, submission of the completed SBE 2025 forms, signed by the DBEs and scanned or faxed to the bidder will be acceptable as long as the original is available and provided upon request. All elements of information indicated on the said form shall be provided, including but not limited to the following:

- (1) The names and addresses of DBE firms that will participate in the contract;
- (2) A description, including pay item numbers, of the work each DBE will perform;
- (3) The dollar amount of the participation of each DBE firm participating. The dollar amount of participation for identified work shall specifically state the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
- (4) DBE Participation Commitment Statements, form SBE 2025, signed by the bidder and each participating DBE firm documenting the commitment to use the DBE subcontractors whose participation is submitted to meet the contract goal;
- (5) If the bidder is a joint venture comprised of DBE companies and non-DBE companies, the Utilization Plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s); and,
- (6) If the contract goal is not met, evidence of good faith efforts; 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.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan submitted by the apparent successful bidder is approved. All information submitted by the bidder must be complete, accurate and adequately document that enough DBE participation has been obtained or document that 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. The Utilization Plan will not be approved by the Department if the Utilization Plan does not document sufficient DBE participation to meet the contract goal unless the apparent successful bidder documented in the Utilization Plan that it made a good faith effort to meet the goal. This means that 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 that 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 prime 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 subsection (c)(6) of 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 that the apparent successful 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 that it is otherwise eligible for award. If the Department determines that 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 shall include a statement of reasons for the 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 in order to cure the deficiency.
- (c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after the receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217) 785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The determination shall become final if a request is not made and delivered. 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 forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order 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 consideration, 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.

CALCULATING DBE PARTICIPATION. 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 prime 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) NO AMENDMENT. 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 submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) CHANGES TO WORK. 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, then a new Request for Approval of Subcontractor shall not be required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.

- (c) SUBCONTRACT. The Contractor must provide DBE subcontracts to IDOT 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) ALTERNATIVE WORK METHODS. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated 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) That 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) That the DBE is aware that 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) That 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 prime contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the prime 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) You have determined that the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides to you written notice 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 prime Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the prime Contractor can self-perform the work for which the DBE contractor was engaged or so that the prime 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 shall provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.

- (f) PAYMENT RECORDS. The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. 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 thirty 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 that 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) ENFORCEMENT. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (h) RECONSIDERATION. 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.

DOWEL BAR INSERTER (BDE)

Effective: January 1, 2017

Revised: January 1, 2018

Add the following to Article 420.03 of the Standard Specifications.

“(l) Mechanical Dowel Bar Inserter1103.20”

Revise the first paragraph of Article 420.05(b)(1) of the Supplemental Specifications to read:

“Preformed or Drilled Holes. If applicable, the tie bars shall be installed after the dowel bars have been tested with the MIT Scan-2 device according to Article 420.05(c)(2)b.2. The tie bars shall be installed with a nonshrink grout or chemical adhesive providing a minimum pull-out strength as follows.”

Revise Article 420.05(c) of the Standard Specifications to read:

“(c) Transverse Contraction Joints. Transverse contraction joints shall consist of planes of weakness created by sawing grooves in the surface of the pavement and shall include load transfer devices consisting of dowel bars. Transverse contraction joints shall be according to the following.”

Revise Article 420.05(c)(2) of the Standard Specifications to read:

“(2) Dowel Bars. Dowel Bars shall be installed parallel to the centerline of the pavement and parallel to the proposed pavement surface. Installation shall be according to one of the following methods.

- a. Dowel Bar Assemblies. The assembly shall act as a rigid unit with each component securely held in position relative to the other members of the assembly. The entire assembly shall be held securely in place by means of nails which shall penetrate the stabilized subbase. At least ten nails shall be used for each 10, 11, or 12 ft (3, 3.3, or 3.6 m) section of assembly.

Metal stakes shall be used instead of nails, with soil or granular subbase. The stakes shall loop over or attach to the top parallel spacer bar of the assembly and penetrate the subgrade or subbase at least 12 in. (300 mm).

At the location of each dowel bar assembly, the subgrade or subbase shall be reshaped and re-tamped when necessary.

Prior to placing concrete, any deviation of the dowel bars from the correct horizontal or vertical alignment (horizontal skew or vertical tilt) greater than 3/8 in. in 12 in (9 mm in 300 mm) shall be corrected and a light coating of oil shall be uniformly applied to all dowel bars.

Care shall be exercised in depositing the concrete at the dowel bar assemblies so the horizontal and vertical alignment will be retained.

- b. Dowel Bar Insertion. The dowel bars may be placed in the pavement slab with a mechanical dowel bar inserter (DBI) attached to a formless paver for pavements ≥ 7.0 in. (175 mm) in thickness. A light coating of oil shall be uniformly applied to all dowel bars.

The DBI shall insert the dowel bars with vibration into the plastic concrete after the concrete has been struck off and consolidated without deformation of the slab. After the bars have been inserted, the concrete shall be refinished and no voids shall exist around the dowel bars. The forward movement of the paver shall not be interrupted by the inserting of the dowel bars.

The location of each row of dowel bars shall be marked in a manner to facilitate where to insert the bars, and where to saw the transverse joint.

1. Placement Tolerances for Dowel Bars. The DBI shall place the dowel bars in the concrete pavement within the following tolerances.

- (a.) Longitudinal Translation (Mislocation). Longitudinal translation (mislocation) shall be defined as the position of the center of the dowel bar along the longitudinal axis, in relation to the sawed joint.

The quality control tolerance for longitudinal translation shall not exceed 2.0 in (50 mm). If this tolerance is exceeded, adjustments shall be made to the paving operation.

Any joint having two or more dowel bars with an embedment length less than 4.0 in. (100 mm) within 12 in. (300 mm) of the same wheelpath will be considered unacceptable. The left and right wheelpaths shall be determined by excluding the middle 2.5 ft (0.8 m) of the pavement lane, and by excluding the outer 1.0 ft (0.3 m) measured from each pavement lane edge. Any joint having an average dowel bar embedment length less than 5.25 in. (130 mm) will also be considered unacceptable. Embedment length shall be defined as the length of dowel bar embedded on the short side of the sawed joint. An unacceptable joint shall be replaced with a minimum of 6 ft (1.8 m) of pavement centered over the joint according to Section 442 for Class B patches.

- (b.) Horizontal Translation (Mislocation). Horizontal translation (mislocation) shall be defined as the difference in the actual dowel bar location parallel to the longitudinal or edge joint from its theoretical position as shown on the plans.

The quality control tolerance for horizontal translation shall not exceed 2.0 in. (50 mm). If this tolerance is exceeded, adjustments shall be made to the paving operation.

Any joint having a dowel bar with a translation greater than 4.0 in. (100 mm) will be considered unacceptable, but may remain in place unless the Engineer determines the joint will not function. If the joint is unable to remain in place, the joint shall be replaced with a minimum of 6 ft (1.8 m) of pavement centered over the joint according to Section 442 for Class B patches.

(c.) Vertical Translation (Mislocation). Vertical translation (mislocation) shall be defined as the difference in the vertical position of the dowel bar relative to the theoretical midpoint of the slab.

The quality control tolerance for vertical translation shall be as shown in the following table. If these tolerances are exceeded, adjustments shall be made to the paving operation.

Pavement Thickness	Dowel Bar Diameter	Vertical Translation Tolerance Above Midpoint	Vertical Translation Tolerance Below Midpoint
≥7 in. to <8 in. (≥175 mm to <200 mm)	1.25 in. (31 mm)	0.25 in. (6 mm)	0.5 in. (13 mm)
≥8 in. to <9 in. (≥200 mm to <225 mm)	1.50 in. (38 mm)	0.25 in. (6 mm)	0.5 in. (13 mm)
≥9 in. to <10 in. (≥225 mm to <250 mm)	1.50 in. (38 mm)	0.75 in. (19 mm)	0.75 in. (19 mm)
≥10 in. (≥250 mm)	1.50 in. (38 mm)	0.75 in. (19 mm)	1.0 in. (25 mm)

Any joint having a dowel bar with top concrete cover less than T/3, where T is slab thickness, will be considered unacceptable. Any joint having 2 or more dowel bars with bottom concrete cover less than 2.0 in. (50 mm) will also be considered unacceptable. An unacceptable joint shall be replaced with a minimum of 6 ft (1.8 m) of pavement according to Section 442 for Class B patches.

(d.) Vertical Tilt or Horizontal Skew (Misalignment). Vertical tilt or horizontal skew (misalignment) shall be defined as the difference in position of the dowel bar ends with respect to each other. Vertical tilt is measured in the vertical axis whereas horizontal skew is measured in the horizontal axis. Misalignment shall be measured in terms of a joint score. The joint score shall be defined as the degree of misalignment evaluated for a single

transverse joint for each lane of pavement. The joint score shall be determined as follows:

$$Joint\ Score = \left(1 + \left(\frac{x}{x-n} \right) \sum_{i=1}^{x-n} W_i \right)$$

where:

W_i = weighting factor (Table 1) for dowel i

x = number of dowels in a single joint

n = number of dowels excluded from the joint score calculation due to measurement interference

Single Dowel Misalignment – The degree of misalignment applicable to a single dowel bar, calculated as:

$$Single\ Dowel\ Misalignment = \sqrt{(Horizontal\ Skew)^2 + (Vertical\ Tilt)^2}$$

Table 1. Weighting Factors in Joint Score Determination	
Single Dowel Bar Misalignment (SDM)	W, Weighting Factor
SDM ≤ 0.6 in. (15 mm)	0
0.6 in. (15 mm) < SDM ≤ 0.8 in. (20 mm)	2
0.8 in. (20 mm) < SDM ≤ 1 in. (25 mm)	4
1 in. (25 mm) < SDM ≤ 1.5 in. (38 mm)	5
1.5 in. (38 mm) < SDM	10

The quality control tolerance for vertical tilt or horizontal skew shall not exceed 0.6 in. (15 mm). If the tolerance is exceeded for either one, adjustments shall be made to the paving operation.

Any joint having a dowel bar with a vertical tilt or horizontal skew greater than 1.5 in. (38 mm) shall be cut. If more than one dowel bar is required to be cut in the joint, the joint will be considered unacceptable and shall be replaced with a minimum of 6 ft (1.8 m) of pavement centered over the joint according to Section 442 for Class B patches.

Single dowel bar misalignment shall be controlled to provide the joint scores shown in the following table.

Number of Dowel Bars in the Joint	Maximum Joint Score
< 5	4
≥ 5 but ≤ 9	8
> 9	12

A joint score greater than the specified maximum will be considered locked. Three consecutive joints with a score greater than the specified maximum total score will all be considered unacceptable.

Three consecutive locked joints shall be corrected by selecting one joint and cutting a dowel bar. Preference shall be given to cutting a dowel bar within the middle 2.5 ft (0.8 m) of the pavement lane to avoid the wheelpaths. If none of the three locked joints will have a joint score less than or equal to the specified maximum after selecting one dowel bar to cut, one of the joints shall be replaced with a minimum of 6 ft (1.8 m) of pavement centered over the joint according to Section 442 for Class B patches.

(e.) For unacceptable work, the Contractor may propose alternative repairs for consideration by the Engineer.

2. Testing of Dowel Bar Placement. The placement of the dowel bars shall be tested within 24 hours of paving with a calibrated MIT Scan-2 device according to "Use of Magnetic Tomography Technology to Evaluate Dowel Placement" (Publication No. FHWA-IF-06-006) by the Federal Highway Administration.

A trained operator shall perform the testing, and all testing shall be performed in the presence of the Engineer. The device shall be calibrated to the type and size dowel bar used in the work according to the manufacturer's instructions. Calibration documentation shall be provided to the Engineer prior to construction. The device shall be recalibrated and/or validate readings as required by the Engineer. The device may be utilized as a process control and make necessary adjustments to ensure the dowel bars are placed in the correct location.

(a.) Test Section. Prior to start of production paving, a test section consisting of 30 transverse joints shall be constructed. The test section may be performed on the actual pavement, but production paving shall not begin until an acceptable test section has been constructed. The test section will be considered acceptable when all of the following are met:

- (1.) 90 percent of the dowel bars meet the quality control tolerance for longitudinal, horizontal, or vertical translation (mislocation);
- (2.) 90 percent of the dowel bars meet the quality control tolerance for vertical tilt or horizontal skew deviation (misalignment); and
- (3.) none of the joints are considered unacceptable prior to a corrective measure for mislocation or misalignment.

If the test section fails, another test section consisting of 30 joints shall be constructed.

The test section requirement may be waived by the Engineer if the Contractor has constructed an acceptable test section and successfully used the DBI on a Department contract within the same calendar year.

- (b.) Production Paving. After the test section is approved, production paving may begin. The mislocation and misalignment of each dowel bar for the first ten joints constructed, and every tenth joint thereafter, shall be tested.

If two consecutive days of paving result in 5 percent or more of the joints on each day being unacceptable prior to a corrective measure, production paving shall be discontinued and a new test section shall be constructed.

If any joint is found to be unacceptable prior to a corrective measure, testing of additional joints on each side of the unacceptable joint shall be performed until acceptable joints are found.

- (c.) Test Report. Test reports shall be provided to the Engineer within two working days of completing each day's testing. The test report shall include the following.

(1.) Contract number, placement date, county-route-section, direction of traffic, scan date, Contractor, and name of individual performing the tests.

(2.) Provide the standard report generated from the on-board printer of the imaging technology used for every dowel and joint measured.

(3.) For every dowel measured, provide the joint identification number, lane number and station, dowel bar number or x-location, direction of testing and reference joint location/edge location, longitudinal translation, horizontal translation, vertical translation, vertical tilt, and horizontal skew.

(4.) Identify each dowel bar with a maximum longitudinal, horizontal, or vertical translation that has been exceeded. Identify each dowel bar with a maximum vertical tilt or horizontal skew deviation that has been exceeded.

(5.) Joint Score Details: Provide the joint identification number, lane number, station, and calculated joint score for each joint.

- (6.) Locked Joint Identification: Identify each joint where the maximum joint score is exceeded.
- (d.) Exclusions. Exclude the following from dowel bar mislocation and misalignment measurements.
 - (1.) Transverse construction joints (headers).
 - (2.) Dowel bars within 24 in. (610 mm) of metallic manholes, inlets, metallic castings, or other nearby or underlying steel reinforced objects.
 - (3.) The outside dowel bar when tie bars are installed with mechanical equipment in fresh concrete. For tie bar installations involving preformed or drilled holes, installation of the tie bar shall be performed after testing with the MIT Scan-2 device.
 - (4.) Joints located directly under high voltage power lines.
 - (5.) Subject to the approval of the Engineer, any other contributors to magnetic interference.
- (e.) Deficiency Deduction. When the Contractor has cut 25 dowel bars to correct unacceptable joints, the Contractor shall be liable and shall pay to the Department a deficiency deduction of \$500.00 for the cost of the bars. Thereafter, an additional deficiency deduction of \$20.00 for each additional bar cut will be assessed.”

Add the following to Section 1103 of the Standard Specifications.

“1103.20 Mechanical Dowel Bar Inserter. The mechanical dowel bar inserter (DBI) shall be self-contained and supported on the formless paver with the ability to move separately from the paver. The DBI shall be equipped with insertion forks along with any other devices necessary for finishing the concrete the full width of the pavement. The insertion forks shall have the ability to vibrate at a minimum frequency of 3000 VPM.”

80378

EQUIPMENT PARKING AND STORAGE (BDE)

Effective: November 1, 2017

Replace the first paragraph of Article 701.11 of the Standard Specifications with the following.

“701.11 Equipment Parking and Storage. During working hours, all vehicles and/or nonoperating equipment which are parked, two hours or less, shall be parked at least 8 ft (2.5 m) from the open traffic lane. For other periods of time during working and for all nonworking hours, all vehicles, materials, and equipment shall be parked or stored as follows.

- (a) When the project has adequate right-of-way, vehicles, materials, and equipment shall be located a minimum of 30 ft (9 m) from the pavement.
- (b) When adequate right-of-way does not exist, vehicles, materials, and equipment shall be located a minimum of 15 ft (4.5 m) from the edge of any pavement open to traffic.
- (c) Behind temporary concrete barrier, vehicles, materials, and equipment shall be located a minimum of 24 in. (600 mm) behind free standing barrier or a minimum of 6 in. (150 mm) behind barrier that is either pinned or restrained according to Article 704.04. The 24 in. or 6 in. measurement shall be from the base of the non-traffic side of the barrier.
- (d) Behind other man-made or natural barriers meeting the approval of the Engineer.”

80388

HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)

Effective: January 1, 2010

Revised: April 1, 2016

Description. This work shall consist of testing the density of longitudinal joints as part of the quality control/quality assurance (QC/QA) of hot-mix asphalt (HMA). Work shall be according to Section 1030 of the Standard Specifications except as follows.

Quality Control/Quality Assurance (QC/QA). Delete the second and third sentence of the third paragraph of Article 1030.05(d)(3) of the Standard Specifications.

Add the following paragraphs to the end of Article 1030.05(d)(3) of the Standard Specifications:

“Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 4 in. (100 mm), from each pavement edge. (i.e. for a 5 in. (125 mm) lift the near edge of the density gauge or core barrel shall be within 5 in. (125 mm) from the edge of pavement.) Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.

- a. Confined Edge. Each confined edge density shall be represented by a one-minute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.
- b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced 10 ft (3 m) apart longitudinally along the unconfined pavement edge and centered at the random density test location.”

Revise the Density Control Limits table in Article 1030.05(d)(4) of the Standard Specifications to read:

“Mixture Composition	Parameter	Individual Test (includes confined edges)	Unconfined Edge Joint Density Minimum
IL-4.75	Ndesign = 50	93.0 – 97.4% ^{1/}	91.0%
IL-9.5	Ndesign = 90	92.0 – 96.0%	90.0%
IL-9.5,IL-9.5L	Ndesign < 90	92.5 – 97.4%	90.0%
IL-19.0	Ndesign = 90	93.0 – 96.0%	90.0%
IL-19.0, IL-19.0L	Ndesign < 90	93.0 ^{2/} – 97.4%	90.0%
SMA	Ndesign = 50 & 80	93.5 – 97.4%	91.0%”

80246

HOT-MIX ASPHALT – TACK COAT (BDE)

Effective: November 1, 2016

Revise Article 1032.06(a) of the Standard Specifications to read:

“(a) Anionic Emulsified Asphalt. Anionic emulsified asphalts shall be according to AASHTO M 140. SS-1h emulsions used as a tack coat shall have the cement mixing test waived.”

80376

LIGHTS ON BARRICADES (BDE)

Effective: January 1, 2018

Revise Article 701.16 of the Standard Specifications to read:

“701.16 Lights. Lights shall be used on devices as required in the plans, the traffic control plan, and the following table.

Circumstance	Lights Required
Daylight operations	None
First two warning signs on each approach to the work involving a nighttime lane closure and “ROUGH GROOVED SURFACE” (W8-I107) signs	Flashing mono-directional lights
Devices delineating isolated obstacles, excavations, or hazards at night (Does not apply to patching)	Flashing bi-directional lights
Devices delineating obstacles, excavations, or hazards exceeding 100 ft (30 m) in length at night (Does not apply to widening)	Steady burn bi-directional lights
Channelizing devices for nighttime lane closures on two-lane roads	None
Channelizing devices for nighttime lane closures on multi-lane roads	None
Channelizing devices for nighttime lane closures on multi-lane roads separating opposing directions of traffic	None
Channelizing devices for nighttime along lane shifts on multilane roads	Steady burn mono-directional lights
Channelizing devices for night time along lane shifts on two lane roads	Steady burn bi-directional lights
Devices in nighttime lane closure tapers on Standards 701316 and 701321	Steady burn bi-directional lights
Devices in nighttime lane closure tapers	Steady burn mono-directional lights
Devices delineating a widening trench	None
Devices delineating patches at night on roadways with an ADT less than 25,000	None
Devices delineating patches at night on roadways with an ADT of 25,000 or more	None

Batteries for the lights shall be replaced on a group basis at such times as may be specified by the Engineer.”

Delete the fourth sentence of the first paragraph of Article 701.17(c)(2) of the Standard Specifications.

Revise the first paragraph of Article 603.07 of the Standard Specifications to read:

“603.07 Protection Under Traffic. After the casting has been adjusted and Class SI concrete has been placed, the work shall be protected by a barricade for at least 72 hours.”

80392

MANHOLES, VALVE VAULTS, AND FLAT SLAB TOPS (BDE)

Effective: January 1, 2018

Description. This special provision applies to 6 ft, 7 ft, 8 ft, 9 ft, and 10 ft diameter manholes Type A; flat slab tops for inlets and catch basins; and valve vaults. This special provision also applies to 4 ft and 5 ft diameter manholes Type A manufactured after January 1, 2018 according to Highway Standards 602401-04 and 602402.

This special provision does not apply to 4' and 5' diameter manholes Type A and their associated flat slab tops, manufactured prior to January 1, 2018 according to Highway Standards 602401-03 and 602601-04. These manholes shall be according to the Standard Specifications and will be accepted until December 31, 2018.

Revise Article 602.02(g) of the Standard Specifications to read:

“(g) Structural Steel (Note 4) 1006.04

Note 4. All components of the manhole joint splice shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable.”

Add the following to Article 602.02 of the Standard Specifications:

“(s) Anchor Bolts and Rods (Note 5) 1006.09

Note 5. The threaded rods for the manhole joint splice shall be according to the requirements of ASTM F 1554, Grade 55, (Grade 380).”

Add the following paragraph after the first paragraph of Article 602.07 of the Standard Specifications:

“Threaded rods connecting precast sections shall be brought to a snug tight condition.”

Revise the second paragraph of Article 1042.10 of the Standard Specifications to read:

“Catch basin Types A, B, C, and D; Manhole Type A; Inlet Types A and B; Drainage Structures Types 1, 2, 3, 4, 5, and 6; Valve Vault Type A; and reinforced concrete flat slab top (Highway Standard 602601) shall be according to AASHTO M 199 (M 199M), except the minimum wall thickness shall be 3 in. (75 mm). Additionally, catch basins, inlets, and drainage structures shall have a minimum concrete compressive strength of 4500 psi (31,000 kPa) at 28 days and manholes, valve vaults, and reinforced concrete flat slab tops shall have a minimum concrete compressive strength of 5000 psi (34,500 kPa) at 28 days.”

80393

PAVEMENT MARKING REMOVAL (BDE)

Effective: July 1, 2016

Revise Article 783.02 of the Standard Specifications to read:

“783.02 Equipment. Equipment shall be according to the following.

Item	Article/Section
(a) Grinders (Note 1)	
(b) Water Blaster with Vacuum Recovery	1101.12

Note 1. Grinding equipment shall be approved by the Engineer.”

Revise the first paragraph of Article 783.03 of the Standard Specifications to read:

“783.03 Removal of Conflicting Markings. Existing pavement markings that conflict with revised traffic patterns shall be removed. If darkness or inclement weather prohibits the removal operations, such operations shall be resumed the next morning or when weather permits. In the event of removal equipment failure, such equipment shall be repaired, replaced, or leased so removal operations can be resumed within 24 hours.”

Revise the first and second sentences of the first paragraph of Article 783.03(a) of the Standard Specifications to read:

“The existing pavement markings shall be removed by the method specified and in a manner that does not materially damage the surface or texture of the pavement or surfacing. Small particles of tightly adhering existing markings may remain in place, if in the opinion of the Engineer, complete removal of the small particles will result in pavement surface damage.”

Revise the first paragraph of Article 783.04 of the Standard Specifications to read:

“783.04 Cleaning. The roadway surface shall be cleaned of debris or any other deleterious material by the use of compressed air or water blast.”

Revise the first paragraph of Article 783.06 of the Standard Specifications to read:

“783.06 Basis of Payment. This work will be paid for at the contract unit price per each for RAISED REFLECTIVE PAVEMENT MARKER REMOVAL, or at the contract unit price per square foot (square meter) for PAVEMENT MARKING REMOVAL – GRINDING and/or PAVEMENT MARKING REMOVAL – WATER BLASTING.”

Delete Article 1101.13 from the Standard Specifications.

80371

PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: November 2, 2017

Add the following to the end of the fourth paragraph of Article 109.11 of the Standard Specifications:

“If reasonable cause is asserted, written notice shall be provided to the applicable subcontractor and/or material supplier and the Engineer within five days of the Contractor receiving payment. The written notice shall identify the contract number, the subcontract or material purchase agreement, a detailed reason for refusal, the value of payment being withheld, and the specific remedial actions required of the subcontractor and/or material supplier so that payment can be made.”

80390

PORTLAND CEMENT CONCRETE (BDE)

Effective: November 1, 2017

Revise the Air Content % of Class PP Concrete in Table 1 Classes of Concrete and Mix Design Criteria in Article 1020.04 of the Standard Specifications to read:

"TABLE 1. CLASSES OF CONCRETE AND MIX DESIGN CRITERIA		
Class of Conc.	Use	Air Content %
PP	Pavement Patching Bridge Deck Patching (10)	4.0 - 8.0"
	PP-1	
	PP-2	
	PP-3	
	PP-4	
	PP-5	

Revise Note (4) at the end of Table 1 Classes of Concrete and Mix Design Criteria in Article 1020.04 of the Standard Specifications to read:

“(4) For all classes of concrete, the maximum slump may be increased to 7 in (175 mm) when a high range water-reducing admixture is used. For Class SC, the maximum slump may be increased to 8 in. (200 mm). For Class PS, the maximum slump may be increased to 8 1/2 in. (215 mm) if the high range water-reducing admixture is the polycarboxylate type.”

80389

PORTLAND CEMENT CONCRETE SIDEWALK (BDE)

Effective: August 1, 2017

Revise the first paragraph of Article 424.12 of the Standard Specifications to read:

“424.12 Method of Measurement. This work will be measured for payment in place and the area computed in square feet (square meters). Curb ramps, including side curbs and side flares, will be measured for payment as sidewalk. No deduction will be made for detectable warnings located within the ramp.”

80385

PROGRESS PAYMENTS (BDE)

Effective: November 2, 2013

Revise Article 109.07(a) of the Standard Specifications to read:

“(a) Progress Payments. At least once each month, the Engineer will make a written estimate of the quantity of work performed in accordance with the contract, and the value thereof at the contract unit prices. The amount of the estimate approved as due for payment will be vouchered by the Department and presented to the State Comptroller for payment. No amount less than \$1000.00 will be approved for payment other than the final payment.

Progress payments may be reduced by liens filed pursuant to Section 23(c) of the Mechanics' Lien Act, 770 ILCS 60/23(c).

If a Contractor or subcontractor has defaulted on a loan issued under the Department's Disadvantaged Business Revolving Loan Program (20 ILCS 2705/2705-610), progress payments may be reduced pursuant to the terms of that loan agreement. In such cases, the amount of the estimate related to the work performed by the Contractor or subcontractor, in default of the loan agreement, will be offset, in whole or in part, and vouchered by the Department to the Working Capital Revolving Fund or designated escrow account. Payment for the work shall be considered as issued and received by the Contractor or subcontractor on the date of the offset voucher. Further, the amount of the offset voucher shall be a credit against the Department's obligation to pay the Contractor, the Contractor's obligation to pay the subcontractor, and the Contractor's or subcontractor's total loan indebtedness to the Department. The offset shall continue until such time as the entire loan indebtedness is satisfied. The Department will notify the Contractor and Fund Control Agent in a timely manner of such offset. The Contractor or subcontractor shall not be entitled to additional payment in consideration of the offset.

The failure to perform any requirement, obligation, or term of the contract by the Contractor shall be reason for withholding any progress payments until the Department determines that compliance has been achieved.”

80328

RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (BDE)

Effective: November 1, 2012

Revise: January 1, 2018

Revise Section 1031 of the Standard Specifications to read:

SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES

1031.01 Description. Reclaimed asphalt pavement and reclaimed asphalt shingles shall be according to the following.

- (a) Reclaimed Asphalt Pavement (RAP). RAP is the material produced by cold milling or crushing an existing hot-mix asphalt (HMA) pavement. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.
- (b) Reclaimed Asphalt Shingles (RAS). Reclaimed asphalt shingles (RAS). RAS is from the processing and grinding of preconsumer or post-consumer shingles. RAS shall be a clean and uniform material with a maximum of 0.5 percent unacceptable material, as defined in Central Bureau of Materials Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources", by weight of RAS. All RAS used shall come from a Central Bureau of Materials approved processing facility where it shall be ground and processed to 100 percent passing the 3/8 in. (9.5 mm) sieve and 93 percent passing the #4 (4.75 mm) sieve based on a dry shake gradation. RAS shall be uniform in gradation and asphalt binder content and shall meet the testing requirements specified herein. In addition, RAS shall meet the following Type 1 or Type 2 requirements.
 - (1) Type 1. Type 1 RAS shall be processed, preconsumer asphalt shingles salvaged from the manufacture of residential asphalt roofing shingles.
 - (2) Type 2. Type 2 RAS shall be processed post-consumer shingles only, salvaged from residential, or four unit or less dwellings not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP).

1031.02 Stockpiles. RAP and RAS stockpiles shall be according to the following.

- (a) RAP Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. "Homogeneous Surface").

Prior to milling, the Contractor shall request the District provide documentation on the quality of the RAP to clarify the appropriate stockpile.

- (1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. All FRAP shall be fractionated prior to testing by screening into a minimum of two size fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP shall pass the sieve size specified below for the mix into which the FRAP will be incorporated.

Mixture FRAP will be used in:	Sieve Size that 100 % of FRAP Shall Pass
IL-19.0	1 1/2 in. (40 mm)
IL-9.5	3/4 in. (20 mm)
IL-4.75	1/2 in. (13 mm)

- (2) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered "homogeneous" with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag.
- (4) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

RAP/FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.

- (b) RAS Stockpiles. Type 1 and Type 2 RAS shall be stockpiled separately and shall not be intermingled. Each stockpile shall be signed indicating what type of RAS is present.

Unless otherwise specified by the Engineer, mechanically blending manufactured sand (FM 20 or FM 22) up to an equal weight of RAS with the processed RAS will be permitted to improve workability. The sand shall be "B Quality" or better from an

approved Aggregate Gradation Control System source. The sand shall be accounted for in the mix design and during HMA production.

Records identifying the shingle processing facility supplying the RAS, RAS type, and lot number shall be maintained by project contract number and kept for a minimum of three years.

1031.03 Testing. RAP/FRAP and RAS testing shall be according to the following.

(a) RAP/FRAP Testing. When used in HMA, the RAP/FRAP shall be sampled and tested either during or after stockpiling.

(1) During Stockpiling. For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).

(2) After Stockpiling. For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP/FRAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

Each sample shall be split to obtain two equal samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedure. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

(b) RAS Testing. RAS or RAS blended with manufactured sand shall be sampled and tested during stockpiling according to Central Bureau of Materials Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Source".

Samples shall be collected during stockpiling at the minimum frequency of one sample per 200 tons (180 metric tons) for the first 1000 tons (900 metric tons) and one sample per 250 tons (225 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once a ≤ 1000 ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS or RAS blended with manufactured sand shall be stockpiled in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.

Before testing, each sample shall be split to obtain two test samples. One of the two test samples from the final split shall be labeled and stored for Department use. The

Contractor shall perform a washed extraction and test for unacceptable materials on the other test sample according to Department procedures. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

If the sampling and testing was performed at the shingle processing facility in accordance with the QC Plan, the Contractor shall obtain and make available all of the test results from start of the initial stockpile.

1031.04 Evaluation of Tests. Evaluation of test results shall be according to the following.

- (a) Evaluation of RAP/FRAP Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation, and when applicable G_{mm} . Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	FRAP/Homogeneous/ Conglomerate
1 in. (25 mm)	
1/2 in. (12.5 mm)	± 8 %
No. 4 (4.75 mm)	± 6 %
No. 8 (2.36 mm)	± 5 %
No. 16 (1.18 mm)	
No. 30 (600 µm)	± 5 %
No. 200 (75 µm)	± 2.0 %
Asphalt Binder	± 0.4 % ^{1/}
G_{mm}	± 0.03

1/ The tolerance for FRAP shall be ± 0.3 %.

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, the RAP/FRAP shall not be used in HMA unless the RAP/FRAP representing the failing tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the ITP, "Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)".

- (b) Evaluation of RAS and RAS Blended with Manufactured Sand Test Results. All of the test results, with the exception of percent unacceptable materials, shall be compiled and averaged for asphalt binder content and gradation. Individual test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	RAS
No. 8 (2.36 mm)	± 5 %

No. 16 (1.18 mm)	± 5 %
No. 30 (600 µm)	± 4 %
No. 200 (75 µm)	± 2.0 %
Asphalt Binder Content	± 1.5 %

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, or if the percent unacceptable material exceeds 0.5 percent by weight of material retained on the # 4 (4.75 mm) sieve, the RAS or RAS blend shall not be used in Department projects. All test data and acceptance ranges shall be sent to the District for evaluation.

1031.05 Quality Designation of Aggregate in RAP/FRAP.

(a) RAP. The aggregate quality of the RAP for homogeneous and conglomerate stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.

(1) RAP from Class I, Superpave/HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.

(2) RAP from Class I binder, Superpave/HMA (High ESAL) binder, or (Low ESAL) IL-19.0L binder mixtures are designated as containing Class C quality coarse aggregate.

(b) FRAP. If the Engineer has documentation of the quality of the FRAP aggregate, the Contractor shall use the assigned quality provided by the Engineer.

If the quality is not known, the quality shall be determined as follows. Coarse and fine FRAP stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5000 tons (4500 metric tons). The Contractor shall obtain a representative sample witnessed by the Engineer. The sample shall be a minimum of 50 lb (25 kg). The sample shall be extracted according to Illinois Modified AASHTO T 164 by a consultant laboratory prequalified by the Department for the specified testing. The consultant laboratory shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample to the Central Bureau of Materials Aggregate Lab for MicroDeval Testing, according to ITP 327. A maximum loss of 15.0 percent will be applied for all HMA applications.

1031.06 Use of RAP/FRAP and/or RAS in HMA. The use of RAP/FRAP and/or RAS shall be the Contractor’s option when constructing HMA in all contracts.

(a) RAP/FRAP. The use of RAP/FRAP in HMA shall be as follows.

(1) Coarse Aggregate Size. The coarse aggregate in all RAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.

- (2) Steel Slag Stockpiles. Homogeneous RAP stockpiles containing steel slag will be approved for use in all HMA (High ESAL and Low ESAL) Surface and Binder Mixture applications.
 - (3) Use in HMA Surface Mixtures (High and Low ESAL). RAP/FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be FRAP or homogeneous in which the coarse aggregate is Class B quality or better. FRAP from Conglomerate stockpiles shall be considered equivalent to limestone for frictional considerations. Known frictional contributions from plus #4 (4.75 mm) homogeneous FRAP stockpiles will be accounted for in meeting frictional requirements in the specified mixture.
 - (4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP/FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP, homogeneous, or conglomerate, in which the coarse aggregate is Class C quality or better.
 - (5) Use in Shoulders and Subbase. RAP/FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, homogeneous, or conglomerate.
 - (6) When the Contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in Article 1031.06(c)(1) below for a given Ndesign.
- (b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.
 - (c) RAP/FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with RAP or FRAP in HMA mixtures up to a maximum of 5.0 percent by weight of the total mix.
 - (1) RAP/RAS. When RAP is used alone or RAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the Max RAP/RAS ABR table listed below for the given Ndesign.

RAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

HMA Mixtures <i>1/, 2/</i>	RAP/RAS Maximum ABR %		
	Ndesign	Binder/Leveling Binder	Surface
30	30	30	10
50	25	15	10
70	15	10	10
90	10	10	10

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the RAP/RAS ABR shall not exceed 50 percent of the mixture.
 - 2/ When RAP/RAS ABR exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28). If warm mix asphalt (WMA) technology is utilized and production temperatures do not exceed 275 °F (135 °C), the high and low virgin asphalt binder grades shall each be reduced by one grade when RAP/RAS ABR exceeds 25 percent (i.e. 26 percent RAP/RAS ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28).
- (2) FRAP/RAS. When FRAP is used alone or FRAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the FRAP/RAS table listed below for the given Ndesign.

FRAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

HMA Mixtures <i>1/, 2/</i>	FRAP/RAS Maximum ABR %		
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified ^{3/, 4/}
30	50	40	10
50	40	35	10
70	40	30	10
90	40	30	10

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the FRAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When FRAP/RAS ABR exceeds 20 percent for all mixes, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28). If warm mix asphalt (WMA) technology is utilized and production temperatures do not exceed 275 °F (135 °C), the high and low virgin asphalt binder grades shall each be reduced by one grade when FRAP/RAS ABR exceeds 25 percent (i.e. 26 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28).
- 3/ For SMA the FRAP/RAS ABR shall not exceed 20 percent.
- 4/ For IL-4.75 mix the FRAP/RAS ABR shall not exceed 30 percent.

1031.07 HMA Mix Designs. At the Contractor's option, HMA mixtures may be constructed utilizing RAP/FRAP and/or RAS material meeting the detailed requirements specified herein.

(a) RAP/FRAP and/or RAS. RAP/FRAP and/or RAS mix designs shall be submitted for verification. If additional RAP/FRAP and/or RAS stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP/FRAP and/or RAS stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP/FRAP and/or RAS stockpiles may be used in the original mix design at the percent previously verified.

(b) RAS. Type 1 and Type 2 RAS are not interchangeable in a mix design.

The RAP, FRAP, and RAS stone bulk specific gravities (G_{sb}) shall be according to the "Determination of Aggregate Bulk (Dry) Specific Gravity (G_{sb}) of Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)" procedure in the Department's Manual of Test Procedures for Materials.

1031.08 HMA Production. HMA production utilizing RAP/FRAP and/or RAS shall be as follows.

(a) RAP/FRAP. The coarse aggregate in all RAP/FRAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.

To remove or reduce agglomerated material, a scalping screen, gator, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAP feed system to remove or reduce oversized material.

If the RAP/FRAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP/FRAP and either switch to the virgin aggregate design or submit a new RAP/FRAP design.

(b) RAS. RAS shall be incorporated into the HMA mixture either by a separate weight depletion system or by using the RAP weigh belt. Either feed system shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes. The portion of RAS shall be controlled accurately to within ± 0.5 percent of the amount of RAS utilized. When using the weight depletion system, flow indicators or sensing devices shall be provided and interlocked with the plant controls such that the mixture production is halted when RAS flow is interrupted.

(c) RAP/FRAP and/or RAS. HMA plants utilizing RAP/FRAP and/or RAS shall be capable of automatically recording and printing the following information.

(1) Dryer Drum Plants.

a. Date, month, year, and time to the nearest minute for each print.

b. HMA mix number assigned by the Department.

- c. Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- d. Accumulated dry weight of RAP/FRAP/RAS in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- e. Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.
- f. Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
- g. Residual asphalt binder in the RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.
- h. Aggregate and RAP/FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAP/FRAP are printed in wet condition.)

(2) Batch Plants.

- a. Date, month, year, and time to the nearest minute for each print.
- b. HMA mix number assigned by the Department.
- c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
- d. Mineral filler weight to the nearest pound (kilogram).
- e. RAP/FRAP/RAS weight to the nearest pound (kilogram).
- f. Virgin asphalt binder weight to the nearest pound (kilogram).
- g. Residual asphalt binder in the RAP/FRAP/RAS material as a percent of the total mix to the nearest 0.1 percent.

The printouts shall be maintained in a file at the plant for a minimum of one year or as directed by the Engineer and shall be made available upon request. The printing system will be inspected by the Engineer prior to production and verified at the beginning of each construction season thereafter.

1031.09 RAP in Aggregate Surface Course and Aggregate Wedge Shoulders, Type B.

The use of RAP in aggregate surface course (temporary access entrances only) and aggregate wedge shoulders, Type B shall be as follows.

- (a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Non-Quality" and "FRAP". The testing requirements of Article 1031.03 shall not apply. RAP used shall be according to the current Central Bureau of Materials Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".
- (b) Gradation. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5 mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted."

80306

| STEEL COST ADJUSTMENT (BDE)

Effective: April 2, 2004

| Revised: August 1, 2017

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

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

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

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

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

Documentation. Sufficient documentation shall be furnished to the Engineer to verify the following:

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

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

$$SCA = Q \times D$$

Where: SCA = steel cost adjustment, in dollars
Q = quantity of steel incorporated into the work, in lb (kg)
D = price factor, in dollars per lb (kg)

$$D = MPI_M - MPI_L$$

Where: MPI_M = The Materials Cost Index for steel as published by the Engineering News-Record for the month the steel is shipped from the mill. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

MPI_L = The Materials Cost Index for steel as published by the Engineering News-Record for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price,. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

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

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

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

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

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

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

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

Attachment

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

80127

SUBCONTRACTOR MOBILILATION PAYMENTS (BDE)

Effective: November 2, 2017

Replace the second paragraph of Article 109.12 of the Standard Specifications with the following:

“This mobilization payment shall be made at least 14 days prior to the subcontractor starting work. The amount paid shall be at the following percentage of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor’s work.

Value of Subcontract Reported on Form BC 260A	Mobilization Percentage
Less than \$10,000	25%
\$10,000 to less than \$20,000	20%
\$20,000 to less than \$40,000	18%
\$40,000 to less than \$60,000	16%
\$60,000 to less than \$80,000	14%
\$80,000 to less than \$100,000	12%
\$100,000 to less than \$250,000	10%
\$250,000 to less than \$500,000	9%
\$500,000 to \$750,000	8%
Over \$750,000	7%”

80391

TEMPORARY PAVEMENT MARKING (BDE)

Effective: April 1, 2012

Revised: April 1, 2017

Revise Article 703.02 of the Standard Specifications to read:

“703.02 Materials. Materials shall be according to the following.

- (a) Pavement Marking Tape, Type I and Type III 1095.06
- (b) Paint Pavement Markings 1095.02
- (c) Pavement Marking Tape, Type IV 1095.11”

Revise the second paragraph of Article 703.05 of the Standard Specifications to read:

“Type I marking tape or paint shall be used at the option of the Contractor, except paint shall not be applied to the final wearing surface unless authorized by the Engineer for late season applications where tape adhesion would be a problem. Type III or Type IV marking tape shall be used on the final wearing surface when the temporary pavement marking will conflict with the permanent pavement marking such as on tapers, crossovers and lane shifts.”

Revise Article 703.07 of the Standard Specifications to read:

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

- a) Short Term Pavement Marking. Short term pavement marking will be paid for at the contract unit price per foot (meter) for SHORT TERM PAVEMENT MARKING. Removal of short term pavement markings will be paid for at the contract unit price per square foot (square meter) for SHORT TERM PAVEMENT MARKING REMOVAL.
- b) Temporary Pavement Marking. Where the Contractor has the option of material type, temporary pavement marking will be paid for at the contract unit price per foot (meter) for TEMPORARY PAVEMENT MARKING of the line width specified, and at the contract unit price per square foot (square meter) for TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS.

Where the Department specifies the use of pavement marking tape, the Type III or Type IV temporary pavement marking will be paid for at the contract unit price per foot (meter) for PAVEMENT MARKING TAPE, TYPE III or PAVEMENT MARKING TAPE, TYPE IV of the line width specified and at the contract unit price per square feet (square meter) for PAVEMENT MARKING TAPE, TYPE III - LETTERS AND SYMBOLS or PAVEMENT MARKING TAPE, TYPE IV – LETTERS AND SYMBOLS.

Removal of temporary pavement markings will be paid for at the contract unit price per square foot (square meter) for TEMPORARY PAVEMENT MARKING REMOVAL.

When temporary pavement marking is shown on the Standard, the cost of the temporary pavement marking and its removal will be included in the cost of the Standard.”

Add the following to Section 1095 of the Standard Specifications:

“1095.11 Pavement Marking Tape, Type IV. The temporary, preformed, patterned markings shall consist of a white or yellow tape with wet retroreflective media incorporated to provide immediate and continuing retroreflection during both wet and dry conditions. The tape shall be manufactured without the use of heavy metals including lead chromate pigments or other similar, lead-containing chemicals.

The white and yellow Type IV marking tape shall meet the Type III requirements of Article 1095.06 and the following.

- (a) Composition. The retroreflective pliant polymer pavement markings shall consist of a mixture of high-quality polymeric materials, pigments and glass beads distributed throughout its base cross-sectional area, with a layer of wet retroreflective media bonded to a durable polyurethane topcoat surface. The patterned surface shall have approximately 40% ± 10% of the surface area raised and presenting a near vertical face to traffic from any direction. The channels between the raised areas shall be substantially free of exposed beads or particles.
- (b) Retroreflectance. The white and yellow markings shall meet the following for initial dry and wet retroreflectance.
 - (1) Dry Retroreflectance. Dry retroreflectance shall be measured under dry conditions according to ASTM D 4061 and meet the values described in Article 1095.06 for Type III tape.
 - (2) Wet Retroreflectance. Wet retroreflectance shall be measured under wet conditions according to ASTM E 2177 and meet the values shown in the following table.

Wet Retroreflectance, Initial R_L

Color	R_L 1.05/88.76
White	300
Yellow	200

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

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

*Shall match Federal 595 Color No. 33538 and the chromaticity limits as follows.

x	0.490	0.475	0.485	0.530
y	0.470	0.438	0.425	0.456

- (d) Skid Resistance. The surface of the markings shall provide an average minimum skid resistance of 50 BPN when tested according to ASTM E 303.
- (e) Sampling, Testing, Acceptance, and Certification. Prior to approval and use of the wet reflective, temporary, removable pavement marking tape, the manufacturer shall submit a notarized certification from an independent laboratory, together with the results of all tests, stating that the material meets the requirements as set forth herein. The certification test report shall state the lot tested, manufacturer's name, and date of manufacture.

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

All costs of testing (other than tests conducted by the Department) shall be borne by the manufacturer."

80298

WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012

| Revised: April 2, 2015

| 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 Monday through Sunday for each week reportable trucking activities occur.

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

80302

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within 135 working days.

80071

PIPE UNDERDRAINS FOR STRUCTURES

Effective: May 17, 2000

Revised: January 22, 2010

Description. This work shall consist of furnishing and installing a pipe underdrain system as shown on the plans, as specified herein, and as directed by the Engineer.

Materials. Materials shall meet the requirements as set forth below:

The perforated pipe underdrain shall be according to Article 601.02 of the Standard Specifications. Outlet pipes or pipes connecting to a separate storm sewer system shall not be perforated.

The drainage aggregate shall be a combination of one or more of the following gradations, FA1, FA2, CA5, CA7, CA8, CA11, or CA13 thru 16, according to Sections 1003 and 1004 of the Standard Specifications.

The fabric surrounding the drainage aggregate shall be Geotechnical Fabric for French Drains according to Article 1080.05 of the Standard Specifications.

Construction Requirements. All work shall be according to the applicable requirements of Section 601 of the Standard Specifications except as modified below.

The pipe underdrains shall consist of a perforated pipe drain situated at the bottom of an area of drainage aggregate wrapped completely in geotechnical fabric and shall be installed to the lines and gradients as shown on the plans.

Method of Measurement. Pipe Underdrains for Structures shall be measured for payment in feet (meters), in place. Measurement shall be along the centerline of the pipe underdrains. All connectors, outlet pipes, elbows, and all other miscellaneous items shall be included in the measurement. Concrete headwalls shall be included in the cost of Pipe Underdrains for Structures, but shall not be included in the measurement for payment.

Basis of Payment. This work will be paid for at the contract unit price per foot (meter) for PIPE UNDERDRAINS FOR STRUCTURES of the diameter specified. Furnishing and installation of the drainage aggregate, geotechnical fabric, forming holes in structural elements and any excavation required, will not be paid for separately, but shall be included in the cost of the pipe underdrains for structures.

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

1. 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 non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#).

The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

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

b. (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 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 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 contractor). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a 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 contractor). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a 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.

**MINIMUM WAGES FOR FEDERAL AND FEDERALLY
ASSISTED CONSTRUCTION CONTRACTS**

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision shall be the minimum paid by contractors and subcontractors to laborers and mechanics.