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### Letting September 20, 2024

## Notice to Bidders, Specifications and Proposal



Contract No. 61G80
DUPAGE County
Section 15-00066-00-BR (Hanover Park)
Route FAP 361 (Arlington Drive)
Project 22FB-847 ()
District 1 Construction Funds

Prepared by

F

# Illinois Department of Transportation

#### **NOTICE TO BIDDERS**

- 1. **TIME AND PLACE OF OPENING BIDS.** Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. September 20, 2024 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. 61G80
DUPAGE County
Section 15-00066-00-BR (Hanover Park)
Project 22FB-847 ()
Route FAP 361 (Arlington Drive)
District 1 Construction Funds

Replace existing struture with a four-cell cast-in-place box culvert with 10X12 cells, south of the Arlington Drive and Greenbrook Boulevard Intersection in Hanover Park. Work includes roadway reconstruction and replacing water mains.

- 3. INSTRUCTIONS TO BIDDERS. (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 101.09 of the Standard Specifications for Road and Bridge Construction, become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.
  - (b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.
- 4. AWARD CRITERIA AND REJECTION OF BIDS. This contract will be awarded to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to re-advertise the proposed improvement, and to waive technicalities.

By Order of the Illinois Department of Transportation

Omer Osman, Secretary

#### **CONTRACT 61G80**

## INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

#### Adopted January 1, 2024

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

ERRATA Standard Specifications for Road and Bridge Construction

(Adopted 1-1-22) (Revised 1-1-24)

#### SUPPLEMENTAL SPECIFICATIONS

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#### LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

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#### **BDE SPECIAL PROVISIONS**

The following special provisions indicated by an "X" are applicable to this contract. An  $^{\star}$  indicates a new or revised special provision for the letting.

<u>File</u> Name	<u>Pg.</u>	Special Provision Title	<b>Effective</b>	Revised
80099		Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2022
80274	99	Aggregate Subgrade Improvement	April 1, 2012	April 1, 2022
80192		Automated Flagger Assistance Device	Jan. 1, 2008	April 1, 2023
80173		Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
80426		Bituminous Surface Treatment with Fog Seal	Jan. 1, 2020	Jan. 1, 2022
80241		☐ Bridge Demolition Debris	July 1, 2009	A 1 2022
5053I		Building Removal	Sept. 1, 1990	Aug. 1, 2022
5026I	100	Building Removal with Asbestos Abatement	Sept. 1, 1990	Aug. 1, 2022
80449	102 103	<ul><li></li></ul>	Aug. 1, 2023	April 1 2010
80384 80198	103	<ul><li></li></ul>	June 2, 2017 April 1, 2008	April 1, 2019
80199		☐ Completion Date (via calendar days) ☐ Completion Date (via calendar days) Plus Working Days	April 1, 2008	
80453		Concrete Sealer	Nov. 1, 2023	
80261	107	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
80434	107	Corrugated Plastic Pipe (Culvert and Storm Sewer)	Jan. 1, 2021	1101. 1, 2011
80029	110	☐ Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Mar. 2, 2019
80229		Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
80452		Full Lane Sealant Waterproofing System	Nov. 1, 2023	<b>J</b> , -
80447		Grading and Shaping Ditches	Jan 1, 2023	
80433		Green Preformed Thermoplastic Pavement Markings	Jan. 1, 2021	Jan. 1, 2022
80443		High Tension Cable Median Barrier Removal	April 1, 2022	
80456	120		Jan. 1, 2024	
80446		☐ Hot-Mix Asphalt – Longitudinal Joint Sealant	Nov. 1, 2022	Aug. 1, 2023
80438		Illinois Works Apprenticeship Initiative – State Funded Contracts	June 2, 2021	April 2, 2024
80045		Material Transfer Device	June 15, 1999	Jan. 1, 2022
80450		Mechanically Stabilized Earth Retaining Walls	Aug. 1, 2023	
80441	121	Performance Graded Asphalt Binder	Jan 1, 2023	
80451	126	Portland Cement Concrete	Aug. 1, 2023	
* 80459		Preformed Plastic Pavement Marking	June 2, 2024	1 4 0000
3426I	407	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2022
80455	127	Removal and Disposal of Regulated Substances	Jan. 1, 2024	April 1, 2024
80445	129	Seeding  Short Torm and Tomperory Devement Markings	Nov. 1, 2022	April 2 2024
* 80457	135	<ul> <li>Short Term and Temporary Pavement Markings</li> <li>Source of Supply and Quality Requirements</li> </ul>	April 1, 2024	April 2, 2024
80448 80340	133	<ul><li>Source of Supply and Quality Requirements</li><li>Speed Display Trailer</li></ul>	Jan. 2, 2023 April 2, 2014	Jan. 1, 2022
80127		Steel Cost Adjustment	April 2, 2014 April 2, 2014	Jan. 1, 2022 Jan. 1, 2022
80397	136	Subcontractor and DBE Payment Reporting	April 2, 2014 April 2, 2018	Jan. 1, 2022
80391	137	Subcontractor Mobilization Payments	Nov. 2, 2017	April 1, 2019
80437	138	Submission of Payroll Records	April 1, 2021	Nov. 2, 2023
80435	.00	Surface Testing of Pavements – IRI	Jan. 1, 2021	Jan. 1, 2023
80410		Traffic Spotters	Jan. 1, 2019	.,
20338	140	Training Special Provisions	Oct. 15, 1975	Sept. 2, 2021
80429		Ultra-Thin Bonded Wearing Course	April 1, 2020	Jan. 1, 2022
80439	143	∀ehicle and Equipment Warning Lights	Nov. 1, 2021	Nov. 1, 2022
* 80458		Waterproofing Membrane System	Aug. 1, 2024	
80302	144	Weekly DBE Trucking Reports	June 2, 2012	Nov. 1, 2021
80454		☐ Wood Sign Support	Nov. 1, 2023	
80427	145	Work Zone Traffic Control Devices	Mar. 2, 2020	
80071	147	☑ Working Days	Jan. 1, 2002	

#### GUIDE BRIDGE SPECIAL PROVISION INDEX/CHECK SHEET

Effective as of the: August 2, 2024 Letting

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



### STATE OF ILLINOIS SPECIAL PROVISIONS

Local Public Agency	County	Section Number
Village of Hanover Park	DuPage	15-00066-00-BR

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

#### LOCATION OF IMPROVEMENT

The project is located south of the intersection of Arlington Drive W and Greenbrook Boulevard in DuPage County with the scope of work having a Gross and Net length of 0.078 miles. The bridge improvement extends from approximately 0.02 miles south of Greenbrook Boulevard to approximately 0.02 miles north of Catalina Drive on Arlington Drive and crosses over the West Branch of the DuPage River. Arlington Drive is a Municipality street located approximately 0.6 miles from the western terminus of the Elgin O'Hare Tollway (IL 390).

#### **DESCRIPTION OF IMPROVEMENT**

The scope of work includes removing the existing bridge, installing a 52-foot 2-inch wide four-cell cast-in-place concrete culvert with 10-foot by 12-foot cells at a 43 degree skew to the roadway, reconstructing the roadway, replacing water main as well as all incidental and collateral work to complete the project as shown on the plans and described herein.

#### **MAINTENANCE OF ROADWAYS (D-1)**

Effective: September 30, 1985 Revised: November 1, 1996

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

If items of work have not been provided in the contract, or otherwise specified for payment, such items, including the accompanying traffic control and protection required by the Engineer, will be paid for in accordance with Article 109.04 of the Standard Specifications.

#### **STATUS OF UTILITIES (D-1)**

Effective: June 1, 2016 Revised: January 1, 2020

Utility companies and/or municipal owners located within the construction limits of this project have provided the following information regarding their facilities and the proposed improvements. The tables below contain a description of specific conflicts to be resolved and/or facilities which will require some action on the part of the Department's contractor to proceed with work. Each table entry includes an identification of the action necessary and, if applicable, the estimated duration required for the resolution.

#### **UTILITIES TO BE ADJUSTED**

Conflicts noted below have been identified by following the suggested staging plan included in the contract. The company has been notified of all conflicts and will be required to obtain the necessary permits to complete their work; in some instances, resolution will be a function of the construction staging. The responsible agency must relocate, or complete new installations as noted below; this work has been deemed necessary to be complete for the Department's contractor to then work in the stage under which the item has been listed.

STAGE / LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Pre-Stage / Sta. 10+32 to Sta. 14+64, RT	Telephone	Underground lines and above ground equipment in conflict with existing bridge removal, proposed bridge culvert, and water main installation.	AT&T	AT&T to install relocated underground lines and equipment.  65 Days Installation
Pre-Stage / Sta. 10+33 to Sta. 14+64, RT	Electric	Underground lines in conflict with existing bridge removal, proposed bridge culvert, and water main installation.		ComEd to install relocated underground lines. 60 Days Installation
Pre-Stage / Sta. 12+20 to Sta. 13+25, LT	CCTV	Underground lines in conflict with existing bridge removal, proposed bridge culvert, and water main installation.	Comcast	Comcast to install relocated underground lines.  15 Days Installation

Pre-Stage: 140 Days Total Installation

The following contact information is what was used during the preparation of the plans as provided by the Agency/Company responsible for resolution of the conflict.

Agency /Company Responsible to Resolve Conflict	Name of Contact	Phone	e-mail address
AT&T	Rahsaan Renford	847-612-2215	rr2765@att.com
#BT2202B	AT&T Electronic Plan Submittals		g05256@att.com
ComEd	Danielle Peteet	312-774-0848	danielle.peteet@ComEd.com
			PlanSubmittalsandMapRequests @exeloncorp.com
Comcast Cable	Martha Gieras	224-229-5862	martha_gieras@comcast.com
	Nate Williams, Construction Specialist	224-355-7012	Nate Williams@comcast.com

#### **UTILITIES TO BE WATCHED AND PROTECTED**

The areas of concern noted below have been identified by following the suggested staging plan included for the contract. The information provided is not a comprehensive list of all remaining utilities, but those which during coordination were identified as ones which might require the Department's contractor to take into consideration when making the determination of the means and methods that would be required to construct the proposed improvement. In some instances, the contractor will be responsible to notify the owner in advance of the work to take place so necessary staffing on the owner's part can be secured.

STAGE / LOCATION	TYPE	DESCRIPTION	OWNER
Construction / Sta.		Existing bridge removal, proposed	
12+00 to Sta.	Gas	bridge culvert, and water main	Nicor
13+50, RT		installation.	

The following contact information is what was used during the preparation of the plans as provided by the owner of the facility.

Agency/Company	Name of contact	Phone	E-mail address
Responsible to			
Resolve Conflict			
Nicor	Tim Raynett	630-337-3850	X2TRAYNE@SOUTHERNCO.COM
	Charles "Chip" Parrot	630-388-3319	cparrot@southernco.com

The above represents the best information available to the Department and is included for the convenience of the bidder. The days required for conflict resolution should be considered in the bid as this information has also been factored into the timeline identified for the project when setting the completion date. The applicable portions of the Standard Specifications for Road and Bridge Construction shall apply.

Estimated duration of time provided above for the first conflicts identified will begin on the date of the executed contract regardless of the status of the utility relocations. The responsible agencies will be working toward resolving subsequent conflicts in conjunction with contractor activities in the number of days noted.

The estimated relocation duration must be part of the progress schedule submitted by the contractor. A utility kickoff meeting will be scheduled between the Department, the Department's contractor and the utility companies when necessary. The Department's contractor is responsible for contacting J.U.L.I.E. prior to all excavation work.

#### FRICTION AGGREGATE (D-1)

Effective: January 1, 2011 Revised: December 1, 2021

Revise Article 1004.03(a) of the Standard Specifications to read:

**"1004.03 Coarse Aggregate for Hot-Mix Asphalt (HMA).** The aggregate shall be according to Article 1004.01 and the following.

(a) Description. The coarse aggregate for HMA shall be according to the following table.

Mixture	Aggregates Allowed			
Seal or Cover	Allowed Alone or in Combination 5/:			
	Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete			
Stabilized Subbase	Allowed Alone or in Combination 5/:			
or Shoulders	Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>1/</sup> Crushed Concrete			
Binder	Allowed Alone or in Combination 5/6/:			
IL-19.0 or IL-19.0L SMA Binder	Crushed Gravel Carbonate Crushed Stone <sup>2/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF)			
	Stabilized Subbase or Shoulders  Binder IL-19.0 or IL-19.0L			

Limestone)2/ Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag4/  Other Combinations Allowed: Up to With 25% Limestone Dolomite 50% Limestone Any Mixture aggregate oo than Dolomite 75% Limestone Crushed Si (ACBF) or Crus Sandstone  HMA High ESAL  E Surface IL-9.5 SMA Ndesign 80 Surface Allowed Alone or in Combination Crushed Gravel Crystalline Crushed Stone Crushed Sandstone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.  Other Combinations Allowed:	Use	Mixture	Aggregates Allowed					
HMA High ESAL  IL-9.5 or IL-9.5FG  IL-9.5FG  Crushed Gravel Carbonate Crushed Stone (other full timestone) <sup>2/2</sup> Crystalline Crushed Stone Crushed Slag (ACBF) Crushed Steel Slag <sup>4/2</sup> Other Combinations Allowed:  Up to  25% Limestone  Crushed Gravel Crushed Stone Crushed Stone Crushed Steel Slag <sup>4/2</sup> Other Combinations Allowed:  Up to  25% Limestone  Any Mixture aggregate of than Dolomite  75% Limestone  Crushed Gravel (ACBF) or Crushed (ACBF) or Crushed Gravel Crushed Gravel Crystalline Crushed Stone Crushed Gravel Crystalline Crushed Stone Crushed Sandstone Crushed Sandstone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag  No Limestone.  Other Combinations Allowed:	High ESAL	IL-9.5 IL-9.5FG	Crushed Gravel Carbonate Crushed Stone <sup>2/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>4/</sup> Crushed Concrete <sup>3/</sup> Allowed Alone or in Combination <sup>5/</sup> : Crushed Gravel Carbonate Crushed Stone (other the Limestone) <sup>2/</sup> Crystalline Crushed Stone Crushed Slag (ACBF)					
Up to  25% Limestone  Dolomite  50% Limestone  Any Mixture aggregate of than Dolomite  75% Limestone  Crushed (ACBF) or Crushed (ACBF) or Crushed Gravel  IL-9.5  SMA Ndesign 80 Surface  Crushed Gravel Crystalline Crushed Stone Crushed Sandstone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag  No Limestone.  Other Combinations Allowed:		IL-9.5						
HMA High ESAL  E Surface IL-9.5 SMA Ndesign 80 Surface Surface  SMA Ndesign 80 Surface  Cother Combinations Allowed:    Dolomite   Any Mixture aggregate of than Dolomite   Any Mixture aggregate of than Dolomite   Allowed Stand S								
HMA High ESAL  E Surface IL-9.5  SMA Ndesign 80 Surface  Many Mixture aggregate of than Dolomite  75% Limestone  Crushed (ACBF) or Crushed (ACBF) or Crushed Gravel Crushed Gravel Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag  No Limestone.  Other Combinations Allowed:								
HMA High ESAL  E Surface IL-9.5  SMA Ndesign 80 Surface  Moderate No Limestone.  (ACBF) or Crusted Sandstone  Allowed Alone or in Combination of Crushed Gravel Crushed Gravel Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag  No Limestone.  Other Combinations Allowed:				Any Mixture D aggregate other				
High ESAL  IL-9.5  SMA Ndesign 80 Surface  Crushed Gravel Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.  Other Combinations Allowed:				(ACBF) or Crushed				
50% Dolomite <sup>2/</sup> Any Mixture		IL-9.5 SMA Ndesign 80	Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag  No Limestone.  Other Combinations Allowed: Up to With					

Use	Mixture	Aggregates Allowed			
		75% Dolomite <sup>2/</sup>	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone		
		75% Crushed Gravel <sup>2/</sup>	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag		
HMA	F Surface	Allowed Alone or in Combination <sup>5/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.			
High ESAL	IL-9.5 SMA Ndesign 80 Surface				
		Other Combinations Allowed:			
		Up to	With		
		50% Crushed Gravel <sup>2/</sup> or Dolomite <sup>2/</sup>	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone		

- 1/ Crushed steel slag allowed in shoulder surface only.
- 2/ Carbonate crushed stone (limestone) and/or crushed gravel shall not be used in SMA Ndesign 80.
- 3/ Crushed concrete will not be permitted in SMA mixes.
- 4/ Crushed steel slag shall not be used as binder.
- 5/ When combinations of aggregates are used, the blend percent measurements shall be by volume."
- 6/ Combining different types of aggregate will not be permitted in SMA Ndesign 80."

#### ADJUSTMENTS AND RECONSTRUCTIONS (D-1)

Effective: March 15, 2011 Revised: October 1, 2021

Revise the first paragraph of Article 602.04 to read:

**"602.04 Concrete.** Cast-in-place concrete for structures shall be constructed of Class SI concrete according to the applicable portions of Section 503. Cast-in-place concrete for pavement patching around adjustments and reconstructions shall be constructed of Class PP-2 concrete, unless otherwise noted in the plans, according to the applicable portions of Section 1020."

Revise the third, fourth and fifth sentences of the second paragraph of Article 602.11(c) to read:

"Castings shall be set to the finished pavement elevation so that no subsequent adjustment will be necessary, and the space around the casting shall be filled with Class PP-2 concrete, unless otherwise noted in the plans, to the elevation of the surface of the base course or binder course. HMA surface or binder course material shall not be allowed. The pavement may be opened to traffic according to Article 701.17(e)(3)b."

Revise Article 603.05 to read:

"603.05 Replacement of Existing Flexible Pavement. After the castings have been adjusted, the surrounding space shall be filled with Class PP-2 concrete, unless otherwise noted in the plans, to the elevation of the surface of the base course or binder course. HMA surface or binder course material shall not be allowed. The pavement may be opened to traffic according to Article 701.17(e)(3)b."

Revise Article 603.06 to read:

"603.06 Replacement of Existing Rigid Pavement. After the castings have been adjusted, the pavement and HMA that was removed, shall be replaced with Class PP-2 concrete, unless otherwise noted in the plans, not less than 9 in. (225 mm) thick. The pavement may be opened to traffic according to Article 701.17(e)(3)b.

The surface of the Class PP concrete shall be constructed flush with the adjacent surface."

Revise the first sentence of Article 603.07 to read:

"603.07 Protection Under Traffic. After the casting has been adjusted and the Class PP concrete has been placed, the work shall be protected by a barricade and two lights according to Article 701.17(e)(3)b."

#### MAINTENANCE OF LIGHTING SYSTEMS

Effective: March 1, 2017

Replace Article 801.11 and 801.12 of the Standard Specifications with the following:

Effective the date the Contractor's activities (electrical or otherwise) at the job site begin, the Contractor shall be responsible for the proper operation and maintenance of all existing and proposed lighting systems which are part of, or which may be affected by the work until final acceptance or as otherwise determined by the Engineer.

Before performing any excavation, removal, or installation work (electrical or otherwise) at the site, the Contractor shall initiate a request for a maintenance transfer and preconstruction inspection, as specified elsewhere herein, to be held in the presence of the Engineer and a representative of the party or parties responsible for maintenance of any lighting systems which may be affected by the work. During the maintenance preconstruction inspection, the party responsible for existing maintenance shall perform testing of the existing system in accordance with Article 801.13a. The Contractor shall request a date for the preconstruction inspection no less than fourteen (14) days prior to the desired date of the inspection.

The Engineer will document all test results and note deficiencies. All substandard equipment will be repaired or replaced by the existing maintenance contractor, or the Engineer can direct the Contractor to make the necessary repairs under Section109.04.

Existing lighting systems, when depicted on the plans, are intended only to indicate the general equipment installation of the systems involved and shall not be construed as an exact representation of the field conditions. It remains the Contractor's responsibility to visit the site to confirm and ascertain the exact condition of the electrical equipment and systems to be maintained. Contract documents shall indicate the circuit limits.

#### **Maintenance of Existing Lighting Systems**

**Existing lighting systems**. Existing lighting systems shall be defined as any lighting system or part of a lighting system in service at the time of contract Letting. The contract drawings indicate the general extent of any existing lighting, but whether indicated or not, it remains the Contractor's responsibility to ascertain the extent of effort required for compliance with these specifications and failure to do so will not be justification for extra payment or reduced responsibilities.

#### Extent of Maintenance.

**Partial Maintenance.** Unless otherwise 'indicated, if the number of circuits affected by the contract is equal to or less than 40% of the total number of circuits in a given controller and the controller is not part of the contract work, the Contractor needs only to maintain the affected circuits within the project limits. The project limits are defined as those limits indicated in the contract plans. Equipment outside of the project limits, on the affected circuits shall be maintained and paid for under Article 109.04. The affected circuits shall be isolated by means of in-line waterproof fuse holders as specified elsewhere and as approved by the Engineer. The unaffected circuits and the controller will remain under the maintenance of the State.

**Full Maintenance.** If the number of circuits affected by the contract is greater than 40% of the total number of circuits in a given controller, or if the controller is modified in any way under the contract work, the Contractor shall maintain the entire controller and all associated circuits within the project limits. Equipment outside of the project limits shall be maintained and paid for under Article 109.04.

If the existing equipment is damaged by normal vehicular traffic, not contractor operations, is beyond repair and cannot be re-set, the contractor shall replace the equipment in kind with payment made for such equipment under Article 109.04. If the equipment damaged by any construction operations, not normal vehicular traffic, is beyond repair and cannot be re-set, the contractor shall replace the equipment in kind and the cost of the equipment shall be included in the cost of this pay item and shall not be paid for separately.

#### Maintenance of Proposed Lighting Systems

**Proposed Lighting Systems**. Proposed lighting systems shall be defined as any lighting system or part of a lighting system, temporary or permanent, which is to be constructed under this contract regardless of the project limits indicated in the plans.

The Contractor shall be fully responsible for maintenance of all items installed under this contract. Maintenance shall include, but not be limited to, any equipment failures or malfunctions as well as equipment damage either by the motoring public, Contractor operations, vandalism, or other means. The potential cost of replacing or repairing any malfunctioning, damaged, or vandalized equipment shall be included in the bid price of this item and will not be paid for separately.

#### **Lighting System Maintenance Operations**

The Contractor's responsibility shall include all applicable responsibilities of the Electrical Maintenance Contract, State of Illinois, Department of Transportation, Division of Highways, District One. These responsibilities shall include the maintenance of lighting units (including sign lighting), cable runs and lighting controls. In the case of a pole knockdown or sign light damage, the Contractor shall promptly clear the lighting unit and circuit discontinuity and restore the system to service. The equipment shall then be re-set by the contractor within the time limits specified herein.

If the existing equipment is damaged by normal vehicular traffic, not contractor operations, is beyond repair and cannot be re-set, the contractor shall replace the equipment in kind with payment made for such equipment under Article 109.04. If the equipment damaged by any construction operations, not normal vehicular traffic, is beyond repair and cannot be re-set, the contractor shall replace the equipment in kind and the cost of the equipment shall be included in the cost of this pay item and shall not be paid for separately.

Responsibilities shall also include weekly night-time patrol of the lighting system, with patrol reports filed immediately with the Engineer and with deficiencies corrected within 24 hours of the patrol. Patrol reports shall be presented on standard forms as designated by the Engineer. Uncorrected deficiencies may be designated by the Engineer as necessitating emergency repairs as described elsewhere herein.

The following chart lists the maximum response, service restoration, and permanent repair time the Contractor will be allowed to perform corrective action on specific lighting system equipment.

INCIDENT OR PROBLEM	SERVICE RESPONSE TIME	SERVICE RESTORATION TIME	PERMANENT REPAIR TIME	
Control cabinet out	1 hour	4 hours	7 Calendar days	
Hanging mast arm	1 hour to clear	na	7 Calendar days	
Radio problem	1 hour	4 hours	7 Calendar days	
Motorist caused damage or leaning light pole 10 degrees or more	1 hour to clear	4 hours	7 Calendar days	
Circuit out – Needs to reset breaker	1 hour	4 hours	na	
Circuit out – Cable trouble	1 hour	24 hours	21 Calendar days	
Outage of 3 or more successive lights	1 hour	4 hours	na	
Outage of 75% of lights on one tower	1 hour	4 hours	na	
Outage of light nearest RR crossing approach, Islands and gores	1 hour	4 hours	na	
Outage (single or multiple) found on night outage survey or reported to EMC	na	na	7 Calendar days	
Navigation light outage	na	na	24 hours	

• **Service Response Time** -- amount of time from the initial notification to the Contractor until a patrolman physically arrives at the location.

• Service Restoration Time – amount of time from the initial notification to the Contractor until the time the system is fully operational again (In cases of motorist caused damage the undamaged portions of the system are operational.)

• **Permanent Repair Time** – amount of time from initial notification to the Contractor until the time permanent repairs are made if the Contractor was required to make temporary repairs to meet the service restoration requirement.

Failure to provide this service will result in liquidated damages of \$500 per day per occurrence. In addition, the Department reserves the right to assign any work not completed within this timeframe to the Electrical Maintenance Contractor. All costs associated to repair this uncompleted work shall be the responsibility of the Contractor. Failure to pay these costs to the Electrical Maintenance Contractor within one month after the incident will result in additional liquidated damages of \$500 per month per occurrence. Unpaid bills will be deducted from any monies owed to the Contractor. Repeated failures and/or a gross failure of maintenance shall result in the State's Electrical

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Maintenance Contractor being directed to correct all deficiencies and the resulting costs deducted from any monies owed the contractor.

Damage caused by the Contractor's operations shall be repaired at no additional cost to the Contract.

#### **Operation of Lighting**

The lighting shall be operational every night, dusk to dawn. Duplicate lighting systems (such as temporary lighting and proposed new lighting) shall not be operated simultaneously. Lighting systems shall not be kept in operation during long daytime periods.

<u>Method of Measurement.</u> The contractor shall demonstrate to the satisfaction of the Engineer that the lighting system is fully operational prior to submitting a pay request. Failure to do so will be grounds for denying the pay request. Months in which the lighting systems are not maintained and not operational will not be paid. Payment shall not be made retroactively for months in which lighting systems were not operational.

<u>Basis of Payment.</u> Maintenance of lighting systems shall be paid for at the contract unit price per calendar month for MAINTENANCE OF LIGHTING SYSTEM.

#### **UNIT DUCT**

Effective: January 1, 2012

Revise the first paragraph of Article 810.04 to read:

"The unit duct shall be installed at a minimum depth of 30-inches (760 mm) unless otherwise directed by the Engineer."

Revise Article 1088.01(c) to read:

"(c) Coilable Nonmetallic Conduit.

#### General:

The duct shall be a plastic duct which is intended for underground use and which can be manufactured and coiled or reeled in continuous transportable lengths and uncoiled for further processing and/or installation without adversely affecting its properties of performance. The duct shall be a plastic duct which is intended for underground use and can be manufactured and coiled or reeled in continuous transportable lengths and uncoiled for further processing and/or installation without adversely affecting its properties of performance.

The duct shall be made of high density polyethylene which shall meet the requirements of ASTM D 2447, for schedule 40. The duct shall be composed of black high density polyethylene meeting the requirements of ASTM D 3350, Class C, Grade P33. The wall thickness shall be in accordance with Table 2 for ASTM D 2447.

The duct shall be UL Listed per 651-B for continuous length HDPE coiled conduit. The duct shall also comply with NEC Article 354.100 and 354.120.

Submittal information shall demonstrate compliance with the details of these requirements.

#### Dimensions:

Duct dimensions shall conform to the standards listed in ASTM D2447. Submittal information shall demonstrate compliance with these requirements.

Nominal Size		Nominal Size		Nominal I.D.		Nominal O.D.		Minimu	ım Wall
mm	in	mm	in	mm in		mm	in		
31.75	1.25	35.05	1.380	42.16	1.660	3.556 +0.51	0.140 +0.020		
38.1	1.50	40.89	1.610	48.26	1.900	3.683 +0.51	0.145 +0.020		

Nomin	al Size	Pulled Tensile		
mm	in	N	lbs	
31.75	1.25	3322	747	
38.1	1.50	3972	893	

#### Marking:

As specified in NEMA Standard Publication No. TC-7, the duct shall be clearly and durably marked at least every 3.05 meters (10 feet) with the material designation (HDPE for high density polyethylene), nominal size of the duct and the name and/or trademark of the manufacturer.

#### Performance Tests:

Polyethylene Duct testing procedures and test results shall meet the requirements of UL 651. Certified copies of the test report shall be submitted to the Engineer prior to the installation of the duct. Duct crush test results shall meet or exceed the following requirements:

_	ict neter	Min. force required to deform sample 50%		
mm	in	N	lbs	
35	1.25	4937	1110	
41	1.5	4559	1025	

#### MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION (DUPAGE CO. DOT)

DC850.01

<u>Description.</u> This work shall consist of maintaining an existing traffic signal installation that has been designated to remain in operation during construction.

<u>General.</u> This work will be performed according to Section 850 of the "Standard Specifications," the DuPage County DOT Traffic Signal General Requirements DC800.01 Special Provision, and the following:

The Contractor shall provide the Engineer with a 24-hour telephone number for traffic signal maintenance, in accordance with the requirements of the DC800.01 Special Provision. The Contractor, or his representative, shall be available on a 24-hour basis to respond to emergency calls by the Engineer, Traffic Engineer or other parties.

The Contractor shall have electricians on staff with IMSA Level II certification to provide signal maintenance.

Full maintenance responsibility shall start as soon as the Contractor begins any physical work on the contract or any portion thereof.

This item shall include maintenance of all traffic signal equipment at the intersection, including cameras, emergency vehicle pre-emption equipment, traffic counters, detection equipment, traffic signal control equipment, terminal servers, media converters, transit signal priority equipment, flashing beacons, uninterruptable power supply (UPS) and batteries, handholes, lighted signs, radios, modems, master controllers, telephone service installations, communication equipment, communication cables, conduits to adjacent intersections, and other traffic signal equipment. The Contractor shall at all times maintain in stock a sufficient amount of materials and equipment to provide effective temporary and permanent repairs.

The Contractor shall check all controllers every month, which will include opening the cabinet door and visually inspecting all timing intervals, relays, detectors, and pre-emption equipment to ensure that they are functioning properly. This item includes all portions of the emergency vehicle pre-emption system. The Contractor shall not clear equipment log buffers. The Contractor shall not remove any existing documentation from the cabinet; it shall remain in the cabinet and remain property of the County or the agency that owns the cabinet.

The Contractor shall respond to all emergency calls from the County or others according to the Repair Timetable and provide immediate corrective action. When equipment has been damaged or becomes faulty beyond repair, the Contractor shall replace it with new and identical equipment. The cost of furnishing and installing the replaced equipment shall be borne by the Contractor at no additional charge to the County. The Contractor may initiate action to recover damages from a responsible third party. If at any time the Contractor fails to perform all work as specified herein to keep the traffic signal installation in proper operating condition or if the Engineer or Traffic Engineer cannot contact the Contractor's designated personnel, the Traffic Engineer shall have the County's Traffic Signal Maintenance Contractor perform the required maintenance work. The County's Traffic Signal Maintenance Contractor shall bill the Contractor for the total cost of the work. The Contractor shall pay this bill within 30 days of the date of receipt of the invoice or the cost of such work will be

deducted from the amount due the Contractor. At any time requested, the Contractor shall allow the County's Traffic Signal Maintenance Contractor to open the cabinet and review the operation of the existing traffic signal installation that has been transferred to the Contractor for maintenance.

The Contractor shall provide immediate corrective action when any part of the system fails to function properly. Two far side signal heads facing each approach shall be considered the minimum acceptable signal operation pending permanent repairs. When repairs at a signalized intersection require that the controller be disconnected, and power is available, the Contractor shall place the traffic signal installation on flashing operation. The signals shall flash **RED** for all directions unless a different indication has been specified by the Traffic Engineer. When the signal is flashing **RED** or when the power is out, the Contractor shall be required to place at least 1 STOP sign (R1-1-36) meeting MUTCD requirements at each approach of the intersection as a temporary means of regulating traffic according to the Repair Timetable in the project special provisions. At approaches where a yellow flashing indication is directed by the Traffic Engineer, STOP signs will not be required. The Contractor shall maintain a sufficient number of STOP signs for all the signals under the Contractor's maintenance and have enough spare STOP signs in stock at all times to replace those which may be damaged or stolen.

Traffic signal equipment which is lost or not returned to the County for any reason shall be replaced with new equipment meeting the requirements of the project special provisions. or in the absence of applicable special provisions, meeting the requirements of the Traffic Engineer.

The Contractor shall be responsible for maintaining the hardware and cables related to the County's Ethernet-based signal and ITS communications system, including any Layer II or Layer III switches, video encoders, power supplies, cables, and peripherals, located in the cabinet maintained under this pay item. Routine programming of Video encoders, Layer II and Layer III switches will be maintained by the County's Network Integrator under separate County contract, except as noted in the plans. The Contractor shall provide cabinet access to the Network Integrator as necessary to maintain communications on the County's Ethernet communications network. Any electrical work required to maintain the communications equipment shall be the responsibility of the Contractor.

The Contractor will not be required to pay the energy charges for the operation of the existing traffic signal installation.

The Traffic Engineer may require the Contractor to transfer maintenance of a signal back to the County's Traffic Signal Maintenance Contractor (or other electrical contractor) for a short time. This may become necessary due to other signal projects in the area, or if the County needs to perform work at the signal. Any costs incurred by the Contractor for maintenance transfer inspections of this type shall be included in cost of pay item MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION.

Temporary replacement of damaged or knockdown of a mast arm pole assembly shall require construction of a full or partial span wire signal installation or other method approved by the Traffic Engineer.

Maintenance will not include Automatic Traffic Enforcement equipment, e.g. red light enforcement cameras, detectors, or peripheral equipment. If present, this equipment is operated and maintained by the local municipality and should be de-activated while the traffic signal is on Contractor maintenance.

<u>Basis of Payment.</u> This work shall be paid for at the Contract unit price each for MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION. Each intersection will be paid for separately. If two intersections are operated by one traffic signal controller, it shall be considered as one intersection for the purposes of this pay item.

#### **DUPAGE COUNTY DOT TRAFFIC SIGNAL GENERAL REQUIREMENTS (DUPAGE CO. DOT)**

Revised: DC800.01

All work and equipment performed and installed under this Contract shall be governed by and shall comply with:

SPECIFICATION	ADOPTED/DATED
The State of Illinois "Standard Specifications for Road and Bridge Construction" referred to as "Standard Specifications"	January 1, 2022
The State of Illinois "Manual on Uniform Traffic Control Devices for Streets and Highways," referred to as "MUTCD"	November 2021
The National Electrical Code referred to as "NEC"	2011 Edition
The National Electrical Manufacturers Association (All publications for traffic control items) referred to as "NEMA"	All applicable current documents published prior to Contract Letting Date
The International Municipal Signal Association ("Official Wire & Cable Specifications Manual,") referred to as "IMSA"	All applicable current documents published prior to Contract Letting Date
The Institute of Transportation Engineers ATC 5.2b Standard	September 25, 2006
AASHTO "Standard Specifications" LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals	2015 Edition & 2017 Interim Revisions
Supplemental Specifications and Recurring Special Provisions	January 1, 2024

The project Special Provisions supplement the above specifications, manuals, and codes. In case of conflict with any part or parts of said documents, the project Special Provisions shall take precedence and shall govern.

The following terms and acronyms are used in the DUDOT traffic signal special provisions:

IDOT Illinois Department of Transportation

District 1 IDOT District 1

DUDOT The DuPage County Division of Transportation
Traffic Engineer The DUDOT Traffic Engineer or designee

Central Signal System DuPage County's ITS System

Network Integration Consultant Currently Parsons Transportation Group

The intent of these Special Provisions is to prescribe the materials and construction methods commonly used in traffic signal installations. The locations and the details of all installations shall be indicated on the plans or as directed by the Engineer.

All traffic signal work related to the traffic signal cabinet shall be performed with at least one electrician holding a current IMSA Traffic Signal Technician Level 2 certification present on site and actively overseeing and directing the work, unless approved in advance by the Traffic Engineer.

The work performed under this Contract shall consist of furnishing and installing all traffic signal work as shown on the plans and as specified herein in a manner acceptable and approved by the Resident Engineer. All materials furnished shall be new unless otherwise noted herein.

The phone number to contact DUDOT for all contract electrical questions or request is (630) 407-6900, which includes requests for detector location approval, transfer of maintenance, Traffic Signal Maintenance Contractor locates, equipment inspections, and traffic signal turn-ons.

#### Definitions of Terms.

Add the following to Section 101 of the Standard Specifications:

101.56 Vendor. Company that sells a particular type of product directly to the Contractor or the Equipment Supplier.

101.57 Equipment Supplier. Company that supplies, represents, and provides technical support for District 1 approved traffic signal controllers and other related equipment. The Equipment Supplier shall be located within District 1 and shall:

- a. Be full service with on-site facilities to assemble, test, and trouble-shoot traffic signal controllers and cabinet assemblies.
- b. Maintain an inventory of District 1 approved controllers and cabinets.
- c. Be staffed with permanent sales and technical personnel able to provide traffic signal controller and cabinet expertise and support.
- d. Technical staff shall attend traffic signal "turn-on" and inspection with a minimum 14 calendar day notice.

#### **SUBMITTALS**

Revise Article 801.05 of the Standard Specifications to read:

All material approval requests shall be submitted electronically unless otherwise directed by the Traffic Engineer. The submittal shall be by email, and shall include a cover letter and one PDF file with all pay items for the project.

#### General requirements include:

- a. All material approval requests shall be submitted within 7 calendar days after the preconstruction meeting. Traffic signal materials and equipment shall bear the U.L. label whenever such labeling is available.
- b. Original manufacturer published product data and shop drawing sheets with legible dimensions and details shall be submitted for review.
- c. Product data and shop drawings shall be arranged by pay item. Pages of the submittal should be numbered. If the literature contains more than one item, the Contractor shall indicate which item or items will be furnished.
- d. When hard copy submittals are necessary for another agency, four complete copies of the manufacturer's descriptive literatures and technical data for the traffic signal materials will be submitted, in addition to the electronic copy required above.
- e. When hard copy submittals are necessary for structural elements, four complete copies of the shop drawings for the mast arm assemblies and poles, and the combination mast arm assemblies and poles showing, in detail, the fabrication thereof and the certified mill analyses of the materials used in the fabrication, anchor rods, and reinforcing materials, shall be submitted, in addition to the electronic copy required above.
- f. Partial or incomplete submittals will be returned without review.
- g. Certain non-standard mast arm poles and structures will require additional review from IDOT's Bureau of Bridges and Structures. Examples include special mast arms and nonstandard length mast arm pole assemblies. The Contractor shall account for the additional review time in their schedule.
- h. The County Section Number, permit number, or IDOT contract number, project location/limits and corresponding pay code number shall be on each sheet of correspondence, catalog cuts, and mast arm pole and assembly drawings.
- i. Where certifications and/or warranties are specified, the information submitted for approval shall include certifications and warranties. Certifications involving inspections, and/or tests of material shall include all test data, dates, and times.
- j. The Contractor shall secure approved materials in a timely manner to assure construction schedules are not delayed.
- k. After the Traffic Engineer reviews the submittals for conformance with the design concept of the project, the drawings will be stamped indicating their status as 'APPROVED', 'APPROVED AS CORRECTED', 'NOT APPROVED', or 'RESUBMIT'. Review schedule will be according to Article 801.05(b). Since the Traffic Engineer's review is for conformance with the design concept only, it is the Contractor's responsibility to coordinate the various items into a working system as specified. The Contractor shall not be relieved from responsibility for errors or omissions in the shop, working, layout drawings, or other documents by the Traffic Engineer's approval thereof.

- I. All submitted items reviewed and marked 'APPROVED AS CORRECTED', 'NOT APPROVED', or 'RESUBMIT' shall be resubmitted in their entirety, unless otherwise indicated within the submittal comments, with a disposition of previous comments to verify Contract compliance at no additional cost to the contract.
- m. It is the Contractor's responsibility to note any deviations from Contract requirements at the time of submittal and to make any requests for deviations in writing to the Resident Engineer. In general, substitutions will not be acceptable. Requests for substitutions shall demonstrate that the proposed substitution is superior to the material or equipment required by the Contract Documents. No exceptions, deviations or substitutions will be permitted without the approval of the Resident Engineer and the Traffic Engineer.
- n. The Contractor shall not order major equipment (i.e., mast arm assemblies) prior to Resident Engineer approval of the Contractor marked proposed traffic signal equipment locations to assure proper placement of Contract required traffic signal displays, push buttons and other facilities. Field adjustments may require changes in proposed mast arm length and other coordination.

#### MARKING PROPOSED LOCATIONS

Revise "Marking Proposed Locations for Highway Lighting System" of Article 801.09 to read "Marking Proposed Locations for Highway Lighting System and Traffic Signals." Add the following to Article 801.09 of the Standard Specifications:

It shall be the Contractor's responsibility to verify all dimensions and conditions existing in the field prior to ordering materials and beginning construction. This shall include locating the mast arm foundations and verifying the mast arms lengths.

#### **INSPECTION OF ELECTRICAL SYSTEMS**

Add the following to Article 801.10 of the "Standard Specifications":

(c) All cabinets, including temporary traffic signal cabinets, shall be assembled by an approved Equipment Supplier in District 1. DUDOT reserves the right to request that any controller and cabinet be tested at a District 1 approved Equipment Supplier's facility prior to field installation. Such testing will be at no extra cost to the contract. All permanent or temporary "railroad interconnected" controllers and cabinets, shall be new, built, tested and approved by the controller Equipment Supplier, in the Equipment Supplier's District 1 approved facility, prior to field installation. The test shall be conducted in the presence of DUDOT and Illinois Commerce Commission personnel, or as directed by the Traffic Engineer. The Equipment Supplier shall provide the technical equipment and assistance as required by the Traffic Engineer to fully test this equipment.

#### LIQUIDATED DAMAGES FOR UNTIMELY WORK

A primary concern is to maintain a safe and efficient roadway for the public. Therefore, the Contractor shall proceed with the traffic signal work as soon as conditions and project staging permit. If in the opinion of the Traffic Engineer construction conditions are suitable for traffic signal work, and the Contractor has not yet begun the traffic signal work, the Resident Engineer shall notify the Contractor to proceed. The Contractor shall begin the traffic signal work within seven calendar days after notification to proceed. The Contractor shall continue to prosecute the traffic signal work until completion, or until they can no longer proceed due to conditions beyond their control. The Contractor shall notify the Resident Engineer of any conditions impeding and/or delaying their

prosecution of the work. Failure by the Contractor to proceed with the traffic signal work as specified herein shall result in liquidated damages of **\$500.00** per calendar day per occurrence.

For projects involving detector loop installations or replacement, the following additional conditions apply. If, in the opinion, of the Traffic Engineer construction conditions are suitable for loop installation(s), the Resident Engineer shall notify the Contractor to proceed. The detector loops shall be installed and fully operational within 14 calendar days following notification to proceed by the Resident Engineer. This 14-day period shall be in effect throughout the entire year, including the off season, regardless of the Contractor's working day status. Failure by the Contractor to complete the loop installation(s) within the specified timeframe shall result in liquidated damages in the amount of \$500.00 per calendar day, per intersection.

For projects involving pavement resurfacing where radar, microwave, video, or other above-ground detection systems are included in the plans, the Contractor shall install the proposed detection system and make it operational prior to the grinding of the pavement loops, unless directed otherwise by the Engineer. In this case, the above-ground detection system will function as a temporary detector system, as well as the permanent system. The Contractor shall maintain the system according to these specifications, including adjusting detector orientation and detection zones, as necessary, to maintain proper detection throughout all stages of construction. Failure by the Contractor to install and operate the detector system within the specified timeframe shall result in liquidated damages in the amount of **\$500.00** per calendar day, per intersection.

#### MAINTENANCE AND RESPONSIBILITY

Revise Article 801.11 of the "Standard Specifications" to read:

- a. Existing traffic signal installations and/or any electrical facilities at locations included in this Contract may be altered or reconstructed totally or partially as part of the work on this contract. The Contractor is hereby advised that all traffic control equipment presently installed at these locations may be the property of the County of DuPage, State of Illinois, Department of Transportation, Division of Highways, County, Transit Agency, Private Developer, or a local governmental entity. Once the Contractor has begun any work on any portion of the project, all traffic signals within the limits of this Contract that have the pay item MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION, TEMPORARY TRAFFIC SIGNAL INSTALLATION, and/or MAINTENANCE OF EXISTING FLASHING BEACON INSTALLATION, shall become the full responsibility of the Contractor, unless otherwise approved in advance by the Traffic Engineer. The Contractor shall supply the Resident Engineer and the County's Traffic Signal Maintenance Contractor one 24-hour emergency contact name and telephone number. The Contractor shall provide sufficient qualified personnel to respond to all notifications of malfunctions on a round-the-clock basis (24 hours a day, 7 days a week). The Contractor is required to keep a time and date log of all maintenance items, including the time of the initial report, the response time, and the time of final permanent repair. The Contractor shall provide this information to the Resident Engineer, upon request.
- b. When the project has a pay item for MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION, TEMPORARY TRAFFIC SIGNAL INSTALLATION, and/or MAINTENANCE OF EXISTING FLASHING BEACON INSTALLATION, the Contractor shall notify the Traffic Engineer at (630) 407-6900 and the County's Traffic Signal Maintenance Contractor of their intent to begin any physical construction work on the project. This

notification shall be a minimum of ten calendar days prior to the start of construction to allow sufficient time for an inspection of the existing traffic signal installation(s) and the transfer of maintenance to the Contractor. If work is started prior to the inspection, maintenance of the traffic signal installation(s) will be immediately transferred to the Contractor without an inspection. The Contractor shall then become responsible for repairing or replacing all equipment that is not operating properly or is damaged at no cost to the owner of the traffic signal. Final repairs to or the replacement of damaged equipment shall meet the approval of the Traffic Engineer at the time of final inspection or the traffic signal installation will not be accepted.

- c. DUDOT, regional transit, IDOT, and other agencies may also have equipment connected to existing traffic signal or peripheral equipment including PTZ cameras, switches, transit signal priority (TSP and BRT) servers, modems, traffic counters, and other devices that shall be included with traffic signal maintenance at no additional cost to the contract.
- d. For contracts that include pay items for milling or pavement patching that may result in destruction of loop detectors, but do not include installation or modification of the traffic signals, maintenance transfers are not required. These contracts do require a notification of intent to work and an inspection. A minimum of ten calendar days prior to the loop removal, the Contractor shall notify the Traffic Engineer at (630) 407-6900, at which time arrangements will be made to adjust the traffic controller timing to compensate for the absence of detection.
- e. The Contractor is advised that the existing and/or temporary traffic signal installation shall remain in operation during all construction stages, except for the most unavoidable down time. Any plan to shut down the traffic signal installation for a period exceeding 15 minutes shall require prior approval from the Traffic Engineer. Except in extraordinary circumstances, approval to shut down the traffic signal installation will only be granted during the hours of 9:00 A.M. to 3:00 P.M. on weekdays, exclusive of holiday periods. Requests for shutdowns outside of these hours, or during holiday periods, will not be granted unless the Traffic Engineer determines that the alternate schedule is beneficial to DuPage County highway operations. Shutdowns will not be allowed during inclement weather.
- f. The Contractor shall be fully responsible for the safe and efficient operation of the traffic signals. Any inquiry, complaint or request by DUDOT, the County's Traffic Signal Maintenance Contractor or the public, shall be investigated and repairs started. The Contractor shall restore service and complete permanent repairs according to the following Repair Timetable. Failure to provide this service will result in liquidated damages of \$500 per calendar day per occurrence. The Traffic Engineer reserves the right to assign any work not completed within this timeframe to the County's Traffic Signal Maintenance Contractor. All costs associated with the completion of the uncompleted repair shall be the responsibility of the Contractor. Failure to pay these costs to the Traffic Signal Maintenance Contractor within one month after the incident will result in additional liquidated damages of \$500 per month per occurrence. Unpaid bills will be deducted from the cost of the Contract. County personnel, the County's Traffic Signal Maintenance Contractor, and the County's Network Integration Consultant may inspect any signalizing device on DUDOT's highway system at any time without notification.

- g. At signals where the Contractor is responsible for maintenance, including temporary traffic signals and newly constructed traffic signals that are operational but not yet accepted by the County, the Contractor shall be responsible for clearing snow, ice, dirt, debris or other condition that obstructs visibility of any traffic signal display or access to traffic signal equipment in compliance with the REPAIR TIMETABLE. Two clearly visible signal indications of all colors and arrows are required to be maintained at all time.
- h. In the event of power loss at locations where the Contractor is responsible for maintenance, including temporary traffic signals and newly constructed traffic signals that are not yet accepted by the County, the Contractor shall be responsible for working with DuPage County personnel to make connections of portable County-supplied generators at the maintained location, as directed by the Traffic Engineer or Resident Engineer.

All items shall be repaired within the period described in the Repair Timetable. The times listed are noncumulative. Any repairs not specifically covered in the Repair Timetable, or described elsewhere, shall be completed within a period matching the most similar line item in the Repair Timetable.

#### **REPAIR TIMETABLE**

(non cumulative)

		RESPO	<u>NSE</u>	SER RESTORAT	VICE	PERMA REPAIR	
KN	OCKDOWNS/FAILURE/DAMAGE:	1 IIVIL		ILSTONAI	ION	INLEAII	<u>10</u>
a.	Cabinet	а.	1 hr	a.	24 hrs	a.	2 wks
a.	Controller (Local or Master)	a.	1 hr	a.	24 hrs	a.	2 wks
a.	Detector Loop/Magnetometer	a.	1 hr	a.	n.a.	a.	2 wks
a.	Loop Detector Amplifier	a.	1 hr	a.	4 hrs	a.	2 wks
a.	Video Detection Camera/Process	sing a.	1 hr	a.	4 hrs	a.	2 wks
	Hardware						
a.	PTZ Camera	a.	2 hrs		48 hrs	a.	2 wks
a.	Modem	a.	2 hrs	a.	NWD	a.	
a.	Load Switch/BIU	a.	1 hr	a.	2 hrs	a.	
a.	Signal Head/Lenses	a.	1 hr	a.	2 hrs	a.	
a.	Pole/Mast Arm	a.	1 hr	a.	2 hrs	a.	ENG
_a.	Cabling/Conduit	a.	1 hr	a.	4 hrs	a.	ENG
<u>a.</u>	Interconnect/Communication	a.	NWE		NWD	a.	ENG
a.	Graffiti/Advertising	a.	NWE	) a.	NWD	a.	NWD
a.	Telemetry, Electrical	a.	1 hr	a.	2 hrs	a.	NWD
a.	Ethernet Switches/Video Encoders	a.	NWE		48 hrs	a.	2 wks
a.	Indicators/switches/LEDs/displays	a.	NWE	) a.	n.a.	a.	
a.	Snow/Ice/Debris/Other Obstructions	a.	1 hr	a.	2 hrs	a.	NWD
a.	Outages not covered elsewhere	a.	1 hr	a.	2 hrs	a.	NWD
a.	Filter/Cleanliness/fans/thermostat	a.	NWE	) a.	NWD	a.	
a.	Misalignment (conflicting)	a.	1 hr	a.	2 hrs	a.	NWD
a.	Misalignment (non-conflicting)	a.	4 hrs	a.	6 hrs	a.	NWD
CO	MPLAINTS/CALLS/ALARMS:						
<u>a.</u>	Timing/Phasing/Programming	a.	1 hr	a.	2 hrs	а.	ENG
<u>a.</u>	Coordination Alarm/Cycle Fail	a.	NWE	) a.	ENG	а.	ENG
<u>a.</u>	Controller Alarm/Status Change	a.	1 hr	a.	NWD	a.	1 wk
<u>a.</u>	Detector Alarm/Status change	a.	NWE	) a.	NWD	a.	ENG
_a.	UPS	a.	1 hr	a.	2 hrs	a.	2 wks
_a.	CMU Flash/Local Flash	a.	1 hr	a.	2 hrs	a.	1 wk
а.	Door Open	a.	1 hr	a.	n.a.	a.	NWD

**LEGEND:** hr=hour, hrs=hours, NWD=next week day, days=calendar days, ENG=acceptable to Traffic Engineer, wk=week, wks=weeks, n.a.=not applicable

#### Work near highway-rail grade crossings

Any proposed activity in the vicinity of a highway-rail grade crossing shall adhere to the guidelines set forth in the MUTCD regarding work in temporary traffic control zones in the vicinity of highway-rail grade crossings which states that lane restrictions, flagging, or other operations shall not create conditions where vehicles can be queued across the railroad tracks. If the queuing of vehicles across

the tracks cannot be avoided, a uniformed law enforcement officer or flagger shall be provided at the crossing to prevent vehicles from stopping on the tracks, even if automatic warning devices are in place.

#### MODIFICATION OF IDOT SPECIAL PROVISION REQUIREMENTS

When IDOT Special Provisions for traffic signal items are included in a DUDOT Contract or Permit project, the following modifications shall apply to the noted Special Provisions.

<u>Contact Information:</u> The Contractor shall utilize the DUDOT contact information for DUDOT projects in place of the personnel, phone numbers, and directives provided in the following District 1 Special Provisions when they are included in the Contract:

800.02TS Optimize Signal System 800.03TS Re-Optimize Signal System 805.01TS Electric Service Installation 886.01TS Detector Loop 886.02TS Detector Loop Replacement and/or Installation

890.01TS Temporary Traffic Signal Installation

890.02TS Temporary Traffic Signal Timing

All references in the above special provisions to Traffic Signal Engineer, Area Traffic Signal Engineer, Area Traffic Signal Maintenance and Operations Engineer, Bureau of Traffic Operations, Traffic Operations Engineer, State, State's Traffic Signal Maintenance Contractor, and State's Electrical Maintenance Contractor shall be replaced with the DUDOT Traffic Engineer and the phone number shall be **630-407-6900**. Submittals, requests for reviews, scheduling of appointments, and requests for materials and information shall be directed to the DUDOT Traffic Engineer instead of IDOT, District 1, or the State's Maintenance Contractor.

<u>Traffic Signal Timing Consultant Requirements:</u> Add the following paragraph to the following District 1 Special Provisions:

800.02TS Optimize Signal System 800.03TS Re-Optimize Signal System 890.02TS Temporary Traffic Signal Timing

Graphics displays for DUDOT signal systems are not required if the signalized intersection is already connected to the county's Centracs software or if it is being added to Centracs under this contract.

<u>Pedestrian Pushbutton Station Requirements:</u> Add the following paragraph to the following District 1 Special Provisions:

888.01TS Pedestrian Push Button 888.02TS Accessible Pedestrian Signals

The pedestrian push button signs shall be retroreflective R10-3e, 9"x15" signs displaying the "Push Button To Cross" legend with the Walking Man symbol and properly oriented arrow, unless shown otherwise in the plans. The pedestrian push button station shall be yellow with rounded corners sized to accommodate the 9"x15" sign.

If extensions are required to ensure proper positioning of the buttons, the extensions shall be included in the cost of the applicable push button pay item at no additional cost to the contract. Catalog cuts are required for the push button extensions prior to ordering.

All accessible buttons shall be programmed for the audible walk indication regardless of their placement. All buttons shall also be capable of producing a user-selectable audible percussive tone.

The required accessible pedestrian signal training will be scheduled for DUDOT personnel in conjunction with the requesting person or group.

<u>Handhole Requirements:</u> Add the following paragraph to the following District 1 Special Provision:

814.01 TS Handholes

The "Traffic Signals" label for the handhole lid shall also be applicable to DUDOT handholes.

#### DAMAGE TO TRAFFIC SIGNAL SYSTEM

Revise Article 801.12(b) of the "Standard Specifications" to read:

Any traffic control equipment damaged or not operating properly from any cause whatsoever shall be repaired and/or replaced. All inoperable components shall be replaced with new equipment meeting the special provisions, or in the absence of applicable special provisions, meeting the requirements of the Traffic Engineer. The Contractor shall provide replacement components at no additional cost to the Contract and/or owner of the traffic signal system. Final repairs or replacement of damaged equipment shall meet the approval of the Traffic Engineer prior to or at the time of final inspection; otherwise the traffic signal installation will not be accepted. Cable splices outside the controller cabinet shall not be allowed, unless approved by the Traffic Engineer.

When present, Automatic Traffic Enforcement equipment, including Red Light Enforcement cameras, detectors, and peripheral equipment, damaged or not operating properly from any cause whatsoever, shall be the responsibility of the municipality or the Automatic Traffic Enforcement company according to the Permit or governing agreement.

#### **VIDEO AND NETWORK SYSTEM REQUIREMENTS**

For all projects including installation or relocation of video and/or network equipment, the Contractor shall contact the Traffic Engineer at 630-407-6900 after installation to confirm proper operation of the equipment within the Ethernet-based field communications system. This includes confirming that the camera horizon is properly adjusted, camera lens is clear, network settings are correct and all devices are communicating correctly with the Central Signal System. For equipment requiring an IP address or other DUDOT assigned parameters, the Traffic Engineer will provide all available IP and programming details upon request, but no earlier than at the pre-construction meeting. The Contractor should request the information from the Traffic Engineer a minimum of one week in advance of the traffic signal "turn-on." The Contractor shall be responsible for making any changes necessary to the camera mounting, aiming, and/or equipment programming to meet the DUDOT requirements and/or to operate the equipment to the satisfaction of the Traffic Engineer. Contacting the Traffic Engineer for confirmation of equipment operation does not constitute an installation review and does not relieve the Contractor of the responsibility to correct deficiencies identified at the "turn-on." The cost of meeting these requirements shall be included in the associated pay item

and no additional compensation shall be made. Calls to the Traffic Engineer shall be made according to the Central Signal System Support section of this special provision.

#### TRAFFIC SIGNAL INSPECTION ("TURN-ON")

Revise Article 801.15(b) of the "Standard Specifications" to read:

When the road is open to traffic, except as otherwise provided in Section 850 of the Standard Specifications, the Contractor may request a "turn-on" and inspection of the completed traffic signal installation at each separate location. This request shall be made to the Traffic Engineer at (630) 407-6900 a minimum of ten calendar days prior to the time of the requested inspection. Prior to the date of the "turn-on," the Contractor must provide written notification (by letter or email) that the equipment has been field tested and the intersection is capable of operating according to Contract requirements.

When the Contract includes the pay item RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, OPTIMIZE TRAFFIC SIGNAL SYSTEM, or TEMPORARY TRAFFIC SIGNAL TIMINGS, the Contractor shall notify the Signal Coordination and Timing (SCAT) Consultant of the "turn-on"/detour implementation schedule, as well as stage changes and signal phase changes during construction. The SCAT Consultant shall be in attendance at each temporary and permanent traffic signal "turn-on." When Emergency Vehicle Preemption (EVP) equipment is included in the project, the Contractor must invite local fire department personnel to each temporary and permanent traffic signal "turn-on."

It is DUDOT's intent to have all electric work completed and the equipment field-tested by the Equipment Supplier prior to DUDOT's "turn-on" field inspection. The Contractor shall have all traffic signal work completed and the electrical service installation connected by the utility company prior to requesting an inspection and "turn-on" of the traffic signal installation. In the event the Traffic Engineer determines that the work is not complete and that the inspection will require more than two hours to complete, the inspection may be cancelled and the Contractor will be required to reschedule at another date.

The Contractor shall provide a representative from the Equipment Supplier's office to attend the traffic signal inspection for both permanent and temporary traffic signal "turn-ons." Signal indications being tested shall match the lane configurations and markings at the intersection. If any conflicting signal indications are visible to motorist or pedestrians while testing, the Contractor shall be responsible to provide police officer(s) to assist with traffic control at the time of testing.

Upon demonstration that the signals are operating properly according to the Contract and to the satisfaction of the Traffic Engineer, the Traffic Engineer will allow the signals to be placed in continuous operation. The Traffic Engineer will inspect the traffic signal installation, with the assistance of the Contractor, and provide a written "punch-list" of deficient items requiring completion. The traffic signals will not be transferred to DUDOT maintenance until all "punch-list" work is corrected and re-inspected. The Contractor shall complete all "punch-list" work within 30 calendar days of notification. If this work is not completed within 30 days, DUDOT reserves the right to have the work completed by others at the Contractor's expense. This cost will be in addition to Liquidated Damages for Untimely Work.

The Contractor shall furnish all equipment and/or parts to keep the traffic signal installation operating. No spare traffic signal equipment is available from DUDOT. The Contractor shall be

responsible for all traffic signal equipment and associated maintenance thereof until DUDOT acceptance is granted.

When the Contractor has completed the "punch-list" work, he shall contact the Traffic Engineer to schedule a follow-up inspection of the traffic signal installation. If the Traffic Engineer determines that any "punch-list" items have not been completed, he may cancel the inspection, and the Contractor will need to reschedule.

It is possible that during any follow-up inspections of the traffic signal installation, deficient items may be identified that were not identified at the "turn-on" inspection, or included in the initial "punchlist." The Traffic Engineer shall advise the Contractor of any such items, and it shall be the Contractor's responsibility to complete these items prior to acceptance of the traffic signal.

Acceptance of the traffic signal by DUDOT shall be based on the inspection results and successful operation during a minimum 72-hour "burn-in" period following activation of the traffic signal and related equipment. Therefore, due to the required "burn-in" period, acceptance of the traffic signal shall not occur at the time of the "turn-on." Upon notification by the Contractor that all noted deficiencies have been corrected, and after the "burn-in" period, the Traffic Engineer shall perform an acceptance inspection of the traffic signal installation. If approved, the traffic signal acceptance shall be given verbally at the inspection, followed by written correspondence from the Traffic Engineer. When DUDOT is acting as a representative of other agencies, the agency that is responsible for the maintenance of each traffic signal installation will assume the traffic signal maintenance upon acceptance by the Traffic Engineer.

DUDOT requires the following Final Project Documentation from the Contractor prior to acceptance of the traffic signal. The documentation shall be provided in hard copy and electronic format as indicated below.

- 1. One (1) copy (11"x17") and one electronic PDF file of as-built signal plans with field revisions marked in red, including the location and labeling of detection equipment that differs from that shown in the plans.
- 2. One (1) copy of the operation and service manuals for the signal controller and the associated control equipment.
- 3. Five (5) copies (11"x17") and one electronic PDF file of the cabinet wiring diagrams.
- 4. Five (5) copies of the traffic signal installation cable log, along with electronic PDF and DGN files.
- 5. Original certificates for all manufacturer and Contractor warranties and guarantees required by Article 801.14 of the Standard Specifications.
- 6. GPS coordinates of traffic signal equipment as detailed in the Record Drawings section herein.
- 7. For new cabinet installations, two (2) cabinet keys and one (1) police door key.

All cost of work and materials required to comply with the above requirements shall be included in the pay item bid prices, under which the subject materials and signal equipment are paid, and no additional compensation will be allowed. Materials and signal equipment not complying with the above requirements will be subject to removal and disposal at the Contractor's expense.

# **LOCATING UNDERGROUND FACILITIES**

Revise Section 803 of the "Standard Specifications" to read:

Once the Contractor has taken maintenance of an existing County facility or has constructed underground facilities, they are responsible for locating the facilities according the J.U.L.I.E. requirements at no additional cost to the Contract.

Contractor requests for equipment locates will be granted only once prior to the start of construction. Additional requests shall be at the expense of the Contractor. The location of underground traffic facilities does not relieve the Contractor of their responsibility to repair any item(s) damaged during the construction, at his/her own expense.

Locate requests shall be directed to DUDOT's Traffic Signal Maintenance Contractor or to the DUDOT Traffic Engineering Department at (630) 407-6900.

The exact location of all utilities shall be field verified by the Contractor before the installation of any components of the traffic signal system. For locations of utilities call J.U.L.I.E. at 1-800-892-0123. The location of some utilities may require contacting other Agencies or Municipalities.

The Contractor should note that IDOT does not participate in J.U.L.I.E. Underground work that is proposed to take place within IDOT right-of-way requires the Contractor to contact IDOT for the procedures involved in locating their facilities.

#### **RESTORATION OF WORK AREA**

Add to Section 801 of the "Standard Specifications":

Restoration of the traffic signal work area shall be included in the related pay item including foundation, conduit, handhole, trench and backfill, etc. and no extra compensation shall be allowed. All roadway surfaces including shoulders, medians, sidewalks, pavement, etc. shall be restored to match the previously existing conditions. All damage to mowed lawns shall be replaced with an approved sod, and all damage to unmowed fields shall be seeded, according to Section 250 and Section 252 of the Standard Specifications respectively. All brick pavers disturbed in the work area shall be restored to their original configuration as directed by the Resident Engineer. All damaged brick pavers shall be replaced with a comparable material approved by the Resident Engineer. Areas in front of residences are to be restored within two weeks of the completion of work causing the disturbance regardless of the duration of the project remaining. The traffic signal work area includes any area where the Contractor or their subcontractors perform work to install, repair, or maintain County owned traffic, lighting, or ITS equipment or facilities, regardless of the presence of an actual traffic signal.

# LOCATION AND ORIENTATION OF ITS EQUIPMENT

The Contractor shall confirm the viability of the proposed mounting location for ITS equipment prior to installing cable, affixing mounting hardware to supporting posts or mast arms, and drilling holes in supporting posts or mast arms. When line-of-sight is required for proper equipment operations,

including but not limited to antennas and detection cameras, the Contractor shall review the proposed installation with the Engineer, in consultation with the vendor's representative, to confirm that the location shown in the plans is still viable. When a PTZ camera or other comparable device is proposed, the Contractor shall review the proposed location with the Engineer prior to installation to ensure that the Agency's preference for visibility can be met within the built environment. In any case, if the Contractor installs cable or hardware, or drills holes, prior to receiving the Engineer's approval, the cost to relocate the equipment to provide proper operation or preferred visibility, including the cost of removing and installing new electrical or communications cable, will be borne by the Contractor. The Contractor will be paid for the actual quantity of cable and equipment based on the final accepted installation location regardless of the quantities shown in the plan, and no additional compensation shall be made under the Contract for excess materials installed prior to approval.

# **Cabinet Neatness and Wiring**

The Contractor shall ensure that all wiring and peripheral equipment in any new traffic signal cabinet is in a neat and orderly fashion that is acceptable to the Traffic Engineer. This applies to controller cabinets, master cabinets, railroad cabinets, communication/ITS cabinets, lighting cabinets, electrical service cabinets, or any other new cabinet called for in the project plans.

All conduit entrances into the cabinet shall be sealed with a pliable waterproof material. Electrical cables inside the cabinet shall be neatly trained along the base and back of the cabinet. Each conductor shall be connected individually to the proper terminal. The spare conductors shall be bound into a neat bundle. All cables, including those for signals, vehicle detection, pushbuttons, emergency vehicle preemption, video transmission, and communication shall be neatly arranged and bundled within the cabinet to the satisfaction of the Traffic Engineer. Each cable shall be marked with an identification number which corresponds to the number and description on the cabinet cable log.

When modernizing or modifying an existing cabinet, the new cables being installed shall be trained, bundled, and labeled to the satisfaction of the Traffic Engineer. When working inside an existing cabinet, the Contractor shall minimize disturbance to existing cables and cabinet wiring. Any existing cables and cabinet wiring disturbed by the Contractor shall be re-trained, bundled, and/or labeled to the satisfaction of the Traffic Engineer.

Unless indicated elsewhere in the plans and specs, all equipment in the cabinet shall be wired through the UPS except lighted street name signs and luminaires.

Components with Ethernet capabilities shall be connected to the Switch or other communications equipment in the cabinet as directed by the Traffic Engineer. All equipment, materials, labor and hardware, including Ethernet patch cables, required to provide cabinet neatness and wiring to the satisfaction of the Traffic Engineer shall be included in the applicable pay item for FULL ACTUATED CONTROLLER AND TYPE IV CABINET SPECIAL, FULL-ACTUATED CONTROLLER IN EXISTING CABINET, and/or MODIFY EXISTING CONTROLLER.

The County will not accept maintenance of the traffic signal installations until the above requirements are satisfied.

# **EQUIPMENT SUPPLIER AND VENDOR REPRESENTATION**

The Traffic Engineer reserves the right to request a representative of the Equipment Supplier and/or Vendor be present at the activation of new traffic equipment. The traffic equipment may include signal heads, cabinets, controllers, amplifiers, preemption, detection, monitoring, communication/transmission, fiber-optic/telemetry, radio, microwave, infrared, illuminated signs, streetlights, push buttons, lighted crosswalks, uninterruptable power supplies, adaptive, counters, and any other new equipment being installed and activated. The representative shall be a qualified technician trained in the proper installation and operation of the equipment being installed under the Contract or permit.

The Traffic Engineer reserves the right to cancel the "turn-on," transfer, or other scheduled activity if, in their opinion, knowledgeable personnel from the Equipment Supplier or Vendor are not present. Rescheduling, and any associated costs, shall be the responsibility of the Contractor, and shall be subject to availability of DUDOT Traffic staff.

This provision is in addition to the requirement contained herein that the Contractor provide a representative from the Equipment Supplier to attend the traffic signal inspection for both permanent and temporary traffic signal "turn-on".

Any costs associated with Equipment Supplier and/or Vendor representation shall be included in the unit price of the associated traffic equipment being activated. Any unforeseen costs incurred by the Contractor to provide this representation shall not be the responsibility of the County.

# **INTERRUPTION OF COMMUNICATION**

The interruption of communication with County equipment shall be kept to an absolute minimum. Communication includes controller telemetry, video transmission, camera control signals, Highway Advisory Radio, wireless interconnect, telephone (POTS/ISDN/DSL), high speed Internet, cellular modem, or any other County communication equipment. This provision applies to cable types including copper, multimode fiber optic, singlemode fiber optic, telephone cables, Ethernet cables, or any other cable used by the County to monitor and maintain its various signal and ITS equipment.

The Contractor shall plan ahead, and shall stage their construction work accordingly, so that they can interrupt communication, and then restore communication, with as little down time as possible. For example, when a section of existing interconnect is being relocated, the new handholes and conduits should be installed prior to disconnecting the interconnect cable. The interconnect cable can then be disconnected, pulled out of the existing conduit, pulled through the new conduit, and reconnected. In addition, when an existing fiber optic cable is to be re-used, the Contractor shall be prepared to immediately replace any fiber splices and/or terminations that become damaged.

Prior to disconnecting any DUDOT communication link, the Contractor shall contact the Traffic Engineer for approval of their planned construction method.

# **Central Signal SYSTEM SUPPORT**

DUDOT Traffic staff are available to provide a limited amount of technical support to the Contractor between the hours of 8:00 AM and 4:30 PM. The Contractor may request the DUDOT staff provide configuration information, settings, and testing support, and other items approved by the Traffic Engineer. Requests that require DUDOT support after 4:30 PM may not be honored until the next business day. Extensions to the Contract working days or completion date will not be authorized solely due to requests for support that do not meet these requirements.

# Construction work under county highway permit

For projects being completed under DuPage County Highway Access Permits, including resurfacing projects that require replacement of detector loops, the Contractor shall have a copy of the approved County Highway Permit on-site at all times work is underway, including when working on loops or other signal related equipment at county-owned intersections even if all work is located outside of DuPage County right-of-way. Penalties for non-compliance will be assessed according to the terms detailed in the Highway Permit.

#### TEMPORARY TRAFFIC SIGNAL TIMING

Effective: May 22, 2002 Revised: March 1, 2024

890.02TS

# Description.

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

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

The following tasks are associated with TEMPORARY TRAFFIC SIGNAL TIMING:

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

# Basis of Payment.

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

# **EMBANKMENT II (D-1)**

Effective: March 1, 2011 Revised: November 1, 2013

<u>Description</u>. This work shall be according to Section 205 of the Standard Specifications except for the following.

<u>Material</u>. Reclaimed asphalt shall not be used within the ground water table or as a fill if ground water is present. The RAP used shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications". Gradation deleterious count shall not exceed 10% of total RAP and 5% of other by total weight.

# **CONSTRUCTION REQUIREMENTS**

<u>Samples</u>. Embankment material shall be sampled and tested before use. The contractor shall identify embankment sources, and provide equipment as the Engineer requires, for the collection of samples from those sources. Samples will be furnished to the Geotechnical Engineer a minimum of three weeks prior to use in order that laboratory tests for compaction can be performed. Embankment material placement cannot begin until tests are completed.

<u>Placing Material</u>. In addition to Article 202.03, broken concrete, reclaimed asphalt with no expansive aggregate, or uncontaminated dirt and sand generated from construction or demolition activities shall be placed in 6 inches (150 mm) lifts and disked with the underlying lift until a uniform homogenous material is formed. This process also applies to the overlaying lifts. The disk must have a minimum blade diameter of 24 inches (600 mm).

When embankments are to be constructed on hillsides or existing slopes that are steeper than 3H:1V, steps shall be keyed into the existing slope by stepping and benching as shown in the plans or as directed by the Engineer.

<u>Compaction</u>. Soils classification for moisture content control will be determined by the Soils Inspector using visual field examination techniques and the IDH Textural Classification Chart.

When tested for density in place each lift shall have a maximum moisture content as follows.

- a) A maximum of 110 percent of the optimum moisture for all forms of clay soils.
- b) A maximum of 105 percent of the optimum moisture for all forms of clay loam soils.

<u>Stability.</u> The requirement for embankment stability in article 205.04 will be measured with a Dynamic Cone Penetrometer (DCP) according to the test method in the IDOT Geotechnical Manual. The penetration rate must be equal or less than 1.5 inches (38 mm) per blow.

<u>Basis of Payment.</u> This work will not be paid separately but will be considered as included in the various items of excavation.

#### TRAFFIC CONTROL PLAN

Traffic Control shall be according to the applicable sections of the Standard Specifications, the Supplemental Specifications, the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways," any special details and Highway Standards contained in the plans, and the Special Provisions contained herein.

Special attention is called to Article 107.09 of the Standard Specifications and the following Highway Standards, Details, Quality Standard for Work Zone Traffic Control Devices, Recurring Special Provisions and Special Provisions contained herein, relating to traffic control.

All Highway Standards and Details listed below and/or shown in the plans shall not be measured for separate payment, but shall be considered included in the cost of the TRAFFIC CONTROL AND PROTECTION, (SPECIAL) pay item.

Contractor shall notify the Village of Hanover Park, IDOT and DuPage County 72 hours. prior to placement of traffic control devices within the project limits and prior to any change in traffic patterns.

# STANDARDS:

701101 701601 701701 701801 701901

# **DETAILS**:

TC-10 – Traffic Control and Protection for Side Roads, Intersections and Driveways

TC-13 – District One Typical Pavement Markings

TC-21 – Detour Signing For Closing State Highways

#### **SPECIAL PROVISIONS:**

Work Zone Traffic Control and Protection (LRS 3)
Traffic Control and Protection (Special)
Maintenance of Roadways (IDOT D1)
Temporary Information Signing (IDOT D1)
Work Zone Traffic Control Devices (BDE)
Vehicle and Equipment Warning Lights (BDE)

# **DEVICES**:

Traffic Control Devices shall be per Article 701.15 of the Standard Specifications for Road and Bridge Construction, 2016 and as approved by the Engineer. All devices for traffic control staging shall be considered included in the cost of TRAFFIC CONTROL AND PROTECTION, (SPECIAL) pay item, unless separate pay items have been listed in the plans.

#### SIGNS:

All traffic control devices used for the maintenance of traffic, as detailed on the plans, shall be reflectorized prior to installation and cleaned as specified by the Engineer.

All existing roadway signs that restrict access to existing roads and driveways based on vehicular classification shall be removed and reinstalled at a location approved by the Engineer per Article 107.25 of the Standard Specifications for Road and Bridge Construction, 2016.

All conflicting existing roadway signs shall be covered during the maintenance of traffic staging. When covering existing Department signs, no tape shall be used on the reflective portion of the sign. Contact the District sign shop for covering techniques.

All signs for traffic control staging shall be included in the cost of TRAFFIC CONTROL AND PROTECTION, (SPECIAL) pay item except as noted for TEMPORARY INFORMATION SIGNING.

# TRAFFIC CONTROL AND PROTECTION, (SPECIAL)

Work under this item will be performed in accordance with Section 701 of the Standard Specifications.

<u>Description</u>. This item of work shall include furnishing, installation, maintenance, relocation and subsequent removal of all signs, signals, markings, traffic cones, barricades, warning lights, flaggers and other devices which are to be used for the purpose of regulating, warning or guiding traffic during the construction of this improvement.

<u>General Requirements</u>. Traffic Control will be in accordance with the applicable sections of the Standard Specifications, the applicable guidelines contained in the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways, the Special Provision, Interim Special Provisions and any Special Details and Highway Standards contained herein and in the plans.

At the preconstruction meeting the Contractor will furnish the name of the individual in his/her direct employ who is to be responsible for the installation and maintenance of the traffic control for this project (Contract 61G80). If the actual installation and maintenance are to be accomplished by a subcontractor, consent will be requested of the Village of Hanover Park at the time of the preconstruction meeting in accordance with Article 108.01 of the Standard Specifications. This will not relieve the Contractor of the foregoing requirement for a responsible individual in his/her direct employ. The Village will provide to the Contractor the name of its representative who will be responsible for the administration of the Traffic Control Plan. The Contractor will notify the Village of Hanover Park 72 hours before commencing construction for changing traffic flow.

The Contractor shall be responsible for the proper location, installation and arrangement of all traffic control devices as shown on the plans, or as directed by the Engineer. Special attention must be given to advance guide signs during these operations in order to keep barricade placement consistent with lane assignment. The Contractor will cover all traffic control devices which may be inconsistent with traffic patterns during the transfer from one construction stage to another. This should include the bagging/partial bagging of any signals that will be off during the detour.

The Contractor's vehicle will always move with and not against or across the flow of traffic. These vehicles will enter or leave work areas in a manner which will not be hazardous to or interfere with normal traffic and will not park or stop except within designated work areas. Personal vehicles will not be permitted to park within the right of way except in specific areas designated by the Engineer.

The Contractor will immediately furnish a certified flagger or flaggers if, in the opinion of the Engineer, the Contractor's construction means or methods warrant. No additional compensation will be made for flaggers. If no flaggers are available, the Contractor will cease operations until they become available.

All signs, signals, markings, traffic cones, barricades, warning lights, flaggers, and other traffic control devices must conform to the plans, specifications, special provisions and the latest edition of the "State of Illinois Manual on Uniform Traffic Control Devices." The Contractor will obtain, erect, maintain, and remove all traffic control devices in accordance with Article 107.14 of the Standard Specifications. Placement and maintenance of all traffic control devices will be as directed by the Engineer. The Engineer will be the sole judge as to the acceptability of placement and maintenance of the traffic control devices prescribed in the appropriate standards.

The Contractor will ensure that all barricades, signs, lights and other devices installed by him/her are operational every day, including Sundays and holidays. In the event of severe weather conditions, the Contractor must furnish any additional personnel required to properly maintain all traffic control devices as directed by the Engineer.

The Contractor must be aware of the requirements for coordination of all work in this project and adjoining or overlapping projects and for coordination of barricade placement necessary to provide a uniform traffic detour pattern. The Contractor will not be permitted to erect, change or remove his/her detour barricade system without the prior approval of the Engineer.

The placement of barricades and warning signs for the required lane closures will be as specified herein and will proceed in the direction of the flow of traffic. The removal of all signs and barricades will begin at the end of the construction areas and proceed toward oncoming traffic.

<u>Traffic Control Highway Standards:</u> Traffic Control Highway Standards 701101, 701601, 701801 and 701901 will not be paid for separately but shall be included in the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

Revisions in the staging of construction, requested by the Contractor, may require traffic control to be installed according to standards and/or designs other than those included in the plans. Revisions or modifications to the traffic control shown in the contract shall be submitted by the Contractor for approval by the Engineer. Any requested revisions, is approved by the Engineer, shall not be at any additional cost to the contract and considered included in the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

Delays to the Contractor caused by complying with these requirements will be considered included in the cost of Traffic Control and Protection and no additional compensation will be allowed.

The Contractor shall have onsite and utilize street sweepers to clean debris from traveled ways when construction operations cause debris to accumulate, or as directed by the Engineer.

<u>Pedestrian Sidewalk Control.</u> The Contractor shall direct pedestrians to usable sidewalks and walkways for both sides of the street during the construction. Pedestrian traffic shall be routed away from the construction area where possible. Pedestrians shall have access to all properties abutting the work zone at all times except in the immediate work areas while construction is actually taking place. All sidewalks and temporary walkways shall meet current ADA standards. "Sidewalk Closed" signs shall be Illinois Standard sign R11-I101 with the sign legend "Sidewalk Closed": Size 24 x 18 inch; black legend on a white reflectorized background. Sidewalk control shall be installed as follows:

- A. Place detectable Pedestrian Barricades on all closed sidewalk locations. Use sufficient numbers of barricades and signage to completely close the walkway and direct pedestrians to the designated walkways. Temporary Chain Link Fence shall be used to separate pedestrians from the work zone and delineate pedestrian routes.
- B. Use one "Sidewalk Closed" sign at each end of each sidewalk section being reconstructed and another at each pedestrian crossing to inform pedestrians of closed sidewalk.
- C. Maintain pedestrian walkways free of any obstructions and hazards such as holes, debris mud, construction equipment, stored materials, etc.

- D. Clearly delineate hazards near or adjacent to walkways.
- E. Any excavation for storm sewer, inlets or manholes left unattended by the Contractor shall require protection for pedestrians, such as temporary fence around the excavated area.

The cost of this work shall be included in the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

<u>Trail Closure Signing.</u> Any additional signing or traffic control required by the DuPage County Forest Preserve, the Village of Hanover Park or as directed by the Engineer for closure of the north trailhead and subsequent parking lot of the Mallard Lake Trail shall be included in the cost of TRAFFIC CONTROL AND PROTECTION, (SPECIAL), unless noted otherwise.

<u>Detour Signing.</u> This work shall consist of installing and maintaining the required detour signs in accordance with the Detour Plan in the plans.

Work shall be done according to Sections 701, 720, and 1106 of the Standard Specifications where applicable and as directed by the Engineer or herein specified.

The Contractor shall be responsible for the proper location, installation, condition, and maintenance of all traffic control devices. All signs and barricades utilized for the proposed detour(s) shall be new or like new condition.

This item includes all signs, barricades, changeable message signs, pavement markings, warning lights, drums, flaggers, and other traffic control devices required for the type of operation being performed. This pay item may also include any additional detour signing as required by the Engineer.

The Contractor shall at all times conduct the work in such a manner as to ensure the least obstruction to vehicular and pedestrian traffic. The convenience and safety of the general public and of the residents along the site shall be provided for in an adequate and satisfactory manner.

<u>Method of Measurement</u>. Traffic control and protection will be measured for payment on a lump sum basis.

<u>Basis of Payment</u>. This work will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL) which price will be payment in full for all labor, materials, transportation, handling and incidentals necessary to furnish, install, maintain, and remove all traffic control devices required by the appropriate standards and as approved by the Engineer. No adjustment or additional compensation will be allowed except as specified herein. The salvage value of the materials removed will be reflected in the bid price for this item.

#### **TEMPORARY INFORMATION SIGNING**

Effective: November 13, 1996 Revised: January 29, 2020

# Description.

This work shall consist of furnishing, installing, maintaining, relocating for various states of construction and eventually removing temporary informational signs. Included in this item may be

ground mount signs, skid mount signs, truss mount signs, bridge mount signs, and overlay sign panels which cover portions of existing signs.

### Materials.

Materials shall be according to the following Articles of Section 1000 - Materials:

	<u>ltem</u>	<u>Article/Section</u>
a.)	Sign Base (Note 1)	1090
b.)	Sign Face (Note 2)	1091
c.)	Sign Legends	1091
d.)	Sign Supports	1093
e.)	Overlay Panels (Note 3)	1090.02

- Note 1. The Contractor may use 5/8 inch (16 mm) instead of 3/4 inch (19 mm) thick plywood.
- Note 2. The sign face material shall be in accordance with the Department's Fabrication of Highway Signs Policy.
- Note 3. The overlay panels shall be 0.08 inch (2 mm) thick.

#### **GENERAL CONSTRUCTION REQUIREMENTS**

### Installation.

The sign sizes and legend sizes shall be verified by the Contractor prior to fabrication.

Signs which are placed along the roadway and/or within the construction zone shall be installed according to the requirements of Article 701.14 and Article 720.04. The signs shall be 7 ft (2.1 m) above the near edge of the pavement and shall be a minimum of 2 ft (600 mm) beyond the edge of the paved shoulder. A minimum of two (2) posts shall be used.

The attachment of temporary signs to existing bridges, sign structures or sign panels shall be approved by the Engineer. Any damage to the existing signs and/or structures due to the Contractor's operations shall be repaired or signs replaced, as determined by the Engineer, at the Contractor's expense.

### Method of Measurement.

This work shall be measured for payment in square feet (square meters) edge to edge (horizontally and vertically).

All hardware, posts or skids, supports, bases for ground mounted signs, connections, which are required for mounting these signs will be included as part of this pay item.

#### Basis Of Payment.

This work shall be paid for at the contract unit price per square foot (square meter) for TEMPORARY INFORMATION SIGNING.

### DRAINAGE AND EROSION CONTROL

<u>Preliminary Drainage.</u> Prior to the start of construction and placement of erosion control items drainage structures show in the pan to have inlet filters shall be cleaned. This work shall be included in the cost of the inlet filter item and not paid for separately.

Interim Drainage. Sufficient drainage facilities shall be maintained throughout construction to facilitate surface runoff. When any loose material is deposited in the flow line of ditches, gutter or drainage structures so that the natural flow of water is obstructed, it shall be removed at the close of each working day. At the conclusion of the construction operations drainage structures shown in the plan to have inlet filters shall be free from dirt and debris. This work shall be included in the cost of other items and not paid for separately. It shall be the Contractor's responsibility to plan his operations, with the approval of the Engineer in the field, so as to utilize the facilities provided to prevent local flooding and insure proper surface runoff. Any minor ditch grading or storm sewer cleaning, necessary to provide for the interim drainage as directed by the Engineer, will not be paid for separately but shall be included in the cost of other items as well.

#### PROTECTION OF EXISTING DRAINAGE FACILITIES DURING CONSTRUCTION

Unless otherwise noted in the contract plans, the existing drainage facilities shall remain in use during the period of construction.

Unless reconstruction or adjustment of an existing manhole, catch basin, or inlet is called for in the contract plans or ordered by the Engineer, the proposed work shall meet the existing elevations of these structures. Should reconstruction or adjustment of a drainage structure be required by the Engineer in the field, the necessary work and payment shall be done in accordance with Section 602 and Article 104.02 respectively, of the Standard Specifications.

Existing frames and grates are to remain unless otherwise noted in the contract plans or as directed by the Engineer. Frames and grates that are missing or damaged prior to construction shall be replaced. The type of replacements frame or grate shall be determined by the Engineer, and replacement and payment for same shall be in accordance with Section 604 and Article 104.02 respectively, of the Standard Specifications unless otherwise noted in the plans or Special Provisions.

# **PARKWAY RESTORATION**

The Contractor will be paid at the rate of 50% for seeding, topsoil furnish and placement at the time of installation. The remaining 50% of payment shall be approved for payment upon substantial grass growth consisting of a two-inch strand covering 90% of the area.

# **EXISTING FRAMES, GRATES, LIDS AND BOXES**

All frames, grates, lids and boxes scheduled to be removed from existing structures based on the plans or as directed by the Engineer shall remain the property of and be delivered to the Village of Hanover Park at 2041 West Lake Street. The cost of which shall be included in the respective items.

# **COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12**

<u>Description.</u> This work shall be done in accordance with Section 606 of the Standard Specifications except as modified herein.

<u>Construction Requirements</u>. Ten (10) foot transitions shall be used to match the proposed curb and gutter to the existing in the field unless otherwise directed by the Engineer.

#### STORM SEWER REMOVAL

<u>Description</u>. This work shall consist of removing and disposing existing concrete storm sewer as shown on the plans and as directed by the Engineer. This work shall conform to Section 551 of the Standard Specifications.

<u>Method of Measurement</u>. This work shall be measured for payment per foot of storm sewer removed.

<u>Basis of Payment</u>. This work shall be paid for at the contract unit price per foot for STORM SEWER REMOVAL, and shall include all labor, equipment, excavation and other materials necessary for construction as specified herein.

#### STREAM GAUGE

<u>Description</u>. This work shall consist of removing, storing and reinstalling stream gauges where indicated on the plans and as directed by the Engineer.

The stream gauge shall be subject to inspection by the Engineer prior to reinstallation. Equipment that is not in good condition shall be replaced at no additional cost to the State and the rejected materials removed from the work site at the Contractor's expense.

Reinstallation shall be coordinated with the Village of Hanover Park's Public Wok Department.

Method of Measurement. This work shall be measured for payment per each of stream gauge.

<u>Basis of Payment</u>. This work shall be paid for at the contract unit price per each for STREAM GAUGE, and shall include all labor, equipment, excavation and other materials necessary for construction as specified herein.

# PERIMETER EROSION BARRIER (SPECIAL)

<u>Description</u>. This work shall consist of constructing, removing, and disposing of perimeter erosion barrier, special as part of the project's temporary erosion control system. Wire-back mesh Perimeter erosion control barrier, special shall be utilized as shown on the plans or as directed by the Engineer. Unsupported may be used in all other project areas.

<u>General</u>. The work shall be performed according to Section 280 of the "Standard Specifications," special provision "PERIMETER EROSION BARRIER" and the following:

<u>Materials</u>. Geotextile Requirements: The geotextile used for the temporary silt fence shall be classified as supported (with a wire of polymeric mesh backing) or unsupporting (no backing). The temporary silt fence geotextile shall meet the requirements of the Table included below. All numeric values except Apparent Opening Size (AOS) represent Minimum Average Roll Values (MARV as defined in ASTM D4439). The values for AOS are the Maximum Average Roll Values.

Table – Temporary Silt Fence Requirements

Requirements	Test Methods	Wire Backed Supported Silt Fence <sup>a</sup>
Maximum Post Spacing		8 feet
Grab Strength	ASTM D4632	
Machine Direction		90 lbs
X-Machine Direction		90 lbs
Permittivity <sup>b</sup>	ASTM D4491	0.05 sec <sup>-1</sup>
Apparent Opening Size	ASTM D4751	0.024in maximum average roll value
Ultraviolet Stability	ASTM D4355	70% after 500 hours of exposure

#### Notes:

- a) Silt fence support shall consist of 12-gauge steel wire with a mesh backing of 6"x6" or prefabricated polymeric mesh of equivalent strength.
- b) These default filtration property values are based on empirical evidence with a variety of sediments. For environmentally sensitive areas, a review of previous experience and/or site or regionally specific geotextile tests should be performed to confirm the suitability of these requirements.

The wire support fence shall:

- 1) Be a minimum of 12-gauge
- 2) Have a minimum of six horizontal wires
- 3) The maximum vertical wire spacing shall be 6"

One row of the fences shall have high visibility material.

Method of Measurement. This work will be measured for payment in place by FOOT.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per FOOT for PERIMETER EROSION BARRIER (SPECIAL). The unit price shall include all work and materials necessary to properly install the barrier and to remove and dispose of the used materials at the completion of the project. Maintenance requirements shall be included and paid for according to Section 280 of the "Standard Specifications."

### STABILIZED CONSTRUCTION ENTRANCE

<u>Description</u>. This work shall consist of furnishing, installation, maintenance and removal of stabilized pad of aggregate underlain with filter fabric as shown on the plans or directed by the Engineer.

Materials. Materials shall conform to the following:

Aggregate size. IDOT Coarse Aggregate Graduation: CA-1 CA-2 CA-3, or CA-4.

Filter Fabric shall consist of synthetic polymers composed of at least 85 percent by weight polypropylene, polyesters, polyamides, polyethylene, polyolefins, or polyvinylidene chlorides. The geotextile shall be free of any chemical treatment or coating that significantly reduces its porosity. Fibers shall contain stabilizers and/or inhibitors to enhance resistance to ultraviolet lights.

<u>Construction Requirements.</u> The course aggregate shall be a thickness of 6 inches or more. The stone entrance should not be filled until the area has been inspected and approved by the Engineer.

The rock shall be dumped and spread into place in approximately horizontal layers not more than 3 feet in thickness. It shall be placed in a manner to produce a reasonable homogeneous stable fill that contains no segregated pockets or larger or small fragments or large unfilled space caused by bridging of larger fragments. No compaction will be required beyond that resulting from the placing and spreading operations.

The minimum width and length shall be 14 and 70 feet, respectively.

All surface water flowing or diverted toward the construction entrance shall be piped across the entrance. Any pipe used for this will be included in the cost of the STABILIZED CONSTRUCTION ENTRANCE. The stabilized construction entrance will have positive drainage away from the roadway.

The entrance shall remain in place and be maintained until the disturbed area is stabilized. Any sediment spilled onto public rights-of-way must be removed immediately.

Method of Measurement. This work will be measured per square yard.

<u>Basis of Payment.</u> The work will be for at the contract unit price per square yard for STABILIZED CONSTRUCTION ENTRANCE, which price shall be payment in full for all material, labor and any other items required to complete the work.

# **EXPLORATION TRENCH (SPECIAL)**

<u>Description</u>. This work shall be done in accordance with Section 213 of the Standard Specifications except as modified herein. This item shall consist of excavating a trench at the locations directed by the Engineer for the purpose of locating existing utilities within the construction limits of the proposed improvement.

<u>General.</u> The depth of the trench shall be variable. The width of the trench shall be sufficient to allow proper investigation of the entire trench.

Trench backfill shall be used under and within two feet (2') of paved areas, including streets, curbs, sidewalks and driveways shall be gradation CA-6 and shall meet the requirements of Article 1004 of the Standard Specifications.

<u>Method of Measurement</u>. This work shall be measured for payment per foot of trench. Payment shall be based on actual length of trench explored without change in unit price because of adjustment in plan quantities.

<u>Basis of Payment</u>. This work shall be paid for at the contract unit price per foot (regardless of depth) for EXPLORATION TRENCH (SPECIAL), and no extra compensation will be allowed for any delays, inconveniences or damage sustained by the Contractor in performing the work. This price shall include excavation, backfill, disposal of excess material.

#### **CONNECTION TO EXISTING SEWER**

<u>Description</u>. This item shall consist of the connection of existing sewers to proposed drainage structures with the installation of watertight flexible rubber connectors.

The connector shall conform to ASTM C-433 & C-923 and include a stainless-steel band. The connector shall provide a watertight connection with the drainage structure. The use of mortar, brick or rock shall not be permitted to fill in voids.

Any damage to the existing storm sewer shall be repaired to the Engineer's satisfaction at no additional cost.

This item shall be in accordance with the Standard Specifications.

<u>Method of Measurement</u>. This work shall be measured for payment per each of connection to existing sewer.

<u>Basis of Payment</u>. This work shall be paid for at the contract unit price per each for CONNECTION TO EXISTING SEWER, and shall include all work, labor, equipment and materials to complete the item.

#### REMOVE AND REINSTALL LIGHT POLES

<u>Description</u>. This item consists of removing, storing and reinstalling light pole including associate luminaires where indicated on the plans and as directed by the Engineer.

# Construction Requirements.

<u>Removal:</u> The existing light pole and associated luminaires shall be electrically disconnected from the underground wiring. Unused underground cable shall be removed and disconnected back to the last location with an energized luminaire. The ground rod shall be removed. The existing light pole and associated luminaires shall be removed without damaging the pole, bracket arm or luminaires. All removed items including light poles, bracket arms, luminaires and all other components shall be stored temporarily until reinstallation in a secure location.

<u>Reinstallation:</u> Reinstallation of the light pole and associated luminaries shall comply with Articles 830 and 844 of the Standard Specifications as modified below.

The pole, hardware, bracket arm, and luminaires shall be subject to inspection by the Engineer prior to reinstallation. Equipment that is not in good condition shall be replaced at no additional cost to the State and the rejected materials removed from the work site at the Contractor's expense.

A new ground rod shall be installed and connected to all metallic components mounted with a new equipment grounding conductor. The proposed equipment grounding conductor shall be exothermically welded to the ground rod as shown in BE-300.

Once the lighting unit is reinstalled, the luminaire shall be tested and re-aimed as necessary to provide acceptable lighting and to the satisfaction of the Engineer. Additional tasting shall be performed in accordance with Section 801.13 of the Standard Specifications.

<u>Method of Measurement</u>. This work shall be measured for payment per lump sum of remove and reinstall light poles.

<u>Basis of Payment</u>. This work shall be paid for at the contract unit price per lump sum for REMOVE AND REINSTALL LIGHT POLES and shall include all materials, labor, equipment, tools and all incidentals necessary for the completion of this work as described herein and elsewhere in the contract documents.

# **REMOVAL OF CABLE IN CONDUIT**

<u>Description</u>. This work shall consist of removing existing electric cables from conduit at the locations shown on the plans and disposing of them. All electric cables shall be disconnected from their source and removed all together from the conduit.

<u>Construction Requirements.</u> The Contractor shall be responsible for verifying the upstream source of power, and downstream electrical equipment connected prior to disconnecting.

If cables cannot be removed from the conduit, the Contractor shall inform the Engineer.

Work to be performed under this item shall be in conformance with IDOT and local ordinances.

<u>Method of Measurement</u>. This work shall be measured for payment per foot of conduit that cables are removed from (not by the number of cables or total length of cables removed).

<u>Basis of Payment</u>. This work shall be paid for at the contract unit price per foot for REMOVAL OF CABLE IN CONDUIT, which price shall be payment in full for all material, labor and any other items required to complete the work.

#### INTERCEPT EXISTING CONDUIT

<u>Description</u>. This item consists of intercepting an existing conduit or raceway for the purpose of installing new electrical equipment or making a connection of a new conduit.

<u>General Requirements.</u> Work under this item shall be performed in accordance with Sections 800, 810, 811, 812 and 1088 of the Standard Specifications.

Construction Requirements. The Contractor shall pull ack the existing Fiber Optic cables, Telecommunication cables, or Electrical cables and carefully cut the conduit or raceway so that the cut conduit ends are smoot. For embedded conduits, the Contractor shall carefully remove the existing concrete encasement around the conduit to be intercepted and thoroughly clean the conduit for a proper connection to the new conduit or junction box. This item shall include all work necessary to connect new conduit runs to the existing conduit runs and shall also include reinstalling the existing cables within the new conduit run. All new conduit and conduit fittings required to intercept the existing conduit and make the necessary connections to create a continuous conduit run into the new junction box or new conduit will not be paid for separately and shall be included in this item. The Contractor shall furnish and install all materials for a complete installation.

<u>Method of Measurement</u>. This work shall be measured for payment per each basis for conduit end cut.

<u>Basis of Payment</u>. This work shall be paid for at the contract unit price per each for INTERCEPT EXISTING CONDUIT, which payment in full for the material and work described herein.

# REMOVE AND REERECT RIGHT OF WAY MARKERS

<u>Description</u>. This item consists of removing and re-erecting right-of way markers in conflict with proposed work.

<u>General Requirements.</u> All right-of-way markers affected by the proposed construction and to remain in their existing location post construction shall be removed and re-erected as shown in the plans or directed by the Engineer.

# Construction Requirements.

<u>Removal:</u> The Contractor shall make the necessary arrangements for the removal of any right-of-way markers that are within the limits of this project and will be re-erected within the limits of the project. The Contractor shall make sure all locations are witnessed by a Professional Land Surveyor and confirm with the Engineer prior to removing them.

The existing right of way markers shall be removed without causing damage and shall be stored temporarily until reinstallation in a secure location.

<u>Re-erecting:</u> The marker shall be subject to inspection by the Engineer prior to reinstallation. If the marker is not in good condition, it shall be replaced at no additional cost to the State.

All work shall comply with Article 666.04 of the Standard Specifications. An Illinois Professional Land Surveyor, with a Department prequalification in "Special Services – Land Survey", shall be obtained by the Contractor to set the right-of-way and property corners.

The right-of-way and property corners shall be set after the construction work is complete, and there is no possibility of disturbance of the marker.

<u>Method of Measurement</u>. This work shall be measured for payment per each.

<u>Basis of Payment</u>. This work shall be paid for at the contract unit price per each for REMOVE AND REERECT RIGHT OF WAY MARKERS, which payment in full for the material and work described herein.

#### SANITARY SERVICE TO BE ADJUSTED

<u>Description</u>. This work shall consist of the reconnection of existing sanitary services disturbed during the installation of the proposed water main. A service shall be considered whenever the water main passes less than eighteen inches above or any distance below the service.

The existing service pipe shall be cut one and one-half foot beyond the walls of the water main trench in a manner that provides a neat and smooth joint. The reconnection of the new and existing pipes shall be made with PVC pipe grade SDR 26, ASTM D2241, 160 psi pressure pipe, or better with push-on bell and spigot type with rubber ring seal gasket ASTM D3139. Non-shear couplings (couplings with stainless steel shear rings) shall be used to connect pipes of dissimilar material or size. The excavation shall be backfilled with trench backfill to a point one foot above the top of the sanitary service. Backfill shall be placed in lifts and firmly compacted such that no future settlement occurs.

NOTE: NO RECONNECTION SHALL BE BACKFILLED UNTIL INSPECTED AND APPROVED BY INSPECTOR.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per each for SANITARY SERVICE TO BE ADJUSTED, which price shall be payment in full for all work as specified herein.

# **CONNECTION TO EXISTING WATER MAIN 8"**

<u>Description</u>. Unit price per each for connection to existing water mains shall include full compensation for labor, materials and equipment for locating, tapping, pipe cutting, plug removal, fittings, sleeves, temporary plugs, plugging and capping of water main to be abandoned, temporary flushing and sampling vents, excavation, concrete pedestals, hauling and disposal of excess materials, sheeting, bedding, backfill, compaction, dewatering, temporary restoration of roadways, cleanup and all work incidental to connection to existing mains.

Any plugging completed on the main shall be done using a cap or plug fitting to make a structurally sound and waterproof seal to facilitate a watertight existing main. The Contractor shall also place any necessary thrust restrain to keep the plug or end sections of existing pipe from separating from the main under pressure.

Existing water mains will be shut down for the connection process with 24-hour notice provided by the Contractor to affected residents by notice provided by the Engineer. Shutdown for water main connection shall be coordinated with the Village of Hanover Park 48 hours in advance. Village's Public Works shall perform all shutdown operations. The Contractor shall not operate existing Village owned valves. Shutdowns will be one day between the hours of 9:00 AM to 3:00 PM.

Shutdowns shall only occur on Monday to Wednesday. No shutdown shall be allowed on Thursday or Friday, unless approved by the Engineer. Contractor shall be charged with extra expense including overtime and mobilization for testing on Saturdays and Sundays.

<u>Method of Measurement</u>. This work will be measured for payment in place as each for CONNECTION TO EXISTING WATER MAIN 8".

<u>Basis of Payment</u>. This work shall be paid for at the contract unit price per each for CONNECTION TO EXISTING WATER MAIN 8", which price shall include all labor, materials and equipment necessary to do the work.

### FIRE HYDRANTS TO BE REMOVED

<u>Description</u>. This work shall include the disconnection and removal of existing hydrants that will no longer be in service due to this contract. Included in this item is the removal of the auxiliary valve and connecting water main, disposal of excess material, backfill and securely plugging the hydrant tee. All removed hydrants and appurtenances, regardless of condition, shall be delivered to the Village of Hanover Park Public Works. All deliveries shall be coordinated with the Engineer.

The Contractor may not remove any fire hydrant without the permission of the Engineer.

The void resulting from the removal of fire hydrants, auxiliary valves, valve boxes and associated connecting water main shall be backfilled by Method 1 in accordance with the requirements of Article 550.07. The backfill material shall meet the approved of the Engineer. The backfill material for voids made in the subgrade of the proposed improvement, and voids where the inner edge of the void is within two feet of the proposed edge of pavement, curb, gutter, curb and gutter, stabilized shoulder or sidewalk shall be aggregate and shall meet the requirements of Article 208.02.

All materials removed that are not salvaged, as determined by the Engineer, shall be disposed of according to Article 202.03.

Method of Measurement. This work will be measured for payment in place as each for FIRE HYDRANTS TO BE REMOVED.

<u>Basis of Payment</u>. This work shall be paid for at the contract unit price per each for FIRE HYDRANTS TO BE REMOVED which price shall include all excavation, backfilling, materials and transportation necessary to complete this item.

# FIRE HYDRANT AND VALVE (SPECIAL)

<u>Description</u>. Fire hydrants shall have a valve opening of five and on fourth (5-1/4) inches and shall be equipped with two (2), two and one-half (2-1/2) inch hose connections and one (1), four and one-half (4-1/2) inch male pumper connections. The outside diameter of the male thread on the two and one-half (2-1/2) inch hose connection shall be "National Standard" threads. Hose caps shall be fastened to barrel with steel chain of at least one either (1/8) inch thickness.

Each hydrant shall be provided with a drip that will leave no water standing in the barrel of the hydrant when the hydrant is closed. This drip shall close tightly before the hydrant begins to open. The hose and steamer connections shall be securely leaded and locked into the hydrants and each shall be provided with a suitable cast iron threaded cover fastened securely.

All fire hydrants shall be equipped with an auxiliary valve and cast-iron valve box. The auxiliary valve shall be a six (6) inch gate six (6) inch cast iron water pipe (Class 150).

Fire hydrants shall be the break flange type, open against pressure and shall be Mueller Centurion or Clow Medallion.

The bowl of each hydrant shall be well braced against unexcavated earth at the end of the trench with stone slabs or concrete backing, or it shall be tied to the pipe with suitable rods or clamps. There shall be restrained joints between the auxiliary valve and the tee, such as a hydrant locking tee and mega-lugs. All hydrants shall be thoroughly cleaned of dirt and foreign material before setting.

The height of the nut on a four and one-half (4-1/2) inch steamer connections shall be no less than twenty-four (24) inches or more than thirty-six (36) inches above the finished grade of the hydrant.

All new fire hydrants shall be covered or labeled as being out of service, until such time as the new main is brought into service.

All fire hydrants shall conform to AWWA C-502.

Method of Measurement. This work will be measured for payment in place as each for FIRE HYDRANT AND VALVE (SPECIAL).

<u>Basis of Payment</u>. This work shall be paid for at the contract unit price per each for FIRE HYDRANT AND VALVE (SPECIAL), which price shall include all excavation, backfill and compaction, the hydrant, auxiliary valve and box, all six-inch ductile iron water main pipe up to the main line tee and all fittings.

#### WATER MAIN REMOVAL

<u>Description</u>. This work consists of removing water main as shown on the Plans or as directed by the Engineer. Work shall conform to the applicable portions of Section 551 and Section 605 of the Standard Specifications. The ends of any water main that is to be abandoned or remain in service shall be plugged by cutting and removing a section of the pipe and placing a restrained joint cap/plug fitting on the end of the fitting or cut pipe section and place any necessary thrust restrain to keep the plug or end sections of existing pipe from separating from the main under pressure. The plug shall make a structurally sound and waterproof seal.

<u>Method of Measurement</u>. This work will be measured for payment for removal in feet.

<u>Basis of Payment</u>. This work shall be paid for at the contract unit price per foot for WATER MAIN REMOVAL. This work shall include all labor, equipment, materials, excavation, removal and disposal

of the pipe, backfill with suitable excavated materials and aggregate as needed and disposal of all surplus material.

#### **DUCTILE IRON WATER MAIN**

Water main pipe materials and installation shall meet all of the applicable requirements of the most current edition of the Standard Specifications for Water and Sewer Main Construction in Illinois, and the following:

This work shall also be done according to the specifications, Special Provisions and to the requirements of the construction permit of Illinois Environmental Protection Agency. The work shall also be completed according to Section 604.1450.b Underwater Crossing of the Illinois Administrative Code. Permanent taps or other provisions to allow insertion of a small meter to determine leakage and obtain water samples must be made on each side of the valve closest to the supply source.

The extent of water main work as shown shall include the following: Trench excavation, backfill and cleanup, pipe installation, fittings, connecting to existing water main, cut offs and plugs if required, bedding, testing, flushing, shoring and bracing. Fittings such as reducers, bends and tees shall be included in the Contractors unit prices for water main.

No water main work shall commence until the IEPA construction permit is issued.

Watermain shall meet the separation requirement from any sanitary or storm sewer per the IEPA requirements and as shown on the plans.

### **EXISTING CONDITIONS**

The location of underground utilities shown on the drawings represents the best information of the Owner. The Contractor shall determine the location of underground utilities and perform the work in a manner which will avoid damage.

Should unidentified or incorrectly located piping or other utilities be encountered during the performance of the work, the Contractor shall consult the Engineer immediately for instructions on how to proceed.

If existing utilities are to remain in place, the Contractor shall provide adequate means of protecting such utilities from any damage which may be caused by his construction operations. Contractor shall repair any such damage to the satisfaction of the Engineer at no additional cost to the Owner.

If existing utilities are to be removed, they shall be demolished and completely removed from site. Contractor shall consult with the Engineer and Utility Owner before any utility services are shut-off or disconnected.

#### MATERIAL REQUIREMENTS

Gland body, wedges and wedge actuating components shall be cast from grade 65-45- 12 ductile iron material in accordance with ASTM A536.

Cement mortar lining shall conform to the latest revision of AWWA C104 standards.

All pipe fittings shall be mechanical joint class 350 compact ductile iron in accordance with AWWA C153. Fittings shall be cement lined in accordance to ANSI/AWWA. Fittings shall have distinctly cast on them pressure ratings, nominal diameters of openings and the number of degrees or fraction of the circle on the bends. Ductile Iron fittings shall have the letters "DI" or "Ductile" cast on them. Cast letters and figures shall be on the outside body of the fitting set forth in the latest revision of ANSI/AWWA specifications. Fittings shall be included in the unit price per foot of water main.

All jointing materials shall be as furnished by manufacturer of pipe and fittings. All jointing materials shall be in accordance with AWWA C111. Joint restraint shall be Megalug Mechanical Joint Restraining Glands (Series 1100 or Approved by the Engineer) shall be used for all fittings (tees, bends, etc.) and shall be included in the cost per FOOT of the DUCTILE IRON WATER MAIN of the size specified. Materials and Installation Specifications are as follows:

# **INSTALLATION & CONSTRUCTION REQUIREMENTS**

Mechanical joint restraint shall require conventional tools and installation procedures per AWWA C600, while retaining full mechanical joint deflection during assembly as well as allowing joint deflection after assembly.

Proper actuation of the gripping wedges shall be ensured with torque limiting twist off nuts.

All water main pipe shall be laid to a depth of five and one-half (5-1/2) feet measured from the existing ground surface or established finished grade shown on the plans to the top of the barrel of the pipe. It may be necessary to increase the depth of the proposed water main to avoid conflicts with other utilities. In addition, the depth of the connection to the existing water main may be greater or less than 5.5'. In both cases no additional compensation will be given to the contractor for extra depth except for increased quantities for selected trench backfill.

Trench section shall be per the "Standard Trench Sections" detail within the plans.

Bedding, haunching and initial backfill to a height of one foot above the pipe, excavation, hauling, and disposal of excess material is included in the cost of this item. In areas where the water main is in non- paved areas, backfilling the trench with native materials is included in the cost of this pay item. Water main shall follow lines and grades per the plan. Thrust blocking shall be per the THRUST BLOCK detail within the plans and will be included in the unit cost per foot of water main.

This WM is intended to be installed via open cut in conjunction with the staged construction of the culvert. The design, specs, and details align with this intention. Should the contractor decide to install via another method, this must be approved by the Engineer in the field. There will be no additional compensation awarded for a change in installation method.

Testing shall be performed according to the requirements set forth in these specifications and as directed by the Engineer. Testing, fittings, tees, mechanical restraining joints and all vertical and horizontal bends shall be included in the unit price of ductile iron watermain of the size specified.

All excess excavated material shall be disposed of offsite in accordance with Section 202 of the SSRBC. In addition, The Contractor shall not conduct any generation, transportation, or recycling of construction or demolition debris, clean or general or uncontaminated soil generated during construction, remodeling, repair, and demolition of utilities, structures, and roads that is not

commingled with any waste, without the maintenance of documentation identifying the hauler, generator, place of origin of the debris or soil, the weight or volume of the debris or soil, and the location, owner and operator of the facility where the debris or soil was transferred, disposed, recycled or treated. This documentation must be maintained by the Contractor for 3 years.

Brass wedges shall be installed to provide electrical conductivity.

At a minimum, Type 3 laying conditions shall be provided, conforming to AWWA Standard C-600.

Unless otherwise shown on plans or directed by the Engineer, all ductile iron water main pipes shall be installed without granular or concrete cradles. Although bell holes may not be required, the trench bottom shall be excavated and shaped such that the pipe is uniformly supported over its entire length. The pipe shall be installed so that the entire length of pipe shall have full bearing. No blocking shall be used to adjust the pipe to grade except in conjunction with concrete thrust blocking or encasements. Laying of water main pipe shall be accomplished to line and grade in the trench only after it has been completely de-watered and the bedding is free of mud, loose silt, or gravel. All foreign material shall be kept out of the pipe. All pipe laid shall be retained in position such to maintain joint closure, alignment, and grade until sufficient backfill has been completed to adequately hold the pipe in place.

All trenches and excavations beneath or within two feet (2') of pavement, curb and gutter, sidewalks and driveways, or as otherwise shown on plans or as directed by the Engineer in the field, will require trench backfill of the type indicated on the plans.

All backfilling shall be done in accordance with Section 20-4.06 of the Water and Sewer Specs. Specifically, all trenches and excavations other than those shown on the plans or designated by the Engineer to receive trench backfill, shall be backfilled by any acceptable method which will not dislodge or damage the pipe, or cause bridging action in the trench. Spoil material may be used as backfill in turf areas unless shown otherwise on the plans. In turf areas, CA-7 crushed stone, Class A, shall be used to a height of one (1) foot above the top of the pipe, and the balance of the backfill may be approved excavated material.

At the end of each work day, the end of installed water main pipe shall be protected and the excavation backfilled. No excavation or trench shall be left open overnight.

### THRUST RESTRAINT

Formed concrete thrust restraints may be required at fire hydrants, plugs, caps, and tees in addition to the wedge action retainer glands at fittings, as shown on the plans, or upon the specific direction of the Engineer. 3,000 PSI Portland cement concrete shall be used. The use of wood blocking, concrete blocks, stakes or clamps will not be allowed.

Thrust restraints shall be included in the cost of the pipe being installed, and no additional compensation will be allowed the Contractor.

#### WATER MAIN TESTING

Contractor shall submit a testing schedule and procedure to Engineer for review three days prior to initiating testing program. Submittal shall include type of equipment and location of its connection to new system. Testing shall be included in the bid items and shall be considered included in the cost of performing the work.

Testing shall be in accordance with Section 41-2.14 of Standard Specifications for Water and Sewer Construction in Illinois and ANSI/AWWA C600-93, and shall also comply with local and IEPA rules and regulations.

### TESTS REQUIRED:

- 1. All new water main work shall be tested for pressure and leakage.
- 2. Contractor shall notify Engineer and Utility Owner 48 hours prior to initiation of testing.
- 3. Contractor shall not perform any testing without Engineer and Utility Owner present.
- 4. New watermain shall not be connected to an existing main until after safe water samples have been obtained from new water main system addition.
- 5. Where a new main is to be connected to an existing main, the following method shall be used prior to performance of a pressure/leakage test of new main.
  - a. New main may be connected to existing water main with a valved connection. Said connection valve shall be shut tight and locked by Utility Owner to prevent a completed connection between existing and new sections of water main. Upon completion, new main shall be filled and disinfected. Upon receipt of safe water samples, new main shall be pressure and leakage tested.

#### PRESSURE TEST:

All water main, fittings and valves shall be subjected to a hydrostatic pressure of 150 PSI after installation. Each section of water main and connections to be pressure tested shall be carefully filled with water to expel all entrapped air, and the test pressure shall be applied by use of a pump connected to a tap in the pipe. The test pressure shall hold without further pressure application for a duration of two (2) hours, with a maximum pressure loss of 7.5 PSI. In the event of a pressure loss greater than the allowable loss, the Contractor shall locate and correct all leaks, and then repeat the hydrostatic pressure test until satisfactory to the Engineer.

#### LEAKAGE TEST:

Leakage test shall conform to the Section 41-2.14C of the Standard Specifications for Water and Sewer Construction in Illinois.

"(1) After completion of the pressure test, a leakage test shall be conducted to determine the quantity of water lost by leakage under the specified test pressure. Test pressure is defined as the maximum operating pressure of the section under test and is bases on the elevation of the lowest point in the line or section under test corrected to the elevation of the test gauge. Applicable provisions of AWWAC600 and C605 shall apply. Duration of each leakage test shall be minimum of two (2) hours in addition to the pressure test period.

(2) Allowable leakage in gallons per hour for pipe shall not be greater than that determined by the formula:

In inch-pound units,

$$L = \frac{SD\sqrt{P}}{148,000}$$

Where:

L = Testing (leakage) allowance (makeup water), in gallons per hour

S = Length of pipe tested, in feet

D = Nominal diameter of the pipe, in inches

*P* = Average test pressure during hydrostatic test, in PSI (gauge)

- (3) Leakage is defined as the quantity of water to be supplied in the newly laid pipe or any valved section under test, which is necessary to maintain the specified leakage test pressure after the pipe has been filled with water and the air expelled. All visible leaks are to be repaired regardless of allowance used for testing.
- (4) Flanged pipe shall be "bottle tight.""

In the event the new work fails to pass the leakage test, the Contractor shall locate and correct all leaks, and then repeat the 24-hour metered leakage test until satisfactory to the Engineer.

The Contractor shall provide all labor, materials, tools, and equipment necessary to perform the pressure and leakage tests.

The Contractor shall satisfactorily perform the pressure and leakage tests prior to requesting the Engineer to witness the official tests. The Contractor shall notify the Engineer at least 48 hours prior to the time that the official tests are requested. Depending on the traffic conditions, public hazard, or other reasons, the Engineer may direct when tests of new work shall be conducted and may order the tests to be made in relatively short sections of new water mains.

This work is included in the cost of the installation of the water main pipe, and no additional compensation will be given for any required re-testing.

#### DISINFECTION

After the new watermain work has been satisfactorily completed, including pressure and leakage testing, the Contractor shall furnish the equipment and chemicals necessary to properly disinfect the work in accordance with the latest revision of AWWA Standard C651 and section 41-2.15 of the Standard Specifications for Water and Sewer Construction in Illinois. The disinfecting solution shall be retained in the main for a period of not less than 24 hours after which the water shall contain no less than 25 mg/l chlorine throughout the new work. After the 24-hour retention period, the disinfecting solution shall be flushed from the main until the chlorine concentration in the water flowing from the main is no higher than that generally prevailing in the Owner's system, or less than 1 mg/l.

De-chlorination is required of the disinfecting solution before being released to the storm sewers. After disinfection and flushing, and before the new water main is placed in service, water samples shall be collected by the Contractor from the end of the main on two consecutive days at least 24 hours apart. Samples shall be collected in sterile bottles treated with sodium thiosulfate and delivered to a State approved laboratory for bacteriologic analysis.

The Owner will not accept the new water main work until satisfactory bacterial test reports have been received from the laboratory. If the initial disinfection fails to produce satisfactory samples, the disinfection procedure shall be repeated until satisfactory laboratory test reports have been obtained.

This work is included in the cost of the installation of the water main pipe, and no additional compensation will be given for repeating any part of the disinfection procedure, should the residual level of chlorine fail to meet the requirements.

# LEAK DETECTION

Upon completion of the proposed water mains and services, but prior to the placement of any asphalt or concrete roadways, the water main shall be leak tested.

The work to be done shall include furnishing of all labor, material, transportation, tools, and supplies necessary to acoustically survey the installed water mains and service connections. The Contractor shall be responsible for and shall provide personnel qualified to conduct waterline locating activities during the course of the leak detection survey.

The contractor shall listen on all hydrants, valves, and when necessary b-boxes with sensitive sound intensifying instruments to determine areas of leakage. When a leak is discovered, the contractor shall conduct further investigations using an Electronic Leak Correlator to pinpoint the leaks for repairs.

Any cracked or defective pipefitting, valves, hydrants or services found shall be removed and replaced at no additional cost to the Village with satisfactory materials and the test repeated until test results are satisfactory. Upon completion of the leak survey a final report shall be submitted indicating the following, at a minimum:

- 1. A description of the area surveyed including lineal feet of the system surveyed;
- 2. A summary list of leaks including a description of the type of leak (main line, service line, valve or hydrant) and the location of the leak.
- 3. Individual leak detection reports incorporating a diagram of the area surveyed for the suspect leak, as well as information relative to the date and time the leak was detected, the address/location of the leak and the number and type of connection points used.
- 4. A summary list of leak repairs completed including a description of the type of leak (main line, service line, valve or hydrant), the location of the leak and the date and time the leak repair was completed.

To summarize, the following specific items shall be included in the contract unit price for ductile iron water main pipe:

- 1. Removal and disposal of all surplus trench excavation from site;
- 2. Excavation for and placement of granular bedding and encasement material when shown on the plans and/or ordered by the Engineer;
- 3. Support of trenches, including any necessary bracing or shoring;
- 4. De-watering of trenches or any excavation;
- 5. Adjustment to horizontal and vertical alignment due to utility conflicts;
- 6. All backfilling (including furnishing and installation of trench backfill); and
- 7. All fittings, thrust blocking, and other appurtenances necessary for a complete installation.
- 8. Pressure and Leakage testing of water mains.
- 9. Disinfections of water mains
- 10. Final flushing and sampling of water mains.
- 11. Leak Detection of proposed water mains and services

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per FOOT for DUCTILE IRON WATER MAIN (TYPE & SIZE SPECIFIED). The length measured will include fittings and tees.

### WATER SERVICE CONNECTION 1 1/2"

<u>Description</u>. This work shall be in accordance with the WATER SERVICE DETAIL within the plans.

All existing services shall be replaced from the main to the B-box and shall include a new corporation, B-box, all necessary copper pipe, and Roundway.

For those service lines unable to meet the required clearances from sanitary or storm sewers, casing pipe shall be installed around the service line to the limits called for by the Water and Sewer Specs. Service line encasement shall be installed from the auger pits and shall not entail open cutting an existing street pavement not otherwise disturbed in the process of installing the replacement water main.

The new water service shall be encased whenever the horizontal and vertical separation of the new service from existing storm or sanitary sewers or services cannot be maintained. The new service shall be encased on each side of the crossing until the perpendicular distance from the end of the casing to the storm sewer or sanitary sewer or service is at least ten feet. Casing pipe shall consist of a minimum 4 inch diameter PVC SDR-26 Pipe. Encasement of water services shall be included in the cost of the water service replacement.

The Engineer reserves the right to require the replacement of additional services; however, services replaced due to damage caused by the Contractor's operations shall not be paid for under this or any other item.

The service line shall be of one and one-half (1 1/2) inch type K (soft) copper tubing as noted on plans or directed by Engineer. All copper connections shall be made with FLARED joints and fittings. All water service lines shall have a minimum five and half (5.5) feet of cover. The water service shall have no splices.

The corporation stop shall be Mueller H-15000 and shall be installed by tapping the water main with an approved tapping machine. The tap shall be made in the upper third of the main, as close to a

45-degree angle as is practical. The tap shall be made through a full circle stainless steel tapping clamp of the correct size depending on diameter of water main and size of new service tap. The roundway key stop shall be Mueller H-15154, with a buffalo style size 100E (6') or 94E (5') service box. Only cast iron buffalo style boxes and lids will be allowed. The roundway key stop and buffalo box shall be located within the Front yard one (1) feet from the property line or as close to that distance as possible from the property line, unless directed otherwise by the Engineer. The cover of the buffalo box shall have the word "WATER" cast thereon. The Contractor shall record the location of each buffalo box in relation to the nearest corner lot line, and the tap in relation to the nearest fire hydrant and this information should be mentioned in Record drawing. No buffalo box shall be located in a driveway or in the sidewalk without the approval of the Engineer.

No splices of any kind will be allowed in the water service line from the corporation stop to the roundway key stop. There shall be no splice from the roundway key stop to the water service meter unless specifically authorized by the Village.

A  $\frac{3}{4}$ "X1.5" or 1"X1.5" brass reducer shall be supplied for every existing service that is  $\frac{3}{4}$ " or 1". The reducer shall be included in the cost of the water service connection.

Prior to final inspection, the Contractor shall see that all water appurtenances are adjusted to grade and clearly visible. All Materials and Methods used shall comply with the above specifications.

However, if long services cannot be pushed, contractor shall open cut, in which case excavation, haul-off, trench backfill shall be included in the price of service connection.

Basis of Payment. This work will be paid for at the contract unit price each for WATER SERVICE CONNECTION 1 ½", which price shall include all excavation, materials, augering, PVC-SDR-26 Casing Pipe and backfilling necessary to complete this item. Restoration, pavement or driveway replacement, topsoil, and sodding will be paid for separately.

It is expected that all services shall be augured under street pavements not otherwise disturbed by the installation of the main or encumbered by the separation requirements from storm and sanitary sewers.

#### **WATER VALVES**

<u>Description</u>. Water main valves shall be Mueller or Waterous resilient wedge or resilient seated gate valves. Resilient wedge or resilient seated gate valves shall be cast iron body, bronze stem and stem nut, rubber seated type with non-rising stem and O-ring packing and conforming to the latest revised requirements of AWWA Specification C509 or C515. The resilient rubber seat shall be bonded to the gate or wedge with the bond proved by requirements of ASTM D429 testing procedures.

All valves shall be counter-clockwise opening and shall be supplied with 2-inch square operating nuts.

Unless otherwise specified, all valves shall be installed in valve vaults forty-eight (48) inches in diameter except for valves greater than ten (10) inches which shall be in a sixty (60) inch vault.

Unit price for each valve shall include full compensation for cost of furnishing and installing valves, column, including masonry support blocking; concrete buttresses; rod restraints; fittings; testing; bacteria disinfection; concrete work, corporation stops; masonry blocking, and disposal of excess material; cleanup work incidental to valve installation not specifically included for payment under other unit prices. Valve installation shall be a component of the unit price cost for WATER VALVES, (of the size specified) installation. Number of valves measured shall be equal to actual number of valves installed.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price EACH for WATER VALVES, (of the size specified).

# VALVE VAULTS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID

<u>Description</u>. Work shall be in accordance with the WATER VALVE VAULT detail within the plans.

Unit price for each vault shall include full compensation for cost of furnishing and installing vaults with concentric cone, including concrete work, masonry work, corporation stops; specified manhole frame and cover; masonry blocking, flexible pipe connectors with stainless steel bands, excavation, hauling, and disposal of excess material; designated backfill; 6" bedding material; compaction; temporary restoration of disturbed area, but not including permanent restoration, cleanup and work incidental to valve vault installation not specifically included for payment under other unit prices. Designated backfill and work incidental to vault installation shall be a component of the unit price cost for this item.

A  $\frac{3}{4}$  inch corporation stop, Mueller No. H-15000, shall be installed on new water main pipe inside each valve vault. Larger corporation stops may be required for flushing purposes on certain valves as shown on the plans.

"WATER" and "HANOVER PARK" shall be cast into each lid.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price EACH for VALVE VAULTS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID.

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

<u>Description</u>. This work shall consist of furnishing and installing bicycle railing along the top of headwalls and wingwalls adjacent to the Mallard Lake Path and sidewalk located over the proposed culvert structure as shown on the plans. The work includes but is not limited to coordination, submittals, materials, fabrication, finishing, transportation, installation and all other miscellaneous elements required for complete provision of the bicycle railing. All work shall conform to the IDOT Standard Specifications for Road and Bridge Construction, adopted April 1, 2022 and as specified herein.

# General:

(a) Related Documents

- (1) Drawings and general provisions of the Contract and Section 509 of the IDOT Standard Specifications for Road and Bridge Construction, adopted April 1, 2022, except as noted otherwise.
- (b) Performance Requirements
  - (1) Provide a comprehensive 10 year warranty on finish system.
- (c) Submittals
  - (1) Product Data Submit product data for each type of product indicated:
    - (i) Steel Components: Structural Steel Tubing, Plates, Splices
    - (ii) Fasteners
    - (iii) Finish Systems including factory and field-applied systems
  - (2) Material Certifications Submit material certifications signed by manufacturers certifying that each of the following items complies with requirements:
    - (i) Steel
    - (ii) Fasteners
    - (iii) Finish Systems
  - (3) Shop Drawings Detail fabrication and installation of bridge fence railing. Indicate plans, elevations, dimensions, shapes, cross sections and limits of each finish.
    - (i) Show bridge fence railing layouts and indicate post and railing types, sizes, orientation and locations. Indicate critical adjacent rustification and joints.
    - (ii) Indicate welded connections by AWS standard symbols. Detail loose and castin hardware, inserts, connections, and joints, including accessories.
    - (iii) Indicate locations and details of anchorage devices to be embedded in other construction.
  - (4) Test results, certified by an independent testing laboratory, from tests required in Section 5 of Finishes in the Materials section of this special provision.
  - (5) Sample of the final powder coat finish.

Materials: Materials shall meet the requirements of Article 509.02 of the Standard Specifications.

#### (a) Finishes

- (1) All posts, rails, anchor devices, bars, splices, plates and structural steel tubing shall be hot-dip galvanized after shop fabrication according to AASHTO M 111. All bolts, nuts, washers and anchor rods shall be galvanized according to AASHTO M 232. Stainless steel materials shall not be galvanized. Galvanizing shall be smooth and free of drops, spikes, inclusions, blobs, etc. and otherwise optimized to achieve a smooth finished surface.
- (2) Prior to finish coat, mechanically clean galvanized surfaces to smooth the surface and remove large deposits from the galvanizing process. Do not damage or remove the galvanizing material as to compromise the corrosion resistance of the system. Alternately, provide other approved method(s) to ensure smooth final finish surface.

- (3) Prior to finish coat, mechanically clean and roughen stainless steel elements with sandblast for optimal coating adhesion.
- (4) Finish all exposed surfaces of the bridge fence railing with two coats of electrostatic polyester, TGIC powder coating, colored black (Munsell No. N1), with high UV stability, impact, corrosion, heat and humidity resistance. The combined total thickness of the two finish coats shall be a minimum of 6 mils.
- (5) Finish system shall meet or exceed the following:
  - (i) ASTM B 117 Salt Spray (Fog) Test 1,000 hours. The coated steel shall exhibit no visible evidence of rust.
  - (ii) ASTM D 3363 Hardness, ASTM D2793 Direct Impact, ASTM D822 Weatherability.
  - (iii) ASTM D 3359 Mechanical Adhesion Test
- (6) The exposed heads and nuts of all hot-dip galvanized anchor rods shall be spot-painted with an approved paint system to match finish color. The surface to be painted shall first be cleaned with an approved solvent.
- (7) Any damage to the coatings shall be repaired promptly in accordance with the manufacturer's recommendations or replaced with undamaged components. Repairs shall be subject to approval by the Engineer. Finish all damaged, cut or other surfaces not powder-coated, subject to approval by the Engineer, with zinc-rich primer (if not already galvanized) and high performance finish coat, compatible with factory coating system, to match finish color.

<u>Installation:</u> Bicycle Railing shall meet the applicable construction requirements of Article 509.03 of the Standard Specifications and as noted below:

- (a) Bicycle railing posts shall be mounted normal to the top of the shared-use path. The bicycle railing shall be plumb.
- (b) Installation Tolerances:
- (1) Openings between the bicycle railing and adjacent surfaces shall not exceed 4".
- (2) If drill and grout anchor bolt option is used, bolts shall not project more than 1/2" above the nut.

<u>Method of Measurement:</u> Bicycle Railing will be measured for payment in place in feet. The length measured will be the overall length of the fence from center to center of the end posts through all posts and gaps.

<u>Basis of Payment:</u> This item shall be paid for at the contract unit price per feet for BICYCLE RAILING (SPECIAL), which price shall include all material, hardware, labor, transportation, erection, cleaning and finishing as specified herein.

# POROUS GRANULAR EMBANKMENT (SPECIAL)

The unit price bid per cubic yard for Porous Granular Embankment (Special) shall include all labor, material and equipment required to place the CA-7 material and geotextile filter fabric under the proposed box culvert to the limits shown in the plans. This work shall be done in accordance with Sections 207 & 282 of the Standard Specifications and the details shown on the plans. This work shall be paid for at the contract unit price per cubic yard for POROUS GRANULAR EMBANKMENT (SPECIAL).

# COFFERDAM (TYPE 1) (IN-STREAM/WETLAND WORK) (D1)

Effective: January 1, 2019 Revised: August 15, 2022

<u>Description.</u> This work shall be performed in accordance with Section 502.06 of the Standard Specifications for Road and Bridge Construction, except as herein modified. The work shall consist of the preparation of an in-stream/wetland work plan and the installation, maintenance, removal and disposal of the temporary cofferdam(s) to isolate the work area from water within regulated wetlands and Waters of the U.S. (WOUS) in accordance with the authorized U.S. Army Corps of Engineers (USACE) Section 404 Permit and the General Conditions of the current Nationwide Permit Program.

<u>Materials.</u> Materials shall be in accordance with the USACE Section 404 Permit and General Conditions of the current Nationwide Permit Program.

<u>Construction Requirements.</u> Construction shall be in accordance with Article 502.06(a) of the Standard Specifications for Road and Bridge Construction and in accordance with the authorized USACE Section 404 Permit. For Cofferdam - Type 1, it is anticipated the design will be based on the flow requirement as shown in the plans and per the General Conditions of the current Nationwide Permit Program.

The Contractor shall be responsible for diverting the water flow from the construction area using a method meeting the approval of the Engineer and in accordance with the authorized USACE Section 404 Permit and General Conditions of the current Nationwide Permit Program.

This project requires a USACE Section 404 Permit prior to the start of work. All conditions of the Section 404 Permit must be followed. As a condition of the Section 404 Permit, the Contractor will be required to submit an In-Stream/Wetland Work Plan to the Department for approval. The USACE defines and determines in-stream/wetland work within the WOUS.

Guidelines on acceptable In-Stream/Wetland work techniques can be found on the USACE website: https://www.lrc.usace.army.mil/Missions/Regulatory/Illinois/IL-Nationwide-Permits/

<u>Method of Measurement.</u> This work will be measured for payment in units of Each where Each is defined as a plan detailed stage of bridge, culvert or other construction for which a temporary instream cofferdam(s) is required. If staged construction is not detailed/specified on the plans, this work will be measured as a total of One Each.

Basis of Payment. This work will be paid for at the contract unit price per each for COFFERDAM

(TYPE 1) (IN-STREAM/WETLAND WORK).

# **SEEDING, CLASS 4A (MODIFIED)**

This work shall consist of preparing the seed bed, placing the seed, and other materials required in the seeding operation in areas as shown in the plans.

All work, materials and equipment shall conform to Section 250 and 1081 of the Standard Specifications except as modified herein.

The Class 4A (Modified) seed mixture shall be supplied in pounds of Pure Live Seed. All native seed species will be local genotype and verified that original seed collection source must originate from a radius of 200 miles from the project site. Fertilizer is not required.

Article 250.07 Seeding Mixtures – Add the following to Table 1:

CLASS – TYPE	SEEDS	PURE LIVE SEED LB/ACRE
4A (Modified) Low Pr	rofile Native Grass	6.0
Boute	loua curtipendula	
(Sic	de Oats Grama)	2.5
Andro	pogon scoparius	
(Lit	ttle Bluestem)	3.5
Temporary Cover		30/12 (lb/acre)
Spring	g: Avena sativa	
	(Annual Oats)	25.0
	Elymus canadensis	
	(Canada Wild Rye)	3.0
Fall:	Triticum aestivum	
	(Winter Wheat)	9.0
	Elymus canadensis	
	(Canada Wild Rye)	3.0

Variation in the Class 3, 4, 5, or 6 seed quantities or varieties may be allowed in the event of a crop failure or other unforeseen conditions. Quantities of proposed substitutions shall be determined by seed count. The Contractor shall provide for the approval of the Engineer a written description of the proposed changes to the Class 3, 4, 5, or 6 Mixture(s), the reasons for the change, and the name of the seed suppliers who were contacted in an effort to obtain the specified species.

Adjustments will be made at no cost to the contract. Approval of substitutes shall in no way waive any requirements of the contract

### **Seeding Time:**

Seeding shall be completed between October 15 to March 15 but not when raining or when the ground is covered with snow, unless prior written approval is received from Engineer. No seed shall be sown when the ground is not in proper condition for seeding. Seeding done outside of this time frame will not be measured for payment unless approved in writing by Engineer in advance.

The Contractor shall schedule work so that final grade is achieved during the specified seeding times. Any seeding installed on or after March 1 must be incorporated into the soil surface, but no deeper than ¼ inch, such as by rangeland type seed drill, harrow, hand rake, or other method approved by the Engineer.

### Bagging, Transporting, and Storing Seed:

Seed mixtures of the specified classes shall be thoroughly mixed, labeled ad bagged by the supplier. Purity and germination tests no older than twelve months old must be submitted for all seed supplied to verify quantities of bulk seed required to achieve LB PLS specified.

Seed shall be thoroughly mixed, labeled and bagged by the supplier. Seed shall be bagged, transported, and stored in such a manner to protect it from damage and to maintain the viability of the seed. All seed mixtures shall be brought to the site in clearly labeled and unopened bags.

Seed shall be adequately protected from rain, temperature extremes, rodents, insects, and other such factors that could adversely affect seed viability during transport or while being stored prior to planting. Bags of seed that are leaking, wet, moldy, or otherwise damaged shall be rejected and promptly removed from the site of work. Prior to application, the Engineer must approve the seed mix in the bags on site.

### **Layout of Seeding:**

The Contractor shall be responsible for filed verifying the acreage of the area(s) to be seeded. The amount of seed ordered shall match the area(s) to be seeded during the pending planting season. A minimum of 30 days shall be allowed for seed acquisition, testing, and inspection.

The Contractor shall demarcate all areas to be seeded and estimate quantities of each area to determine the quantity of seed necessary to achieve the specified seed rate per acre. The Contractor shall delineate the perimeter of the seedbed with wooden lathe. The wooden lathe shall remain in place. The contractor shall provide a minimum of seven calendar days notice to the Engineer to allow for review and approval of seeding layout.

### Inspection:

The Engineer must witness the delivery of seed with original labels attached in the field. A bag ticket must be affixed to each bag of seed upon delivery, and shall not be removed until the Engineer has reviewed and accepted each bag of seed. The label shall bear the dealer's guarantee of mixture and year grown, purity and germination, and date of test.

### **Seed Bed Preparation:**

All area(s) to be seeded must be properly prepared prior to planting seed.

Bare earth seeding refers to sowing seed upon soils with no existing vegetative cover. In areas with existing vegetation, the vegetation shall be eradicated as specified or as directed by the Engineer.

Seed bed preparation shall not be started until all requirements of Section 212 have been completed. The area to be seeded shall be worked to a minimum depth of 3 in. (75 mm) with a disk, tiller, box rake, or other equipment approved by the Engineer. In areas with heavy soils, tilling or power raking will be required to achieve the proper depth. All soil clods shall be reduced to a size not larger than ½ in. (13 mm) in the largest dimension to create a friable, pulverized topsoil surface suitable for seeding. Dragging the soil surface with the blade of a loader or dozer will not be an acceptable method of seed bed preparation. The prepared surface shall be relatively free of weeds, stones, roots, sticks, debris, rills, gullies, crusting, caking, and compaction. No seed shall be sown until the seed bed has been approved by the Engineer.

### **Seeding Methods:**

No seed shall be sown when wind gusts exceed 25 miles per hour or when the ground is not in a proper condition for seeding, nor shall any seed be sown until the purity test has been completed for the seeds to be used, and said tests show that the seed meets the noxious weed seed requirements. All equipment shall be approved by the Engineer prior to being used. Prior to starting work, seeders shall be calibrated and adjusted to sow seeds at the required seeding rate. Equipment shall be operated in a manner to ensure complete coverage of the entire area to be seeded. The Engineer shall be notified 48 hours prior to beginning the seeding operations so that the Engineer may determine by trial runs that a calibration of the seeder will provide uniform distribution at the specified rate per acre.

Seeding Classes 3, 4, 5, and 6 shall be sown with a broadcast seeder or a rangeland type seed drill. Hand broadcasting and other methods of sowing seed will be allowed in special circumstances as approved by the Engineer. Special circumstances include but are not necessarily limited to steep slopes (over 1:3 (V:H)), inaccessible areas, wet areas, or other unique situations where the use of the specified equipment is not possible.

Method of Measurement. SEEDING, CLASS 4A (MODIFIED) will be measured for payment in acres of surface area of seeding for the seed mix type specified.

<u>Basis of Payment.</u> SEEDING, CLASS 4A (MODIFIED) shall be paid at the Contract unit price per acre. Payment shall be in full for seed, planting, and furnishing all labor to complete the work as set forth above.

### SEEDING, CLASS 5 (MODIFIED)

This work shall consist of Seeding of Class 5 (Modified) in areas as shown in the plans or a directed by the Engineer.

All work, materials, and equipment shall conform to Sections 250 and 1081 of the Standard Specifications except as modified herein.

The Class 5 (Modified) seed mixture shall be supplied in labeled bags which the Resident Engineer will inspect prior to opening the bag. All native species will be local genotype and will be from a radius of 200 miles from the project area. The Class 5 (Modified) seed mix shall be supplied with the appropriate inoculants. The seed shall be sown as soon as possible after inoculation. Seed that has been stored more than 30 days after inoculation shall be reinoculated before sowing. Fertilizer is not required.

Article 250.07 Seeding Mixtures – Delete sentence 4. Add the following to Table 1 – Seeding Mixtures:

CLASS - TYPE	SEEDS	LBS/ACRE
5 (Modified) Short N	ative Forb Mixture:	9.0
	pias syriaca	
`	Common Milkweed)	0.20
	pias tuberosa	0.45
	utterfly Weed)	0.15
•	sia australis	0.00
	alse Indigo)	0.20
	naecrista fasciculata	4.00
•	artridge Pea)	1.00
	opsis lanceolata	0.50
•	ance-leaf Coreopsis)	0.50
	a candida /hite Prairie Clover)	0.80
•	,	0.60
	a purpurea urple Prairie Clover)	1.00
`	iacea purpurea	1.00
	urple Coneflower)	1.00
•	gium yuccifolium	1.00
	attlesnake Master)	0.15
•	arda fistulosa	0.10
	/ild Bergamont)	0.20
	temon digitalis	
	oxglove Beard Tongue)	0.15
	eckia hirta	
(B	lack-Eyed Susan)	3.00
•	phyotrichum oolentangien	se
, ,	ky Blue Aster)	0.15
•	ena stricta	
(H	loary Vervain)	0.50
	•	

Variation in the Class 3, 4, 5, or 6 seed quantities or varieties may be allowed in the event of a crop failure or other unforeseen conditions. Quantities of proposed substitutions shall be determined by seed count. The Contractor shall provide for the approval of the Engineer a written description of the proposed changes to the Class 3, 4, 5, or 6 Mixture(s), the reasons for the change, and the name of the seed suppliers who were contacted in an effort to obtain the specified species. Adjustments will be made at no cost to the contract. Approval of substitutes shall in no way waive any requirements of the contract.

### Seeding Time:

Seeding shall be completed between October 15 to March 15 but not when raining or when the ground is covered with snow, unless prior written approval is received from Engineer. No seed shall be sown when the ground is not in proper condition for seeding. Seeding done outside of this time frame will not be measured for payment unless approved in writing by Engineer in advance.

The Contractor shall schedule work so that final grade is achieved during the specified seeding times. Any seeding installed on or after March 1 must be incorporated into the soil surface, but no deeper than ¼ inch, such as by rangeland type seed drill, harrow, hand rake, or other method approved by the Engineer.

### Bagging, Transporting, and Storing Seed:

Seed mixtures of the specified classes shall be thoroughly mixed, labeled ad bagged by the supplier. Purity and germination tests no older than twelve months old must be submitted for all seed supplied to verify quantities of bulk seed required to achieve LB PLS specified.

Seed shall be thoroughly mixed, labeled and bagged by the supplier. Seed shall be bagged, transported, and stored in such a manner to protect it from damage and to maintain the viability of the seed. All seed mixtures shall be brought to the site in clearly labeled and unopened bags.

Seed shall be adequately protected from rain, temperature extremes, rodents, insects, and other such factors that could adversely affect seed viability during transport or while being stored prior to planting. Bags of seed that are leaking, wet, moldy, or otherwise damaged shall be rejected and promptly removed from the site of work. Prior to application, the Engineer must approve the seed mix in the bags on site.

### **Layout of Seeding:**

The Contractor shall be responsible for filed verifying the acreage of the area(s) to be seeded. The amount of seed ordered shall match the area(s) to be seeded during the pending planting season. A minimum of 30 days shall be allowed for seed acquisition, testing, and inspection.

The Contractor shall demarcate all areas to be seeded and estimate quantities of each area to determine the quantity of seed necessary to achieve the specified seed rate per acre. The Contractor shall delineate the perimeter of the seedbed with wooden lathe. The wooden lathe shall remain in place. The contractor shall provide a minimum of seven calendar day notice to the Engineer to allow for review and approval of seeding layout.

### Inspection:

The Engineer must witness the delivery of seed with original labels attached in the field. A bag ticket must be affixed to each bag of seed upon delivery and shall not be removed until the Engineer has reviewed and accepted each bag of seed. The label shall bear the dealer's guarantee of mixture and year grown, purity and germination, and date of test.

### **Seed Bed Preparation:**

All area(s) to be seeded must be properly prepared prior to planting seed.

Bare earth seeding refers to sowing seed upon soils with no existing vegetative cover. In areas with existing vegetation, the vegetation shall be eradicated as specified or as directed by the Engineer. Seed bed preparation shall not be started until all requirements of Section 212 have been completed. The area to be seeded shall be worked to a minimum depth of 3 in. (75 mm) with a disk, tiller, box rake, or other equipment approved by the Engineer. In areas with heavy soils, tilling or power raking will be required to achieve the proper depth. All soil clods shall be reduced to a size not larger than ½ in. (13 mm) in the largest dimension to create a friable, pulverized topsoil surface suitable for seeding. Dragging the soil surface with the blade of a loader or dozer will not be an acceptable

method of seed bed preparation. The prepared surface shall be relatively free of weeds, stones, roots, sticks, debris, rills, gullies, crusting, caking, and compaction. No seed shall be sown until the seed bed has been approved by the Engineer.

### **Seeding Methods:**

No seed shall be sown when wind gusts exceed 25 miles per hour or when the ground is not in a proper condition for seeding, nor shall any seed be sown until the purity test has been completed for the seeds to be used, and said tests show that the seed meets the noxious weed seed requirements. All equipment shall be approved by the Engineer prior to being used. Prior to starting work, seeders shall be calibrated and adjusted to sow seeds at the required seeding rate. Equipment shall be operated in a manner to ensure complete coverage of the entire area to be seeded. The Engineer shall be notified 48 hours prior to beginning the seeding operations so that the Engineer may determine by trial runs that a calibration of the seeder will provide uniform distribution at the specified rate per acre.

All legumes (Canada Milk Vetch, White Prairie Clover, Purple Prairie Clover, White Wild Indigo, and Illinois Bundleflower) shall be inoculated with the proper rhizobial bacteria in the amounts and manner recommended by the seed supplier before sowing or being mixed with other seeds for sowing. The inoculant shall be furnished by the Contractor and shall be approved by the Engineer.

Seeding Classes 3, 4, 5, and 6 shall be sown with a broadcast seeder or a rangeland type seed drill.

Hand broadcasting and other methods of sowing seed will be allowed in special circumstances as approved by the Engineer. Special circumstances include but are not necessarily limited to steep slopes (over 1:3 (V:H)), inaccessible areas, wet areas, or other unique situations where the use of the specified equipment is not possible.

<u>Method of Measurement</u>. SEEDING, CLASS 5 (MODIFIED) will be measured for payment in acres of surface area of seeding for the seed mix type specified.

<u>Basis of Payment.</u> SEEDING, CLASS 5 (MODIFIED) shall be paid at the Contract unit price per acre. Payment shall be in full for seed, planting, and furnishing all labor to complete the work as set forth above.

### HEAVY DUTY EROSION CONTROL BLANKET (SPECIAL)

This work shall consist of furnishing, transporting, and placing 100 % biodegradable leno weave erosion control blanket over seeded areas with biodegradable anchors as detailed on the plans, according to Section 251 except as modified herein.

Delete Article 1081.10(c) (1) Excelsior Blanket.

Delete Article 1081.10 (c) (2) Knitted Straw Mat and substitute the following:

Knitted Straw Mat. The minimum weight (mass) of the blanket shall be 8.32 oz/sq yd (282.9 g/sm). The blanket shall be machine-produced 100% biodegradable blanket which contains 70% certified weed free straw and 30% coconut fiber with a functional longevity of up to 18 months. The blanket shall be of a consistent thickness of .25 inch with the straw and coconut evenly distributed over the entire area of the mat. The blanket shall be covered on the top

and bottom sides with 100% biodegradable woven natural organic jute fiber netting. No plastic netting will be allowed.

The top and bottom netting shall consist of machine directional strands formed from two intertwined yarns with cross directional strands interwoven through the twisted machine strands (leno weave) to form an approximate  $0.50 \times 1.0 (1.27 \times 2.54 \text{ cm})$  mesh. Joints shall be movable joints, not fixed or welded.

The blanket shall be sewn together on 1.50-inch (3.81 cm) to 2-inch centers with 100% biodegradable thread. The blanket shall be manufactured with a colored thread stitched along both outer edges (approximately 2-5 inches (5-12.5cm) from the edge) as an overlap guide for adjacent mats.

The manufacturer shall furnish a certification with each shipment, stating the number of rolls furnished and that the material complies with these requirements.

Delete Article 1081.10(d) Wire Staples.

Add the following to Article 1081.10 (e) Wood Stakes:

The 100% biodegradable hardwood stake shall exhibit ample rigidity to enable being driven into hard ground, with sufficient flexibility to resist breakage. The wooden stake shall be a minimum of 12 inches in length with a 1.25 inch head to hold the blanket in place. Biodegradable plastic stakes nor metal wire stakes will be allowed.

Add the following to Article 251.06 Method of Measurement:

Heavy Duty Erosion Control Blanket, Special will be measured for payment in place in square yards of actual surface areas covered.

Add the following to Article 251.07 Basis of Payment:

This work will be paid for at the contract unit price per square yard for HEAVY DUTY EROSION CONTROL BLANKET (SPECIAL).

### **EROSION CONTROL BLANKET (SPECIAL)**

This Special Provision revises Section 251 of the Standard Specifications for Road and Bridge Construction to eliminate the use of Excelsior Blanket for Erosion Control Blanket. This work shall consist of furnishing, transporting, and placing 100 % biodegradable leno weave erosion control blanket over seeded areas with biodegradable anchors as detailed on the plans, according to Section 251 except as modified herein.

Delete Article 1081.10 (a) Excelsior Blanket.

Delete Article 1081.10 (b) Knitted Straw Mat and substitute the following:

Knitted Straw Mat. Knitted straw mat shall be a machine-produced mat of 100% clean, weed free agricultural straw. The blanket shall be of consistent thickness with the straw evenly

distributed over the entire area of the blanket with a functional longevity of up to 12 months. The blanket shall be covered on top and bottom sides with a 100% biodegradable woven natural organic fiber netting. No plastic netting will be allowed.

The top and bottom netting shall consist of machine directional strands formed from two intertwined yarns with cross directional strands interwoven through the twisted machine strands (leno weave) to form an approximate  $0.50 \times 1.0 (1.27 \times 2.54 \text{ cm})$  mesh. Joints shall be movable joints, not fixed or welded.

The blanket shall be sewn together on 1.50-inch (3.81 cm) to 2-inch centers with 100% biodegradable thread. The blanket shall be manufactured with a colored thread stitched along both outer edges (approximately 2-5 inches (5-12.5cm) from the edge) as an overlap guide for adjacent mats.

Delete Article 1081.10(d) Wire Staples.

Add the following to Article 1081.10 (e) Wood Stakes:

The 100% biodegradable hardwood stake shall exhibit ample rigidity to enable being driven into hard ground, with sufficient flexibility to resist breakage. The wooden stake shall be a minimum of 6 inches in length with a 1.25 inch head to hold the blanket in place. Biodegradable plastic stakes nor metal wire stakes will be allowed.

Add the following to Article 251.06 Method of Measurement:

Erosion Control Blanket, Special will be measured for payment in place in square yards of actual surface areas covered.

Add the following to Article 251.07 Basis of Payment:

This work will be paid for at the contract unit price per square yard for EROSION CONTROL BLANKET (SPECIAL).

### **WASHOUT BASIN**

<u>Description:</u> This work shall consist of constructing and maintaining a washout basin for concrete trucks and other construction vehicles per the details shown on the plans and subsequent removal and disposal. This work shall be done in accordance with Section 280 of the Standard Specifications.

<u>Method of Measurement:</u> This work will be measured for at the contract lump sum price for WASHOUT BASIN which price shall include general maintenance and removal of all construction debris, restoration of the site upon completion and all incidentals required to complete this item of work.

<u>Basis of Payment:</u> This work will be paid for at the contract lump sum price for WASHOUT BASIN.

### **HOT-MIX ASPHALT BINDER AND SURFACE COURSE (D1)**

Effective: November 1, 2019 Revised: December 1, 2021

Revise Article 1004.03(c) to read:

"(c) Gradation. The coarse aggregate gradations shall be as listed in the following table.

Use	Size/Application	Gradation No.
Class A-1, A-2, & A-3	3/8 in. (10 mm) Seal	CA 16 or CA 20
Class A-1	1/2 in. (13 mm) Seal	CA 15
Class A-2 & A-3	Cover Coat	CA 14
	IL-19.0;	CA 11 <sup>1/</sup>
	Stabilized Subbase IL-19.0	
	SMA 12.5 <sup>2/</sup>	CA 13 <sup>4</sup> , CA 14, or CA 16
HMA High ESAL	SMA 9.5 <sup>2/</sup>	CA 13 <sup>3/4/</sup> or CA 16 <sup>3/</sup>
	IL-9.5	CA 16, CM 13 <sup>4/</sup>
	IL-9.5FG	CA 16
LIMA Low ESAL	IL-19.0L	CA 11 <sup>1/</sup>
HMA Low ESAL	IL-9.5L	CA 16

- 1/ CA 16 or CA 13 may be blended with the CA 11.
- 2/ The coarse aggregates used shall be capable of being combined with the fine aggregates and mineral filler to meet the approved mix design and the mix requirements noted herein.
- 3/ The specified coarse aggregate gradations may be blended.
- 4/ CA 13 shall be 100 percent passing the 1/2 in. (12.5mm) sieve."

Revise Article 1004.03(e) of the Supplemental Specifications to read:

"(e) Absorption. For SMA the coarse aggregate shall also have water absorption ≤ 2.0 percent."

Revise the "High ESAL" portion of the table in Article 1030.01 to read:

"High ESAL	Binder Courses	IL-19.0, IL-9.5, IL-9.5FG, IL-4.75, SMA 12.5, Stabilized Subbase IL-19.0
	Surface Courses	IL-9.5, IL-9.5FG, SMA 12.5, SMA 9.5"

Revise Note 2. and add Note 6 to Article 1030.02 of the Standard Specifications to read:

"Item Article/Section

(g)Performance Graded Asphalt Binder (Note 6)

1032

(h) Fibers (Note 2)

Note 2. A stabilizing additive such as cellulose or mineral fiber shall be added to the SMA mixture according to Illinois Modified AASHTO M 325. The stabilizing additive shall meet the Fiber Quality Requirements listed in Illinois Modified AASHTO M 325. Prior to approval and use of fibers, the Contractor shall submit a notarized certification by the producer of these materials stating they meet these requirements. Reclaimed Asphalt Shingles (RAS) may be used in Stone Matrix Asphalt (SMA) mixtures designed with an SBA polymer modifier as a fiber additive if the mix design with RAS included meets AASHTO T305 requirements. The RAS shall be from a certified source that produces either Type I or Type 2. Material shall meet requirements noted herein and the actual dosage rate will be determined by the Engineer.

Note 6. The asphalt binder shall be an SBS PG 76-28 when the SMA is used on a full-depth asphalt pavement and SBS PG 76-22 when used as an overlay, except where modified herein. The asphalt binder shall be a SBS PG 76-22 for IL-4.75, except where modified herein.."

### Revise table in Article 1030.05(a) of the Standard Specifications to read:

	ı	"MIXT	URE	CON	1POSI	TION	(% P	ASSII	VG) 1/			
Sieve	IL-19	.0 mm	SMA	12.5	SMA	9.5	IL-9.	5mm	IL-9	5FG	IL-4.7	'5 mm
Size	min	max	min	max	min	max	min	max	min	max	min	max
1 1/2 in (37.5 mm)												
1 in. (25 mm)		100										
3/4 in. (19 mm)	90	100		100								
1/2 in. (12.5 mm)	75	89	80	100		100		100		100		100
3/8 in. (9.5 mm)				65	90	100	90	100	90	100		100
#4 (4.75 mm)	40	60	20	30	36	50	34	69	60	75 <sup>6/</sup>	90	100
#8 (2.36 mm)	20	42	16	24 4/	16	324/	34 5/	52 <sup>2/</sup>	45	60 <sup>6/</sup>	70	90
#16 (1.18 mm)	15	30					10	32	25	40	50	65
#30 (600 μm)			12	16	12	18			15	30		
#50 (300 μm)	6	15					4	15	8	15	15	30
#100 (150 μm)	4	9					3	10	6	10	10	18
#200 (75 μm)	3.0	6.0	7.0	9.0 3/	7.5	9.5 <sup>3/</sup>	4.0	6.0	4.0	6.5	7.0	9.0 3/
#635 (20 μm)			≤ .	3.0	≤ 3	3.0						
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		1.0		1.0		1.0

- 1/ Based on percent of total aggregate weight.
- 2/ The mixture composition shall not exceed 44 percent passing the #8 (2.36 mm) sieve for surface courses with Ndesign = 90.
- 3/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer.
- 4/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted above the percentage stated on the table.
- 5/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted below 34 percent.

6/ When the mixture is used as a binder, the maximum shall be increased by 0.5 percent passing."

Revise Article 1030.05(b) of the Standard Specifications to read:

(b) Volumetric Requirements. The target value for the air voids of the HMA shall be 4.0 percent, for IL-4.75 and SMA mixtures it shall be 3.5 percent and for Stabilized Subbase it shall be 3.0 percent at the design number of gyrations. The voids in the mineral aggregate (VMA) and voids filled with asphalt binder (VFA) of the HMA design shall be based on the nominal maximum size of the aggregate in the mix and shall conform to the following requirements.

			e Mineral Aggre ⁄linimum for Nde		
Mix Design	30	50	70	80	90
IL-19.0		13.5	13.5		13.5
IL-9.5		15.0	15.0		
IL-9.5FG		15.0	15.0		
IL-4.75 <sup>1/</sup>		18.5			
SMA-12.5 <sup>1/2/5/</sup>				17.03//16.04/	
SMA-9.5 <sup>1/2/5/</sup>				17.0 <sup>3/</sup> /16.0 <sup>4/</sup>	
IL-19.0L	13.5				
IL-9.5L	15.0				

- 1/ Maximum draindown shall be 0.3 percent according to Illinois Modified AASHTO T 305.
- 2/ The draindown shall be determined at the JMF asphalt binder content at the mixing temperature plus 30°F.
- 3/ Applies when specific gravity of coarse aggregate is  $\geq 2.760$ .
- 4/ Applies when specific gravity of coarse aggregate is < 2.760.
- 5/ For surface course, the coarse aggregate can be crushed steel slag, crystalline crushed stone or crushed sandstone. For binder course, coarse aggregate shall be crushed stone (dolomite), crushed gravel, crystalline crushed stone, or crushed sandstone"

Revise the last paragraph of Article 1102.01 (a) (5) of the Standard Specifications to read:

"IL-4.75 and Stone Matrix Asphalt (SMA) mixtures which contain aggregate having absorptions greater than or equal to 2.0 percent, or which contain steal slag sand, shall have minimum surge bin storage plus haul time of 1.5 hours."

Add after third sentence of Article 1030.09(b) to read:

"If the Contractor and Engineer agree the nuclear density test method is not appropriate for the mixture, cores shall be taken at random locations determined according to the QC/QA document "Determination of Random Density Test Site Locations". Core densities shall be determined using the Illinois Modified AASHTO T 166 or T 275 procedure."

Revise Table 1 and Note 4/ of Table 1 in Article 406.07(a) of the Standard Specifications to read:

	Breakdown/Intermediate Roller (one of the following)	Final Roller (one or more of the following)	Density Requirement
IL-9.5, IL-9.5FG, IL-19.0 <sup>1/</sup>	V <sub>D</sub> , P , T <sub>B</sub> , 3W, O <sub>T</sub> , O <sub>B</sub>	V <sub>S</sub> , T <sub>B</sub> , T <sub>F</sub> , O <sub>T</sub>	As specified in Section 1030
IL-4.75 and SMA	Т <sub>в,</sub> 3W, От	T <sub>F</sub> , 3W	As specified in Section 1030
Mixtures on Bridge Decks <sup>2/</sup>	Тв	T <sub>F</sub>	As specified in Articles 582.05 and 582.06.

"4/ The Contractor shall provide a minimum of two steel-wheeled tandem rollers ( $T_B$ ), and/or three-wheel (3W) rollers for breakdown, except one of the ( $T_B$ ) or (3W) rollers shall be 84 inches (2.14 m) wide and a weight of 315 pound per linear inch (PLI) (5.63 kg/mm) and one of the ( $T_B$ ) or (3W) rollers can be substituted for an oscillatory roller ( $O_T$ ).  $T_F$  rollers shall be a minimum of 280 lb/in. (50 N/mm). The 3W and  $T_B$  rollers shall be operated at a uniform speed not to exceed 3 mph (5 km/h), with the drive roll for  $T_B$  rollers nearest the paver and maintain an effective rolling distance of not more than 150 ft (45 m) behind the paver."

Add the following after the fourth paragraph of Article 406.13 (b):

"The plan quantities of SMA mixtures shall be adjusted using the actual approved binder and surface Mix Design's G<sub>mb</sub>."

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

"A test strip of 300 ton (275 metric tons), except for SMA mixtures it will be 400 ton (363 metric ton), will be required for each mixture on each contract at the beginning of HMA production for each construction year according to the Manual of Test Procedures for Materials "Hot Mix Asphalt Test Strip Procedures". At the request of the Producer, the Engineer may waive the test strip if previous construction during the current construction year has demonstrated the constructability of the mix using Department test results."

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

"When a test strip is constructed, the Contractor shall collect and split the mixture according to the document "Hot-Mix Asphalt Test Strip Procedures". The Engineer, or a representative, shall deliver split sample to the District Laboratory for verification testing. The

Contractor shall complete mixture tests stated in Article 1030.09(a). Mixture sampled shall include enough material for the Department to conduct mixture tests detailed in Article 1030.09(a) and in the document "Hot-Mix Asphalt Mixture Design Verification Procedure" Section 3.3. The mixture test results shall meet the requirements of Articles 1030.05(b) and 1030.05(d), except Hamburg wheel tests will only be conducted on High ESAL mixtures during production."

### HOT-MIX ASPHALT – MIXTURE DESIGN VERIFICATION AND PRODUCTION (D1)

Effective: January 1, 2019 Revised: December 1, 2021

Add to Article 1030.05 (d)(3) of the Standard Specifications to read:

"During mixture design, prepared samples shall be submitted to the District laboratory by the Contractor for verification testing. The required testing, and number and size of prepared samples submitted, shall be according to the following tables.

High	ESAL – Required Samples for Verification Testing
Mixture	Hamburg Wheel and I-FIT Testing <sup>1/2/</sup>
Binder	total of 3 - 160 mm tall bricks
Surface	total of 4 - 160 mm tall bricks

Low	ESAL – Required Samples for Verification Testing
Mixture	I-FIT Testing 1/2/
Binder	1 - 160 mm tall brick
Surface	2 - 160 mm tall bricks

- 1/ The compacted gyratory bricks for Hamburg wheel and I-FIT testing shall be  $7.5 \pm 0.5$  percent air voids.
- 2/ If the Contractor does not possess the equipment to prepare the 160 mm tall brick(s), twice as many 115 mm tall compacted gyratory bricks will be acceptable.

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

"When a test strip is not required, each HMA mixture shall still be sampled on the first day of production: I-FIT and Hamburg wheel testing for High ESAL; I-FIT testing for Low ESAL. Within two working days after sampling the mixture, the Contractor shall deliver gyratory cylinders to the District laboratory for Department verification testing. The High ESAL mixture test results shall meet the requirements of Articles 1030.05(d)(3) and 1030.05(d)(4). The Low ESAL mixture test results shall meet the requirements of Article 1030.05(d)(4). The required number and size of prepared samples submitted for the Hamburg wheel and I-FIT testing shall be according to the "High ESAL - Required Samples for Verification Testing" table in Article 1030.05(d)(3) above."

Add the following to the end of Article 1030.10 of the Standard Specifications to read:

"Mixture sampled during first day of production shall include approximately 60 lb (27 kg) of additional material for the Department to conduct Hamburg wheel testing and approximately 80 lb (36 kg) of additional material for the Department to conduct I-FIT testing. Within two working days after sampling, the Contractor shall deliver prepared samples to the District laboratory for verification testing. The required number and size of

prepared samples submitted for the Hamburg wheel and I-FIT testing shall be according to the "High ESAL - Required Samples for Verification Testing" table in Article 1030.05(d)(3) above."

### **COOPERATION WITH ADJACENT CONTRACTS**

This contract overlaps with other concurrent and future contracts as listed below. The contractor will be governed by Article 105.08 of the Standard Specifications. The contractor shall cooperate with the other contractors in the phasing and performance of his work so as not to delay, interrupt or hinder the progress or completion of work being performed by the other contractors.

No additional compensation will be allowed this Contractor for compliance with the above requirements, nor for any delays or inconvenience resulting from the activities of the other contractors.

1. IDOT Contract 62R91 – Bridge resurfacing on US 20

Lane closures are expected to start Summer 2024. Temporary traffic signal timings will be in place at US 20 and Greenbrook. No impacts or conflicts to this project are anticipated.

### **AVAILABLE REPORTS**

□ No project specific reports were prepared.
When applicable, the following checked reports and record information is available for Bidders' reference upon request:
☐ Record structural plans
☑ Preliminary Site Investigation (Local PSI)
☑ Preliminary Environmental Site Assessment (Local PESA)
⊠ Soils/Geotechnical Report
⊠ Boring Logs
□ Pavement Cores
☐ Location Drainage Study (LDS)
☐ Noise Analysis

Those seeking these reports should request access from:

Karla Bastien
Assistant Village Engineer
Village of Hanover Park
Public Works
2041 West Lake Street
Hanover Park, IL 60133
KBastien@hpil.org
630-823-5652

Hours: 8:00 AM to 5:00 PM (Mon - Fri)

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

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

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

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

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

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

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

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

BASIS OF PAYMENT: This work will be paid for at the contract unit price of \$15.00 per hour for each utilized certified TPG Program trainee (TRAINEES TRAINING PROGRAM GRADUATE). The estimated total number of hours, unit price, and total price must be included in the schedule of prices for the Contract submitted by Contractor prior to beginning work. The initial number of TPG trainees for which the incentive is available for this contract is one (1) per EEO.

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

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

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

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

LR107-4

Page 1 of 1

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:

Village of Hanover Park		
DuPage County		

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

### LR1030-2

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

### LOCAL QUALITY ASSURANCE/ QUALITY MANAGEMENT QC/QA

Effective: January 1, 2022

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

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

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

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

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

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

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

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

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

If core testing is the density verification method, the Engineer will witness the Contractor coring, and secure and take possession of all density samples at the density verification locations. The Engineer will test the cores collected by the Contractor for density according to Illinois Modified AASHTO T 166 or AASHTO T 275.

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

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

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

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



### **Storm Water Pollution Prevention Plan**



Route	Marked Route	Section Number
Arlington Drive		15-00066-00-BR
Project Number	County	Contract Number
22FB(847)	DuPage	61G80
This plan has been prepared to co ILR10 (Permit ILR10), issued by t activities.	omply with the provisions of the National Pol he Illinois Environmental Protection Agency	lutant Discharge Elimination System (NPDES) Permit No. (IEPA) for storm water discharges from construction site
the person or persons who manag submitted is, to the best of my kno	the system or those persons directly record	pared under my direction or supervision in accordance with luated the information submitted. Based on my inquiry of consible for gathering the information, the information lete. I am aware that there are significant penalties for for knowing violations.
Signature		Date
John All	<u></u>	1/10/24
Print Name	Title	Agency
Jonathan Stelle	Village Engineer	Village of Hanover Park
. Site Description:  A. Provide a description of the proj  Arlington Dr over West Bran		section, town, and range: ver Park, 41°51'30"N, 88°08',19"W, T40N, R10E
A. Provide a description of the project consists of 1 corpridge will be removed and root by 12-foot cells at a 43° the culvert. Additional work witterm sewer outlet in the NW lessist in proventians.	iect location; include latitude and longitude, sech of DuPage River, Village of Hano struction activity which is the subject of this properties installation, maintenance, removal of erosion astruction stage. The road will be closeplaced with a 52-foot 2-inch wide for skew to the roadway. In-stream work will include reconstructing the roadway quadrant and installing riprap on all Temporary erosion control measures.	plan. Include the number of construction stages, drainage measures, and permanent stabilization: seed during construction. The existing 3 span pur-cell cast-in-place concrete culvert with 10-k will include a cofferdam for the installation of ay, replacing water main, adjusting existing and panks adjacent to the culvert to stabilize and seed to be placed during as a seed to be placed during as a seed to be placed during a seed to be placed to the culvert to stabilize and seed to be placed to the culvert to stabilize and seed to be placed to the culvert to stabilize and seed to the culvert to stabilize the culvert to stabilize and seed to the culvert to stabilize the culvert t
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F. List all soils found within project boundaries; include map unit name, slope information, and erosivity:
223B - varna silt loam, 2 to 4 pecrent slopes; 232A - ashkum silty clay loam, 0 to 2 percent slopes; 805B -
orthents, clayey, undulating
G. If wetlands were delineated for this project, provide an extent of wetland acreage at the site; see Phase I report:
No wetlands present
H. Provide a description of potentially erosive areas associated with this project:
side slopes in each quadrant of the new culvert and outlet of most northern culvert cell
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 slopes, etc.):
Completed slide slopes in each quadrant of the new culvert will have 1:2 backslopes.
J. See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking (to be added after contractor identifies locations), areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where storm water is discharged to surface water including wetlands.
K. Identify who owns the drainage system (municipality or agency) this project will drain into:
Village of Hanover Park
L. The following is a list of General NPDES ILR40 permittees within whose reporting jurisdiction this project is located:
Village of Hanover Park
M. The following is a list of receiving water(s) and the ultimate receiving water(s) for this site. In addition, include receiving waters that are listed as Biologically Significant Streams by the Illinois Department of Natural Resources (IDNR). The location of the receiving waters can be found on the erosion and sediment control plans:
West Branch DuPage River and Des Plaines River
N. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes (i.e., 1:3 or steeper), highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc. Include any commitments or requirements to protect adjacent wetlands.
For any storm water discharges from construction activities within 50-feet of Waters of the U.S. (except for activities for water-dependent structures authorized by a Section 404 permit, describe: a) How a 50-foot undisturbed natural buffer will be provided between the construction activity and the Waters of the U.S. or b) How additional erosion and sediment controls will be provided within that area.
Section 404 permit is part of the Contract documents
O. Per the Phase I document, the following sensitive environmental resources are associated with this project and may have the potential to be impacted by the proposed development. Further guidance on these resources is available in Section 41-4 of the BDE Manual.
N/A
303(d) Listed receiving waters for suspended solids, turbidity, or siltation.  The name(s) of the listed water body, and identification of all pollutants causing impairment:
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:

Perimeter erosion barrier will be placed to prevent sediment discharge. Additionally, inlet filter protection will be

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All disturbed areas will be seeded and temporary erosion control blanket will be placed to prevent erosion.

provided for all existing inlets.	pakar i na arti arajasa tultu arama sa mit Ali di tana di Salaja da d
	p (1) is a program when it is a first proper to the control of the
Provide a description of the location(s) of direct discharge from the projection	ect site to trie 303(d) water body.
The second of th	The department of the second o
Provide a description of the location(s) of any dewatering discharges to	the MS4 and/or water body:
Applicable Federal, Tribal, State, or Local Programs	
DuPage Co and Village of Hanover Park	menters and state of the color of the color
☐ Floodplain	<ul> <li>Control of the control of the control</li></ul>
☐ Historic Preservation	
N/A - 1 1 to the more than an area of the more than the second of the se	(4) A consequence of the problem
Receiving waters with Total Maximum Daily Load (TMDL) for sedime	
TMDL (fill out this section if checked above)	I. Carlos (1965) (Interpretation of the Carlos (1964) (Interpretation of the Carlos (1964) (Interpretation of The Carlos (1964) (Interpretation of the Carlos (1964) (Interpretation of the Carlos (1964) (Interpretation of
The name(s) of the listed water body:	
N/A	
Provide a description of the erosion and sediment control strategy that w	will be incorporated into the site design that is consistent with the
assumptions and requirements of the TMDL:	viii be incorporated into the otte design that is consistent that the
N/A	
If a specific numeric waste load allocation has been established that wo	uld apply to the project's discharges, provide a description of the
necessary steps to meet that allocation:	
N/A	:
Threatened and Endangered Species/Illinois Natural Areas (INAI)/N	ature Preserves
N/A	
Other Other	
N/A	
Wetland	
N/A	
and the second s	ena de la estición de Banada explayación a la diala de cipación de la seguina por e
P. The following pollutants of concern will be associated with this constr	
☐ Antifreeze / Coolants  ☐ Concrete	Solid Waste Debris  Solvents
	☐ Waste water from cleaning construction equipments
☐ Concrete Truck Waste	Other (Specify)
Fertilizers / Pesticides	Other (Specify)
Paints	Other (Specify)
Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids)	
Soil Sediment	Other (Specify)
II. Controls:	The second of th

Page 3 of 7

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in Section 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:

- 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	<b>t</b> :
☐ Erosion Control Blanket / Mulching	Temporary Turf (Seeding, Class 7)
Geotextiles	Temporary Mulching
□ Permanent Seeding	☐ Vegetated Buffer Strips
☐ Preservation of Mature Seeding	Other (Specify)
□ Protection of Trees	Other (Specify)
Sodding	Other (Specify)
☐ Temporary Erosion Control Seeding	Other (Specify)
Describe how the stabilization practices listed above will be utilized of	
temporary erosion control blanket and temporary seedin	
engineer during construction; tree protection to be place	
designated for removal and are within limits of construct	ion areas
Describe how the stabilization practices listed above will be utilized a	ufter construction activities have been completed:
erosion control blanket and permanent seeding to be us	ed after construction activities have been completed
subsurface drains, pipe slope drains, level spreaders, storm drain	If and the discharge of pollutants from exposed areas of the site.  In barrier, earth dikes, drainage swales, sediment traps, ditch checks,
Aggregate Ditch	
Concrete Revetment Mats	☐ Stabilized Trench Flow
☐ Dust Suppression	☐ Slope Mattress
Dewatering Filtering	☐ Slope Walls
☐ Gabions	☐ Temporary Ditch Check
☑ In-Stream or Wetland Work	☐ Temporary Pipe Slope Drain

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Level Spreaders	☐ Temporary Sediment Basin
Paved Ditch	garan in the means in agree 🔲 Temporary Stream Crossing and including a highest world in the
Permanent Check Dams	gas in the inspects o 🔲 Turf Reinforcement Mats (backer again to be where to be about
☐ Perimeter Erosion Barrier	Other (Specify) Cofferdam
Permanent Sediment Basin	Other (Specify)
Retaining Walls	Other (Specify)
⊠ Riprap	Other (Specify)
Rock Outlet Protection	Other (Specify)
Sediment Trap	Other (Specify)
	Other (Specify)
Describe how the structural practices listed a	bove will be utilized during construction:
barrier will be placed around outer lin	dam and the installation of the cast-in-place culvert, perimeter erosion nits of work prior to construction start, stabilized construction entrances to storm drain inlet protection to be placed in existing inlets prior to
	hove will be utilized after construction activities have been completed:
Describe how the structural practices listed a	
1 9, 1	
Describe how the structural practices listed a Riprap will remain in the four quadra	nts adjacent to the culvert to stabilize and assist in preventing erosion
Riprap will remain in the four quadra	
Riprap will remain in the four quadra	nts adjacent to the culvert to stabilize and assist in preventing erosion
Riprap will remain in the four quadra	nts adjacent to the culvert to stabilize and assist in preventing erosion
Riprap will remain in the four quadrant  D. Treatment Chemicals  Will polymer flocculants or treatment chemical	nts adjacent to the culvert to stabilize and assist in preventing erosion
Riprap will remain in the four quadrant  D. Treatment Chemicals  Will polymer flocculants or treatment chemical	nts adjacent to the culvert to stabilize and assist in preventing erosion
D. Treatment Chemicals  Will polymer flocculants or treatment chemicals  Will polymer flocculants or treatment chemicals  If yes above, identify where and how polymer  E. Permanent (i.e., Post-Construction) Statinstalled during the construction process to operations have been completed. The installa  1. Such practices may include but are not structures, flow attenuation by use of op systems (which combine several practices  The practices selected for implementation Water Pollution Control) of the IDOT implementation or if practices are applied will be explained below.  2. Velocity dissipation devices will be placed non-erosive velocity flow from the structure.	Ints adjacent to the culvert to stabilize and assist in preventing erosion  als be utilized on this project:  Yes No  flocculants or treatment chemicals will be utilized on this project.  From Water Management Controls: Provided below is a description of measures that will be control volume and pollutants in storm water discharges that will occur after construction tion of these devices may be subject to Section 404 of the Clean Water Act.  Ilimited to: storm water detention structures (including wet ponds), storm water retention en vegetated swales and natural depressions, infiltration of runoff on site, and sequential of the water determined based on the technical guidance in Chapter 41 (Construction Site Storm BDE Manual. If practices other than those discussed in Chapter 41 are selected for to situations different from those covered in Chapter 41, the technical basis for such decisions at discharge locations and along the length of any outfall channel as necessary to provide a set to a water course so that the natural physical and biological characteristics and functions
D. Treatment Chemicals  Will polymer flocculants or treatment chemicals  Will polymer flocculants or treatment chemicals  If yes above, identify where and how polymer  E. Permanent (i.e., Post-Construction) Statisticalled during the construction process to operations have been completed. The installanguage of the installanguage	Its adjacent to the culvert to stabilize and assist in preventing erosion  Its be utilized on this project: Yes No  If locculants or treatment chemicals will be utilized on this project.  If the control volume and pollutants in storm water discharges that will occur after construction of these devices may be subject to Section 404 of the Clean Water Act.  If imited to: storm water detention structures (including wet ponds), storm water retention en vegetated swales and natural depressions, infiltration of runoff on site, and sequential or situations different from those covered in Chapter 41 (Construction Site Storm BDE Manual. If practices other than those discussed in Chapter 41 are selected for so situations different from those covered in Chapter 41, the technical basis for such decisions at discharge locations and along the length of any outfall channel as necessary to provide a set to a water course so that the natural physical and biological characteristics and functions enance of hydrologic conditions such as the hydroperiod and hydrodynamics present prior to
D. Treatment Chemicals  Will polymer flocculants or treatment chemicals  Will polymer flocculants or treatment chemicals  If yes above, identify where and how polymer  E. Permanent (i.e., Post-Construction) Statisticalled during the construction process to operations have been completed. The installanguage of the installanguage	Its adjacent to the culvert to stabilize and assist in preventing erosion  Its be utilized on this project:  Yes No  If locculants or treatment chemicals will be utilized on this project.  Form Water Management Controls: Provided below is a description of measures that will be control volume and pollutants in storm water discharges that will occur after construction tion of these devices may be subject to Section 404 of the Clean Water Act.  Ilimited to: storm water detention structures (including wet ponds), storm water retention en vegetated swales and natural depressions, infiltration of runoff on site, and sequential by the water determined based on the technical guidance in Chapter 41 (Construction Site Storm BDE Manual. If practices other than those discussed in Chapter 41 are selected for so situations different from those covered in Chapter 41, the technical basis for such decisions at discharge locations and along the length of any outfall channel as necessary to provide a ret to a water course so that the natural physical and biological characteristics and functions enance of hydrologic conditions such as the hydroperiod and hydrodynamics present prior to agement controls:

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 IEPA'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

Not increasing impervious area, increasing area of landscaped median, proposed riprap in lieu of landscape slopes in locations of high concern for erosion, preserving features of the existing stream

- 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 cons
    - Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
    - Paving, saw-cutting, and any other pavement related operations
  - Major planned stockpiling operation
    - Time frame for other significant long-term operations or activities that may plan non-storm water discharges as dewatering, grinding, etc
      - Permanent stabilization activities for each area of the project
- 2. During the pre-construction meeting, the Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:
  - Temporary Ditch Checks Identify what type and the source of Temporary Ditch Checks that will be installed as part of the project. The installation details will then be included with the SWPPP.
  - Vehicle Entrances and Exits Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
  - Material Delivery, Storage and Use Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
  - Stockpile Management Identify the location of both on-site and off-site stockpiles. Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
    - Waste Disposal Discuss methods of waste disposal that will be used for this project.
  - Spill Prevention and Control Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.)
  - Concrete Residuals and Washout Wastes Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
  - Litter Management Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
  - Vehicle and Equipment Fueling Identify equipment fueling locations for this project and what BMPs will be used to ensure containment and spill prevention.
  - Vehicle and Equipment Cleaning and Maintenance Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
  - Dewatering Activities Identify the controls which will be used during dewatering operations to ensure sediments will not leave the construction site.
  - Polymer Flocculants and Treatment Chemicals Identify the use and dosage of treatment chemicals and provide the Resident Engineer with Material Safety Data Sheets. Describe procedures on how the chemicals will be used and identify who will be responsible for the use and application of these chemicals. The selected individual must be trained on the established procedures.
    - Additional measures indicated in the plan.

### III. Maintenance:

When requested by the Contractor, the Resident Engineer will provide general maintenance guides (e.g., IDOT Erosion and Sediment Control Field Guide) to the Contractor for the practices associated with this project. Describe how all items will be checked for structural integrity, sediment accumulation and functionality. Any damage or undermining shall be repaired immediately. Provide specifics on how repairs will be made. The following additional procedures will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. It will be the Contractor's responsibility to attain maintenance guidelines for any manufactured BMPs which are to be installed and maintained per manufacture's specifications.

#### IV. Inspections:

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

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

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

The Incidence of Non-Compliance shall be mailed to the following address: Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn: Compliance Assurance Section
1021 North Grand East
Post Office Box 19276
Springfield, Illinois 62794-9276

### V. Failure to Comply:

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



## Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

### **Uncontaminated Soil Certification**

# by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 III. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 III. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location	ion Information n of the source of the u	acostominated coil		
Project Name: Arling		icontaminated soil)		nber, if available: 630-823-5700
	on (address, including no e over the DuPage Rive	,	rook Blvd and Catalina D	
City: Hanvoe	r Park	State: IL	Zip Code: 60133	
County: DuPage		Township:		
Lat/Long of approxim	nate center of site in dec	imal degrees (DD.d	ddddd) to five decimal pl	aces (e.g., 40.67890, -90.12345):
Latitude: 41.97484	Longitude: -	88.13872		
(Decimal I Identify how the lat/lo	Degrees) ong data were determine	(-Decimal Degrees) ed:		
○ GPS ○ Map	Interpolation O Photo	Interpolation (	Survey 🕢 Other	
Google Earth Approx	kimation			
IEPA Site Number(s)	, if assigned: BOL:		BOW:	BOA:
Approximate Start D	ate (mm/dd/yyyy): <u>Jul</u>	10, 2020	_ Approximate End Date	e (mm/dd/yyyy): Jun 1, 2021
Estimated Volume of	f debris (cu. Yd.):		<b>→</b> ),	
II. Owner/Opera	tor Information for	Source Site		
Site Owner			Site Operator	
Name: <u>Villa</u>	ge of Hanover Park - E	ngineering Dept	Name:	
Street Address:	2121	W. Lake Street	Street Address:	=
PO Box:			PO Box:	
City:	Hanover Park	State: IL	City:	State:
Zip Code:	60133 Phone:	630-823-5700	Zip Code:	Phone:
Contact: Jona	athan Stelle P.E.CFM \	/illage Engineer	Contact:	
Email, if available:		istelle@hpil.org	Email, if available:	

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

IL 532-2922 LPC 663 Rev. 1/2019

Uncontaminated Soil Certification

### Latitude: 41.97484

Longitude: - 88.13872

### **Uncontaminated Soil Certification**

### III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 III. Adm. Code 1100.610(a)]:

Based on review of the H&H 2017 PESA, 2 PIPs were identified in relation to the portion of the Project Corridor represented by this 663 Form. 4 borings and 2 sediment samples were advanced to identify potential impacts associated with the PIPs and characterize soils for soil management.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 III. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0,including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 III. Adm. Code 1100.201 (g), 1100.205(a), 1100.610]:

Soil samples were screened with a PID and select samples analyzed for one or more of the following: VOCs, BTEX, SVOCs, RCRA metals, TCLP chromium, pH. All results achieve MACs (Sed-02 had 1 PNA above unpopulated area MAC), pH ranged from 7.87 to 8.93, within the CCDD requirements. See attached narrative for further details and identified CCDD exclusion zone.

## IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Jeremy J. Reynolds, P.G.	(name of licensed professional engineer or geologist)
	cluding but not limited to, all attachments and other information, is to
the best of my knowledge and belief, true, accurate and comp	plete. In accordance with the Environmental Protection Act [415
ILCS 5/22.51 or 22.51a] and 35 III. Adm. Code 1100.205(a), I	certify that the soil from this site is uncontaminated soil. I also
certify that the soil pH is within the range of 6.25 to 9.0. In ad	Idition, I certify that the soil has not been removed from the site as
part of a cleanup or removal of contaminants. All necessary	

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

State:

Company Name:

Huff & Huff, Inc. / GZA, Inc.

Street Address:

915 Harger Road, Suite 330

City:

Oak Brook

IL Zip Code: 60523

Phone:

630-684-9100

Jeremy J. Revnolds

Printed Name:

Licensed Professional Engineer or

Licensed Professional Geologist Signature:

Jan 8, 2024
Date:

JEREMY
PEYNOLDS
196-001170
P.E or L.P.G. Seal:

IL 532-2922 LPC 663 Rev. 1/2019

Uncontaminated Soil Certification

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# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY



1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 · (217) 782-3397

JB PRITZKER, GOVERNOR

JOHN J. KIM, DIRECTOR

(217) 782 - 1724

January 25, 2024

Rodney S. Craig, Village President Village of Hanover Park 2121 Lake St. Hanover Park, IL 60133

Re:

Hanover Park (IL0314480)

"Arlington Dr W, Section 15-00066-00-BR, Project 22FB(847), Bridge Replacement"

Extension of Water Main Extension Construction Permit No. 0197-FY2021

Dear Rodney S. Craig:

In accordance with the request made through your engineers, Alfred Benesch & Company, in an email dated January 18, 2024, our Construction Permit No. 0197-FY2021, issued on November 25, 2020, for "Arlington Dr W, Section 15-00066-00-BR, Project 22FB(847), Bridge Replacement", is hereby extended.

This extension of the construction permit is void after January 24, 2025, unless construction on this project has started on or prior to that date.

Sincerely,

David C. Cook, P.E.

Manager, Permit Section

Division of Public Water Supplies

DCC:cse

cc:

Alfred Benesch & Company

Elgin Regional Office

### ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue, East; Post Office Box 19276; Springfield, IL 62794-9276

Division of Public Water Supplies

Telephone 217/782-1724

### PUBLIC WATER SUPPLY CONSTRUCTION PERMIT

SUBJECT: FOX LAKE (IL0970200)

Permit Issued to: Village of Fox Lake 66 Thillen Drive Fox Lake, IL 60020

PERMIT NUMBER: 0551-FY2024

DATE ISSUED: January 23, 2024

PERMIT TYPE: Water Main Extension

The issuance of this permit is based on plans and specifications prepared by the engineers/architects indicated and are identified as follows. This permit is issued for the construction and/or installation of the public water supply improvements described in this document, in accordance with the provisions of the "Environmental Protection Act", Title IV, Sections 14 through 17, and Title X, Sections 39 and 40, and is subject to the conditions printed on the last page of this permit and the ADDITIONAL CONDITIONS listed below.

FIRM: Alfred Benesch & Company NUMBER OF PLAN SHEETS: 14

TITLE OF PLANS: "IL 59 and Grand Avenue Intersection Improvements"

APPLICATION RECEIVED DATE: December 1, 2023

### PROPOSED IMPROVEMENTS:

\*\*\*The installation of approximately 1,342 feet of 12-inch, 747 feet of 8-inch and 177 feet of 6 water main.\*\*\*

### ADDITIONAL CONDITIONS:

- 1. When the owner or operator of a community water supply replaces a water main, the community water supply shall identify all lead service lines connected to the water main and shall comply with the requirements of Section 17.12 of the Act, 415 ILCS 5/17.12 for lead service line replacement. Galvanized service line must also be replaced if the galvanized service line is or was connected downstream to the lead piping. A statement must be submitted with the Application for Operating Permit indicating either that no full or partial lead service lines were identified or that Section 17.12 of the Act was complied with for this project.
- 2. When replacing water mains with lead service lines or partial lead service lines connected to them, the owner or operator of the community water supply shall provide the owner or operator of each potentially affected building that is serviced by the affected lead service lines or partial lead service lines, as well as the occupants of those buildings, with an individual written notice. The lead informational notice shall be provided at least 14 days prior to permitted water main work. The notification provided by the community water supply must satisfy the requirements of Section 17.12(jj) of the Act, 415 ILCS 5/17.12(jj). A copy of the notice used must be submitted to the Agency with the Application for Operating Permit

Fox Lake, IL0970200 IL Re 59 & Grand Ave WMR Page 2

- 3. All water mains shall be satisfactorily disinfected prior to use pursuant to Ill. Adm. Code, Title 35, Subtitle F, Section 602.310. Two consecutive sets of samples collected at least 24 hours apart must show the absence of coliform bacteria. The samples must be collected from every 1,200 feet of new water main along each branch and from the end of the line. An operating permit must be obtained before the project is placed in service. The application for operating permit and supporting documents can either be mailed to this office or emailed to EPA.PWSPermits@illinois.gov. Use of the email address is preferred.
- 4. The permit approval is for the Application, Schedule B, and 14 plan sheets received on December 1, 2023.

DCC:GAZ

cc: Alfred Benesch & Company
Elgin Regional Office
Lake County Health Department
IDPH/DEH – Plumbing and Water Quality Program

David C. Cook, P.E.

Manager Permit Section

Division of Public Water Supplies

November 18, 2020

Kane-DuPage Soil & Water Conservation District

Thomas Janicke, PE, SE Alfred, Benesch and Company, INC 1230 E. Diehl Rd, Suite 109 Naperville, IL 60563

KDSWCD project number: 20e034 USACE Number: LRC-2020-661 KDSWCD Approval Date: 11/18/2020 Date of Revised Plans: 11/6/2020

Dear Mr. Janicke,

KDSWCD received your soil erosion and sedimentation control plan submittal for the Arlington Drive Over the West Branch DuPage River project in Hanover Park, IL. **KDSWCD approval is contingent upon:** 

- 1. The means, methods, and locations for any dewatering and/or in-stream work should be coordinated with and approved by KDSWCD.
- 2. If the plans require revision based on the concurrent review by USACE and these revisions result in significant changes to the plans, revised plans must be submitted to KDSWCD for re-review.

This letter and a copy of the updated plans located at the construction office on site will serve to certify the erosion and sediment control plans meet technical standards. As a reminder, KDSWCD will visit the site several times during the course of construction to assess compliance with the specifications. We will be glad to address specific issues that may arise during the course of construction.

Sincerely,

Patrick J. McPartlan Digitally signed by Patrick J. McPartlan Date: 2020.11.18 11:18:19 -06'00'

Patrick McPartlan, CPESC Resource Conservationist

CC:

Brielle Cummings, USACE Kathleen Chernich, USACE Lailah Reich, Huff & Huff Inc

### AGGREGATE SUBGRADE IMPROVEMENT (BDE)

Effective: April 1, 2012 Revised: April 1, 2022

Add the following Section to the Standard Specifications:

### "SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT

**303.01 Description.** This work shall consist of constructing an aggregate subgrade improvement (ASI).

**303.02 Materials.** Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate	1004.07
(b) Reclaimed Asphalt Pavement (RAP	)

- **303.03 Equipment.** The vibratory roller shall be according to Article 1101.01, or as approved by the Engineer. Vibratory machines, such as tampers, shall be used in areas where rollers do not fit.
- **303.04 Soil Preparation.** The minimum immediate bearing value (IBV) of the soil below the improved subgrade shall be according to the Department's "Subgrade Stability Manual" for the aggregate thickness specified.
- **303.05 Placing and Compacting.** The maximum nominal lift thickness of aggregate gradations CA 2, CA 6, and CA 10 when compacted shall be 9 in. (225 mm). The maximum nominal lift thickness of aggregate gradations CS 1, CS 2, and RR 1 when compacted shall be 24 in. (600 mm).

The top surface of the aggregate subgrade improvement shall consist of a layer of capping aggregate gradations CA 6 or CA 10 that is 3 in. (75 mm) thick after compaction. Capping aggregate will not be required when aggregate subgrade improvement is used as a cubic yard pay item for undercut applications.

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

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

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

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

Add the following to Section 1004 of the Standard Specifications:

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

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

The coarse aggregate gradation for total ASI thickness greater than 12 in. (300 mm) shall be CS 1 or CS 2 as shown below or RR 1 according to Article 1005.01(c).

	COARSE AGGREGATE SUBGRADE GRADATIONS				
Grad No.	Sieve Size and Percent Passing				
Grad No.	8"	6"	4"	2"	#4
CS 1	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20
CS 2		100	80 ± 10	25 ± 15	

	COARSE AGGREGATE SUBGRADE GRADATIONS (Metric)				
Grad No.		Sieve Size and Percent Passing			
Grad No.	200 mm	150 mm	100 mm	50 mm	4.75 mm
CS 1	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20
CS 2		100	80 ± 10	25 ± 15	

(2) Capping aggregate shall be gradation CA 6 or CA 10."

Add the following to Article 1031.09 of the Standard Specifications:

"(b) RAP in Aggregate Subgrade Improvement (ASI). RAP in ASI shall be according to Articles 1031.01(a), 1031.02(a), 1031.06(a)(1), and 1031.06(a)(2), and the following.

- (1) The testing requirements of Article 1031.03 shall not apply.
- (2) Crushed RAP used for the lower lift may be mechanically blended with aggregate gradations CS 1, CS 2, and RR 1 but it shall be no greater than 40 percent of the total product volume. RAP agglomerations shall be no greater than 4 in. (100 mm).
- (3) For capping aggregate, well graded RAP having 100 percent passing the 1 1/2 in. (38 mm) sieve may be used when aggregate gradations CS 1, CS 2, CA 2, or RR 1 are used in the lower lift. FRAP will not be permitted as capping material.

Blending shall be through calibrated interlocked feeders or a calibrated blending plant such that the prescribed blending percentage is maintained throughout the blending process. The calibration shall have an accuracy of  $\pm 2.0$  percent of the actual quantity of material delivered."

CEMENT, TYPE IL (BDE)
Effective: August 1, 2023
Add the following to Article 302.02 of the Standard Specifications:
"(k) Type IL Portland-Limestone Cement1001
Revise Note 2 of Article 352.02 of the Standard Specifications to read:
"Note 2. Either Type I or Type IA portland cement or Type IL portland-limestone cemen shall be used."
Revise Note 1 of Article 404.02 of the Standard Specifications to read:
"Note 1. The cement shall be Type I portland cement or Type IL portland-limestone cement."
Revise Article 1019.02(a) of the Standard Specifications to read:
"(a) Cement, Type I or IL1001

#### **COMPENSABLE DELAY COSTS (BDE)**

Effective: June 2, 2017 Revised: April 1, 2019

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

- "(b) Compensation. Compensation will not be allowed for delays, inconveniences, or damages sustained by the Contractor from conflicts with facilities not meeting the above definition; or if a conflict with a utility in an unanticipated location does not cause a shutdown of the work or a documentable reduction in the rate of progress exceeding the limits set herein. The provisions of Article 104.03 notwithstanding, compensation for delays caused by a utility in an unanticipated location will be paid according to the provisions of this Article governing minor and major delays or reduced rate of production which are defined as follows.
  - (1) Minor Delay. A minor delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two hours, but not to exceed two weeks.
  - (2) Major Delay. A major delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two weeks.
  - (3) Reduced Rate of Production Delay. A reduced rate of production delay occurs when the rate of production on the work in conflict with the utility in an unanticipated location decreases by more than 25 percent and lasts longer than seven calendar days."

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

- "(c) Payment. Payment for Minor, Major, and Reduced Rate of Production Delays will be made as follows.
  - (1) Minor Delay. Labor idled which cannot be used on other work will be paid for according to Article 109.04(b)(1) and (2) for the time between start of the delay and the minimum remaining hours in the work shift required by the prevailing practice in the area.
    - Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4).
  - (2) Major Delay. Labor will be the same as for a minor delay.

Equipment will be the same as for a minor delay, except Contractor-owned equipment will be limited to two weeks plus the cost of move-out to either the

Contractor's yard or another job and the cost to re-mobilize, whichever is less. Rental equipment may be paid for longer than two weeks provided the Contractor presents adequate support to the Department (including lease agreement) to show retaining equipment on the job is the most economical course to follow and in the public interest.

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

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

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

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

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

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

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

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

Add the following to Section 109 of the Standard Specifications.

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

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

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

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

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

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

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

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

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

# 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 <sup>2/</sup>	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

<sup>1/</sup> Effective dates apply to Contractor 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 (<a href="http://www.epa.gov/cleandiesel/verification/verif-list.htm">http://www.epa.gov/cleandiesel/verification/verif-list.htm</a>), or verified by the California Air Resources Board (CARB) (<a href="http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm">http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm</a>); 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

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

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.

# DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

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

<u>FEDERAL OBLIGATION</u>. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR Part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified by the Department in accordance with the requirements of 49 CFR Part 26 and listed in the Illinois Unified Certification Program (IL UCP) DBE Directory.

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

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

The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of contracts funded in whole or in part with federal or state funds. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

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

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

assisted contracts for the subject reporting fiscal year. The Department is required to make a good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 19 % of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

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

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

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

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

The bidder shall submit a DBE Utilization Plan (form SBE 2026), and a DBE Participation Statement (form SBE 2025) for each DBE company proposed for the performance of work to achieve the contract goal, with the bid. If the Utilization Plan indicates the contract goal will not be met, documentation of good faith efforts shall also be submitted. The documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor is selected over a DBE for work on the contract. The required forms and documentation must be submitted as a single .pdf file using the "Integrated Contractor Exchange (iCX)" application within the Department's "EBids System".

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

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

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

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

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

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

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

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

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

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

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

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

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

- (6) The Contractor has determined the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides written notice to the Contractor of its withdrawal:
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the Contractor can self-perform the work for which the DBE contractor was engaged or so that the Contractor can substitute another DBE or non-DBE contractor after contract award.
  - When a DBE is terminated or fails to complete its work on the Contract for any reason, the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal. The good faith efforts shall be documented by the Contractor. If the Department requests documentation under this provision, the Contractor shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of the Contractor. The Department will provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.
- (f) FINAL PAYMENT. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than 30 calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Resident Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.
- (g) <u>ENFORCEMENT</u>. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be

made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.

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

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

Effective: January 1, 2024

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

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

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

"When establishing the target density, the HMA maximum theoretical specific gravity (G<sub>mm</sub>) will be the Department mix design verification test result."

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

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

# PERFORMANCE GRADED ASPHALT BINDER (BDE)

Effective: January 1, 2023

Revise Article 1032.05 of the Standard Specifications to read:

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

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

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

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

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

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

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

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

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

Table 2 - Requirements for Styrene-Butadiene Rubber (SBR) Modified Asphalt Binders			
Test	Asphalt Grade SBR PG 64-28 SBR PG 70-22	Asphalt Grade SB/SBS PG 64-34 SB/SBS PG 70-28 SBR PG 76-22 SBR PG 76-28	
Separation of Polymer			
ITP, "Separation of Polymer from Asphalt			
Binder"			
Difference in °F (°C) of the softening			
point between top and bottom portions	4 (2) max.	4 (2) max.	
Toughness			
ASTM D 5801, 77 °F (25 °C),	440 (40 =)	440 (40 =)	
20 in./min. (500 mm/min.), inlbs (N-m)	110 (12.5) min.	110 (12.5) min.	
Tenacity			
ASTM D 5801, 77 °F (25 °C),	()	( )	
20 in./min. (500 mm/min.), inlbs (N-m)	75 (8.5) min.	75 (8.5) min.	
TESTS ON RESIDUE FROM ROLLING THIN FILM OVEN TEST (AASHTO T 240)			
Elastic Recovery			
ASTM D 6084, Procedure A,			
77 °F (25 °C), 100 mm elongation, %	40 min.	50 min.	

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

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

Sieve Size	Percent Passing	
No. 16 (1.18 mm)	100	
No. 30 (600 µm)	95 ± 5	
No. 50 (300 µm)	> 20	

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

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

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

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

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

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

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

Table 4 - Requirements for Softener Modified Asphalt Binders			
	Asphalt Grade		
	SM PG 46-28	SM PG 46-34	
Test	SM PG 52-28	SM PG 52-34	
	SM PG 58-22	SM PG 58-28	
	SM PG 64-22		
Small Strain Parameter (AASHTO PP 113)			
BBR, ΔTc, 40 hrs PAV (40 hrs	-5°C min.		
continuous or 2 PAV at 20 hrs)			
Large Strain Parameter (Illinois Modified			
AASHTO T 391) DSR/LAS Fatigue ≥ 54 %		E 1 0/	
Property, Δ G* peak τ, 40 hrs PAV	≥ 54 %		
(40 hrs continuous or 2 PAV at 20 hrs)			

The following grades may be specified as tack coats.

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

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

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

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

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

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

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

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

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

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

# PORTLAND CEMENT CONCRETE (BDE)

Effective: August 1, 2023

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

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

# REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE)

Effective: January 1, 2024 Revised: April 1, 2024

Revise the first paragraph of Article 669.04 of the Standard Specifications to read:

"669.04 Regulated Substances Monitoring. Regulated substances monitoring includes environmental observation and field screening during regulated substances management activities. The excavated soil and groundwater within the work areas shall be managed as either uncontaminated soil, hazardous waste, special waste, or non-special waste.

As part of the regulated substances monitoring, the monitoring personnel shall perform and document the applicable duties listed on form BDE 2732 "Regulated Substances Monitoring Daily Record (RSMDR)"."

Revise the first two sentences of the nineteenth paragraph of Article 669.05 of the Standard Specifications to read:

"The Contractor shall coordinate waste disposal approvals with the disposal facility and provide the specific analytical testing requirements of that facility. The Contractor shall make all arrangements for collection, transportation, and analysis of landfill acceptance testing."

Revise the last paragraph of Article 669.05 of the Standard Specifications to read:

"The Contractor shall select a permitted landfill facility or CCDD/USFO facility meeting the requirements of 35 III. Admin. Code Parts 810-814 or Part 1100, respectively. The Department will review and approve or reject the facility proposed by the Contractor based upon information provided in BDE 2730. The Contractor shall verify whether the selected facility is compliant with those applicable standards as mandated by their permit and whether the facility is presently, has previously been, or has never been, on the United States Environmental Protection Agency (U.S. EPA) National Priorities List or the Resource Conservation and Recovery Act (RCRA) List of Violating Facilities. The use of a Contractor selected facility shall in no manner delay the construction schedule or alter the Contractor's responsibilities as set forth."

Revise the first paragraph of Article 669.07 of the Standard Specifications to read:

"669.07 Temporary Staging. Soil classified according to Articles 669.05(a)(2), (b)(1), or (c) may be temporarily staged at the Contractor's option. All other soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) shall be managed and disposed of without temporary staging to the greatest extent practicable. If circumstances beyond the Contractor's control require temporary staging of these latter materials, the Contractor shall request approval from the Engineer in writing.

Topsoil for re-use as final cover which has been field screened and found not to exhibit PID readings over daily background readings as documented on the BDE 2732, visual staining or

odors, and is classified according to Articles 669.05(a)(2), (a)(3), (a)(4), (b)(1), or (c) may be temporarily staged at the Contractor's option."

Add the following paragraph after the sixth paragraph of Article 669.11 of the Standard Specifications.

"The sampling and testing of effluent water derived from dewatering discharges for priority pollutants volatile organic compounds (VOCs), priority pollutants semi-volatile organic compounds (SVOCs), or priority pollutants metals, will be paid for at the contract unit price per each for VOCS GROUNDWATER ANALYSIS using EPA Method 8260B, SVOCS GROUNDWATER ANALYSIS using EPA Methods 8270C, or RCRA METALS GROUNDWATER ANALYSIS using EPA Methods 6010B and 7471A. This price shall include transporting the sample from the job site to the laboratory."

Revise the first sentence of the eight paragraph of Article 669.11 of the Standard Specifications to read:

"Payment for temporary staging of soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) to be managed and disposed of, if required and approved by the Engineer, will be paid according to Article 109.04."

# **SEEDING (BDE)**

Effective: November 1, 2022

Revise Article 250.07 of the Standard Specifications to read:

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

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

TABLE 1 - SEEDING MIXTURES				
Class	- Type	Seeds	lb/acre (kg/hectare)	
1	Lawn Mixture 1/	Kentucky Bluegrass	100 (110)	
		Perennial Ryegrass	60 (70)	
		Festuca rubra ssp. rubra (Creeping Red Fescue)	40 (50)	
1A	Salt Tolerant	Kentucky Bluegrass	60 (70)	
	Lawn Mixture 1/	Perennial Ryegrass	20 (20)	
		Festuca rubra ssp. rubra (Creeping Red Fescue)	20 (20)	
		Festuca brevipilla (Hard Fescue)	20 (20)	
		Puccinellia distans (Fults Saltgrass or Salty Alkaligrass)	60 (70)	
1B	Low Maintenance	Turf-Type Fine Fescue 3/	150 (170)	
	Lawn Mixture 1/	Perennial Ryegrass	20 (20)	
		Red Top  Facture rubra cap rubra (Crooping Red Faceure)	10 (10) 20 (20)	
	Decadaida Mistrus 1/	Festuca rubra ssp. rubra (Creeping Red Fescue)		
2	Roadside Mixture 1/	Lolium arundinaceum (Tall Fescue) Perennial Ryegrass	100 (110) 50 (55)	
		Festuca rubra ssp. rubra (Creeping Red Fescue)	40 (50)	
		Red Top	10 (10)	
2A	Salt Tolerant	Lolium arundinaceum (Tall Fescue)	60 (70)	
	Roadside Mixture 1/	Perennial Ryegrass	20 (20)	
		Festuca rubra ssp. rubra (Creeping Red Fescue)	30 (20)	
		Festuca brevipila (Hard Fescue)	30 (20)	
		Puccinellia distans (Fults Saltgrass or Salty Alkaligrass)	60 (70)	
3	Northern Illinois	Elymus canadensis	5 (5)	
	Slope Mixture 1/	(Canada Wild Rye) 5/	J (J)	
	'	Perennial Ryegrass	20 (20)	
		Alsike Clover 4/	5 (5)	
		Desmanthus illinoensis	2 (2)	
		(Illinois Bundleflower) 4/ 5/		
		Schizachyrium scoparium	12 (12)	
		(Little Bluestem) 5/	10 (10)	
		Bouteloua curtipendula (Side-Oats Grama) 5/	10 (10)	
		Puccinellia distans (Fults Saltgrass or Salty Alkaligrass)	30 (35)	
		Oats, Spring	50 (55)	
		Slender Wheat Grass 5/	15 (15)	
		Buffalo Grass 5/ 7/	5 (5)	
зА	Southern Illinois	Perennial Ryegrass	20 (20)	
	Slope Mixture 1/	Elymus canadensis	20 (20)	
		(Canada Wild Rye) 5/		
		Panicum virgatum (Switchgrass) 5/	10 (10)	
		Schizachyrium scoparium	12 (12)	
		(Little Blue Stem) 5/ Bouteloua curtipendula	10 (10)	
		(Side-Oats Grama) 5/	10 (10)	
		Dalea candida	5 (5)	
		(White Prairie Clover) 4/ 5/	0 (0)	
		Rudbeckia hirta (Black-Eyed Susan) 5/	5 (5)	
		Oats, Spring	50 (5 <del>`</del> 5)	

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

Cla	ss – Type	Seeds	lb/acre (kg/hectare)
5	Forb with	Annuals Mixture (Below)	1 (1)
	Annuals Mixture 2/ 5/ 6/	Forb Mixture (Below)	10 (10)

Annuals Mixture - Mixture not exceeding 25 % by weight of any one species, of the following:

Coreopsis lanceolata (Sand Coreopsis) Leucanthemum maximum (Shasta Daisy) Gaillardia pulchella (Blanket Flower) Ratibida columnifera (Prairie Coneflower) Rudbeckia hirta (Black-Eyed Susan)

Forb Mixture - Mixture not exceeding 5 % by weight PLS of any one species, of the following:

Amorpha canescens (Lead Plant) 4/ Anemone cylindrica (Thimble Weed) Asclepias tuberosa (Butterfly Weed) Aster azureus (Sky Blue Aster) Symphyotrichum leave (Smooth Aster) Aster novae-angliae (New England Aster) Baptisia leucantha (White Wild Indigo) 4/ Coreopsis palmata (Prairie Coreopsis) Echinacea pallida (Pale Purple Coneflower) Eryngium yuccifolium (Rattlesnake Master) Helianthus mollis (Downy Sunflower) Heliopsis helianthoides (Ox-Eye) Liatris aspera (Rough Blazing Star) Liatris pycnostachya (Prairie Blazing Star) Monarda fistulosa (Prairie Bergamot) Parthenium integrifolium (Wild Quinine) Dalea candida (White Prairie Clover) 4/ Dalea purpurea (Purple Prairie Clover) 4/ Physostegia virginiana (False Dragonhead)

Potentilla arguta (Prairie Cinquefoil)
Ratibida pinnata (Yellow Coneflower)
Rudbeckia subtomentosa (Fragrant Coneflower)
Silphium laciniatum (Compass Plant)
Silphium terebinthinaceum (Prairie Dock)
Oligoneuron rigidum (Rigid Goldenrod)
Tradescantia ohiensis (Spiderwort)
Veronicastrum virginicum (Culver's Root)

Class -	- Туре	Seeds	lb/acre (kg/hectare)
5A	Large Flower Native Forb Mixture 2/ 5/ 6/	Forb Mixture (see below)	5 (5)
	Species: Aster novae-angliae (New Echinacea pallida (Pale Pu Helianthus mollis (Downy Heliopsis helianthoides (O Liatris pycnostachya (Prain Ratibida pinnata (Yellow C Rudbeckia hirta (Black-Eysilphium laciniatum (Comp Silphium terebinthinaceum	urple Coneflower) Sunflower) x-Eye) rie Blazing Star) Coneflower) ed Susan) pass Plant) ri (Prairie Dock)	% By Weight 5 10 10 10 10 5 10 10 10 20
5B	Oligoneuron rigidum (Rigid Wetland Forb 2/ 5/ 6/	Goldenrod) Forb Mixture (see below)	10 2 (2)
	Species: Acorus calamus (Sweet Fl Angelica atropurpurea (An Asclepias incarnata (Swar Aster puniceus (Purple Ste Bidens cernua (Beggartick Eutrochium maculatum (S Eupatorium perfoliatum (B Helenium autumnale (Autu Iris virginica shrevei (Blue Lobelia cardinalis (Cardina Lobelia siphilitica (Great B Lythrum alatum (Winged L Physostegia virginiana (Fa Persicaria pensylvanica (Fa Persicaria lapathifolia (Cur Pychanthemum virginianu Rudbeckia laciniata (Cut-ka Oligoneuron riddellii (Ridda Sparganium eurycarpum (	gelica) np Milkweed) emmed Aster) (s) potted Joe Pye Weed) oneset) umn Sneeze Weed) Flag Iris) al Flower) lue Lobelia) .oosestrife) alse Dragonhead) Pennsylvania Smartweed) elytop Knotweed) m (Mountain Mint) eaf Coneflower) ell Goldenrod)	% By Weight  3 6 2 10 7 7 7 2 2 5 5 10 10 10 5 5 2 5
6	Conservation Mixture 2/ 6/	Schizachyrium scoparium (Little Blue Stem) 5/ Elymus canadensis (Canada Wild Rye) 5/ Buffalo Grass 5/ 7/ Vernal Alfalfa 4/ Oats, Spring	5 (5) 2 (2) 5 (5) 15 (15) 48 (55)
6A	Salt Tolerant Conservation Mixture 2/ 6/	Schizachyrium scoparium (Little Blue Stem) 5/ Elymus canadensis (Canada Wild Rye) 5/ Buffalo Grass 5/ 7/ Vernal Alfalfa 4/ Oats, Spring Puccinellia distans (Fults Saltgrass or Salty Alkaligrass)	5 (5) 2 (2) 5 (5) 15 (15) 48 (55) 20 (20)
7	Temporary Turf Cover Mixture	Perennial Ryegrass Oats, Spring	50 (55) 64 (70)

#### Notes:

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

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

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

Effective: January 2, 2023

Add the following to Article 106.01 of the Standard Specifications:

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

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

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

# SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)

Effective: April 2, 2018

Add the following to Section 109 of the Standard Specifications.

"109.14 Subcontractor and Disadvantaged Business Enterprise Payment Reporting. The Contractor shall report all payments made to the following parties:

- (a) first tier subcontractors;
- (b) lower tier subcontractors affecting disadvantaged business enterprise (DBE) goal credit;
- (c) material suppliers or trucking firms that are part of the Contractor's submitted DBE utilization plan.

The report shall be made through the Department's on-line subcontractor payment reporting system within 21 days of making the payment."

## **SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)**

Effective: November 2, 2017

Revised: April 1, 2019

Replace the second paragraph of Article 109.12 of the Standard Specifications with the

following:

"This mobilization payment shall be made at least seven days prior to the subcontractor starting work. The amount paid shall be at the following percentage of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor's work.

Value of Subcontract Reported on Form BC 260A	Mobilization Percentage
Less than \$10,000	25%
\$10,000 to less than \$20,000	20%
\$20,000 to less than \$40,000	18%
\$40,000 to less than \$60,000	16%
\$60,000 to less than \$80,000	14%
\$80,000 to less than \$100,000	12%
\$100,000 to less than \$250,000	10%
\$250,000 to less than \$500,000	9%
\$500,000 to \$750,000	8%
Over \$750,000	7%"

## SUBMISSION OF PAYROLL RECORDS (BDE)

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

FEDERAL AID CONTRACTS. Revise the following section of Check Sheet #1 of the Recurring

Special Provisions to read:

### "STATEMENTS AND PAYROLLS

The payroll records shall include the worker's name, social security number, last known address, telephone number, email address, classification(s) of work actually performed, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof), daily and weekly number of hours actually worked in total, deductions made, and actual wages paid.

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

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

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

In addition to filing certified payroll(s) with the IDOL, the Contractor and each subcontractor shall certify and submit payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers shall not be included on weekly submittals. Instead, the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted. The submittals shall be made using LCPtracker Pro software. The software is web-based and can be accessed at https://lcptracker.com/.

When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option ("No Work", "Suspended", or "Complete") selected."

### TRAINING SPECIAL PROVISIONS (BDE)

Effective: October 15, 1975 Revised: September 2, 2021

This Training Special Provision supersedes Section 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," and is in implementation of 23 U.S.C. 140(a).

As part of the Contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The Contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be **1 (ONE)**. In the event the Contractor subcontracts a portion of the contract work, it shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The Contractor shall also ensure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the Contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee it employs on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps it has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he or she has successfully completed a training course leading to journeyman status or in which he or she has been employed as a journeyman. The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor Employment Training Administration shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the Contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the Contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A Contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The Contractor shall furnish the trainee a copy of the program he will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The Contractor shall provide for the maintenance of records and furnish periodic reports documenting its performance under this Training Special Provision.

For contracts with an awarded contract value of \$500,000 or more, the Contractor is required to comply with the Illinois Works Apprenticeship Initiative (30 ILCS 559/20-20 to 20-25) and all applicable administrative rules to the extent permitted by Section 20-20(g). For federally funded projects, the number of trainees to be trained under this contract, as stated in the Training Special Provisions, will be the established goal for the Illinois Works Apprenticeship Initiative 30 ILCS 559/20-20(g). The Contractor shall make a good faith effort to meet this goal. For federally funded projects, the Illinois Works Apprenticeship Initiative will be implemented using the FHWA approved OJT procedures. The Contractor must comply with the recordkeeping and reporting obligations of the Illinois Works Apprenticeship Initiative for the life of the project, including the certification as to whether the trainee/apprentice labor hour goals were met.

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

<u>Basis of Payment</u>. This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price, and total price have been included in the schedule of prices.

## **VEHICLE AND EQUIPMENT WARNING LIGHTS (BDE)**

Effective: November 1, 2021 Revised: November 1, 2022

Add the following paragraph after the first paragraph of Article 701.08 of the Standard Specifications:

"The Contractor shall equip all vehicles and equipment with high-intensity oscillating, rotating, or flashing, amber or amber-and-white, warning lights which are visible from all directions. In accordance with 625 ILCS 5/12-215, the lights may only be in operation while the vehicle or equipment is engaged in construction operations."

## WEEKLY DBE TRUCKING REPORTS (BDE)

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

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

The report shall be submitted to the Engineer on Department form "SBE 723" within ten business days following the reporting period. The reporting period shall be Sunday through Saturday for each week reportable trucking activities occur.

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

## **WORK ZONE TRAFFIC CONTROL DEVICES (BDE)**

Effective: March 2, 2020

Add the following to Article 701.03 of the Standard Specifications:

"(q) Temporary Sign Supports ......1106.02"

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

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

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

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

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

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

Category 1 includes small, lightweight, channelizing and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These include cones, tubular markers, plastic drums, and delineators, with no attachments (e.g. lights). Category 1 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 1 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2024.

Category 2 includes devices that are not expected to produce significant vehicular velocity change but may otherwise be hazardous. These include vertical panels with lights, barricades, temporary sign supports, and Category 1 devices with attachments (e.g. drums with lights). Category 2 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 2 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2024.

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions (impact

attenuators), truck mounted attenuators, and other devices not meeting the definitions of Category 1 or 2. Category 3 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 3 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2029. Category 3 devices shall be crash tested for Test Level 3 or the test level specified.

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

For each type of device, when no more than one MASH-16 compliant is available, an NCHRP 350 or MASH-2009 compliant device may be used, even if manufactured after December 31, 2019."

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

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

Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings. The barrier shall be capable of being moved on and off the roadway on a daily basis."

# **WORKING DAYS (BDE)**

Effective: January 1, 2002

The Contractor shall complete the work within 95 working days.

### MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES

Effective: October 4, 2016 Revised: March 1, 2019

<u>Description.</u> This work shall consist of furnishing and placing a membrane waterproofing system on the top slab and sidewalls, or portions thereof, for buried structures as detailed on the contract plans.

All membrane waterproofing systems shall be supplied by qualified producers. The Department will maintain a list of qualified producers.

<u>Materials.</u> The materials used in the waterproofing system shall consist of the following.

(a) Cold-applied, self-adhering rubberized asphalt/polyethylene membrane sheet with the following properties:

Physical Properties	
Thickness ASTM D 1777 or D 3767	60 mils (1.500 mm) min.
Width	36 inches (914 mm) min.
Tensile Strength, Film ASTM D 882	5000 lb./in <sup>2</sup> (34.5 MPa)
	min.
Pliability [180° bend over 1" inch (25 mm) mandrel @ -20 °F (-29 °C)] ASTM D 146 (Modified) or D1970	No Effect
Puncture Resistance-Membrane ASTM E 154	40 lb. (178 N) min.
Permeability (Perms) ASTM E 96, Method B	0.1 max.
Water Absorption (% by Weight) ASTM D 570	0.2 max.
Peel Strength ASTM D 903	9 lb./in (1576 N/m) min.

(b) Ancillary Materials: Adhesives, Conditioners, Primers, Mastic, Two-Part Liquid Membranes, and Sealing Tapes as required by the manufacturer of the membrane and film for use with the respective membrane waterproofing system.

<u>Construction.</u> The areas requiring waterproofing shall be prepared and the waterproofing shall be installed in accordance with the manufacturer's instructions. The Contractor shall not install any part of a membrane waterproofing system in wet conditions, or if the ambient or concrete surface temperature is below 40° (4° C), unless allowed by the Engineer.

Surfaces to be waterproofed shall be smooth and free from projections which might damage the membrane sheet. Projections or depressions on the surface that may cause damage to the membrane shall be removed or filled as directed by the Engineer. The surface shall be power washed and cleaned of dust, dirt, grease, and loose particles, and shall be dry before the waterproofing is applied.

The Contractor shall uniformly apply primer to the entire area to be waterproofed, at the rate stated in the manufacturer's instructions, by brush, or roller. The Contractor shall brush out primer that tends to puddle in low spots to allow complete drying. The primer shall be cured according to the manufacturer's instructions. Primed areas shall not stand uncovered overnight. If membrane sheets are not placed over primer within the time recommended by the manufacturer, the Contractor shall recoat the surfaces at no additional cost to the Department.

The installation of the membrane sheet to primed surfaces shall be such that all joints are shingled to shed water by commencing from the lowest elevation of the buried structure's top slab and progress towards the highest elevation. The membrane sheets shall be overlapped as required by the manufacturer. The Contractor shall seal with mastic any laps that were not thoroughly sealed. The membrane shall be smooth and free of wrinkles and there shall be no depressions in horizontal surfaces of the finished waterproofing. After placement, exposed edges of membrane sheets shall be sealed with a troweled bead of a manufacturer's recommended mastic, or two-part liquid membrane, or with sealing tape.

Sealing bands at joints between precast segments shall be installed prior to the waterproofing system being applied. Where the waterproofing system and sealing band overlap, the installation shall be planned such that water will not be trapped or directed underneath the membrane or sealing band.

Care shall be taken to protect and to prevent damage to the waterproofing system prior to and during backfilling operations. The waterproofing system shall be removed as required for the installation of slab mounted guardrails and other appurtenances. After the installation is complete, the system shall be repaired and sealed against water intrusion according to the manufacturer's instructions and to the satisfaction of the Engineer.

Replace the last paragraph of Article 540.06 Precast Concrete Box Culverts and replace with:

Handling holes shall be filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation nor project above the outside surface to the extent that may cause damage to the membrane. When metal lifting inserts are used, their sockets shall be filled with mastic or mortar compatible with the membrane.

<u>Method of Measurement</u>. The waterproofing system will be measured in place, in square yards (square meters) of the concrete surface to be waterproofed.

<u>Basis of Payment.</u> This will work will be paid for at the contract unit price, per square yard (square meter) for MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES.

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

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

#### **ATTACHMENTS**

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

#### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid designbuild contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The designbuilder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).
- II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

- 1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).
- b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training."

- 2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women

- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- 4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

#### 6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

#### 10. Assurances Required:

- a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.
- b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:
  - (1) Withholding monthly progress payments;
  - (2) Assessing sanctions;
  - (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.
- c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
- a. The records kept by the contractor shall document the following:

- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
  - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
  - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on <a href="Form FHWA-1391">Form FHWA-1391</a>. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

#### **III. NONSEGREGATED FACILITIES**

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

#### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA- 1273 format and FHWA program requirements.

#### 1. Minimum wages (29 CFR 5.5)

- a. Wage rates and fringe benefits. All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.
- b. Frequently recurring classifications. (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:
  - (i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

- (ii) The classification is used in the area by the construction industry; and
- (iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.
- (2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.
- c. Conformance. (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:
  - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
  - (ii) The classification is used in the area by the construction industry; and
  - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.
- (3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to <a href="mailto:DBAconformance@dol.gov">DBAconformance@dol.gov</a>. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.
- (4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to <code>DBAconformance@dol.gov</code>, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.
- (5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

- under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- d. Fringe benefits not expressed as an hourly rate. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- e. Unfunded plans. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
- f. Interest. In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

### 2. Withholding (29 CFR 5.5)

- a. Withholding requirements. The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.
- b. Priority to withheld funds. The Department has priority to funds withheld or to be withheld in accordance with paragraph

- 2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:
- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
  - (2) A contracting agency for its reprocurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
  - (4) A contractor's assignee(s);
  - (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

#### 3. Records and certified payrolls (29 CFR 5.5)

- a. Basic record requirements (1) Length of record retention. All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.
- (2) Information required. Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.
- (3) Additional records relating to fringe benefits. Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.
- (4) Additional records relating to apprenticeship. Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.
- b. Certified payroll requirements (1) Frequency and method of submission. The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

- agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.
- (2) Information required. The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker ( e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <a href="https://www.dol.gov/sites/dolgov/files/WHD/">https://www.dol.gov/sites/dolgov/files/WHD/</a> legacy/files/wh347/.pdf or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.
- (3) Statement of Compliance. Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:
  - (i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;
  - (ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and
  - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.
- (4) Use of Optional Form WH–347. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

- (5) Signature. The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.
- (6) Falsification. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.
- (7) Length of certified payroll retention. The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
- c. Contracts, subcontracts, and related documents. The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
- d. Required disclosures and access (1) Required record disclosures and access to workers. The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.
- (2) Sanctions for non-compliance with records and worker access requirements. If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.
- (3) Required information disclosures. Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action

# 4. Apprentices and equal employment opportunity (29 CFR 5.5)

- a. Apprentices (1) Rate of pay. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (2) Fringe benefits. Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.
- (3) Apprenticeship ratio. The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.
- (4) Reciprocity of ratios and wage rates. Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.
- b. Equal employment opportunity. The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.
- **6. Subcontracts**. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- **8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.
- 9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
- 10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of  $\underline{40}$   $\underline{\text{U.S.C. }3144(b)}$  or  $\S$  5.12(a).
- c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, <u>18</u> U.S.C. 1001.
- **11. Anti-retaliation**. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:
- a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;
- b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or  $\underline{29\ \text{CFR part 1}}$  or  $\underline{3}$ ;
- c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or
- d. Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

# V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)\* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

\* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

#### 3. Withholding for unpaid wages and liquidated damages

- a. Withholding process. The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.
- b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:
- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
  - (2) A contracting agency for its reprocurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate:
  - (4) A contractor's assignee(s);
  - (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, <u>31</u> U.S.C. 3901–3907.
- **4. Subcontracts.** The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lowertier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

- **5. Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:
- a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;
- b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;
- c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or
- d. Informing any other person about their rights under CWHSSA or this part.

#### VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)
- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees:
  - (2) the prime contractor remains responsible for the quality of the work of the leased employees;

- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
  - (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.
- 2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).
- 5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

#### **VII. SAFETY: ACCIDENT PREVENTION**

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

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and

health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

# VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal- aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

#### 18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented:

Shall be fined under this title or imprisoned not more than 5 years or both."

# IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

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

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

### 1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

- e. The terms "covered transaction," "debarred,"
  "suspended," "ineligible," "participant," "person," "principal,"
  and "voluntarily excluded," as used in this clause, are defined
  in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200.
  "First Tier Covered Transactions" refers to any covered
  transaction between a recipient or subrecipient of Federal
  funds and a participant (such as the prime or general contract).
  "Lower Tier Covered Transactions" refers to any covered
  transaction under a First Tier Covered Transaction (such as
  subcontracts). "First Tier Participant" refers to the participant
  who has entered into a covered transaction with a recipient or
  subrecipient of Federal funds (such as the prime or general
  contractor). "Lower Tier Participant" refers any participant who
  has entered into a covered transaction with a First Tier
  Participant or other Lower Tier Participants (such as
  subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<a href="https://www.sam.gov/">https://www.sam.gov/</a>). 2 CFR 180.300, 180.320, and 180.325.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

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# 2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800: and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).
- (5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and
- (6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

 ${\bf 3.\ Instructions\ for\ Certification\ -\ Lower\ Tier\ Participants:}$ 

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

- a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 - 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<a href="https://www.sam.gov/">https://www.sam.gov/</a>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

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

- a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:
- (1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;
- (2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and
- (3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)
- b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

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# XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

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

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or

cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

#### XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

- 1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.
- 2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

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

**ROAD CONTRACTS** (23 CFR 633, Subpart B, Appendix B) This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

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