# 106

Letting April 29, 2022

## Notice to Bidders, Specifications and Proposal



Contract No. 66F91 BUREAU County Section (R-4)CR Route FAS 1252 Project STP-IUGQ(682) District 3 Construction Funds

> Prepared by Checked by

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#### **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. April 29, 2022 at which time the bids will be publicly opened from the iCX SecureVault.
- **2. DESCRIPTION OF WORK**. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

Contract No. 66F91 BUREAU County Section (R-4)CR Project STP-IUGQ(682) Route FAS 1252 District 3 Construction Funds

The project consists on the removal and replacement of six concrete box culverts on IL 29 (DePue Spur) in Bureau County. The scope of work includes milling & resurfacing the area in between culverts and guardrail upgrades. Traffic control shall be achieved by detour. The project length is 0.6 miles.

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

By Order of the Illinois Department of Transportation

Omer Osman, Secretary

#### INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

#### Adopted January 1, 2022

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

No ERRATA this year.

#### SUPPLEMENTAL SPECIFICATIONS

Std. Spec. Sec.

Page No.

No Supplemental Specifications this year.

#### RECURRING SPECIAL PROVISIONS

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

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#### STATE OF ILLINOIS

#### SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted January 1, 2022, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of FAS Route 1252 (IL 29), Project STP-IUGQ(682), Section (R-4)CR, Bureau County, Contract No. 66F91 and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

#### LOCATION OF PROJECT

The project is located on IL 29 in Bureau County near the Village of DePue and starts approximately 0.5 mile west of the DePue Spur and ends 0.1 mile west of the DePue Spur.

#### DESCRIPTION OF PROJECT

The project consists of removal and replacement of six concrete box culverts (unnamed 3'x3', SN 006-2535, SN 006-2536, SN 006-2537, SN 006-2538, and SN 006-2540) and installation of a permanent end treatment on SN 006-2539 carrying IL 29 over an unnamed stream. It also consists of milling and resurfacing 21/4 inches of HMA over existing PCC and HMA pavement. Additional work includes guardrail replacement and HMA shoulders, and associated earthwork. The project will be constructed under a full road closure with a marked detour provided.

#### DELAYED START DATE

Due to the anticipated tree removal restriction, The Contractor should assume that the start date for work on this project will be <u>May 1<sup>st</sup>, 2023</u>, unless approved by the Engineer.

• The work associated with tree removal shall be performed as outlined per the tree removal restriction.

No working days will be charged, and no additional compensation shall be due to the Contractor for delays prior to May 1st, 2023.

#### TREE REMOVAL

No trees three (3) inches or greater in diameter at breast height will be allowed to be removed from April 1 to September 30 of any given year.

This item shall not be paid for separately but shall be included in the TREE REMOVAL pay items.

#### TRAFFIC CONTROL AND PROTECTION, (SPECIAL)

This work shall include furnishing, installing, maintaining, replacing, relocating, and removing all traffic control devices used for the purpose of regulating, warning, or directing traffic along IL 29 and adjacent sideroads during construction. Traffic control and protection shall be provided as detailed in road closure details, applicable Highway Standards, the Standard Specifications, these special provisions, or as directed by the Engineer.

The applicable Traffic Control and Protection Standards noted in the list of Highway Standards will not be paid for separately but shall be considered as included in the cost of TRAFFIC CONTROL AND PROTECTION (SPECIAL).

This work will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION (SPECIAL). This price shall be payment in full for all labor, materials, transportation, handling, and any other work necessary to furnish, install, maintain, replace, relocate, and remove all traffic control devices required in the plans and specifications. Detour Signing shall be paid for separately.

#### POLYUREA PAVEMENT MARKING

Two separate applications of polyurea pavement marking will be required. The second application shall be placed a minimum of 14 days after the first application.

The Contractor shall not place one thick application in lieu of two regular applications.

This requirement shall be included in the cost of POLYUREA PAVEMENT MARKING of the width specified in the plans.

#### LINEAR DELINEATOR PANELS, 4 INCH

(Effective January 1, 2022)

<u>Description</u>. This work shall consist of furnishing and installing linear delineators on steel plate beam guardrail at locations shown on plan details.

#### CONSTRUCTION REQUIREMENTS

<u>General</u>. Linear delineator panels shall be attached to steel plate beam guardrail as shown on plan details and as directed by the Engineer. These panels shall be either white or yellow, matching the color of the adjacent pavement marking edge line. They should be spaced at a minimum of 80-foot centers horizontally, with a minimum of two linear delineator per guardrail run. Linear delineators shall not be place on guardrail terminal sections. Linear delineator spacing through horizontal curves where the normal speed limit is reduced, the spacing of the linear delineators shall be reduced to 40-foot centers. Existing steel plate beam guardrail that contain existing linear delineator panels shall have any damaged or missing panels removed and replaced as directed by the Engineer.

When securing the linear delineator panels to steel plate beam guardrail, the Contractor may use a linear delineation system panel and bracket mounting method approved by the Engineer. Linear delineation system panel and bracket including installation methods shall be according to the manufacture's recommendations.

The Contractor shall be responsible for testing the durability and strength of the method used to ensure permanent adhesion of the linear delineator panel to the bridge rail. Drilling into metal bridge rail or other metal surfaces to secure the linear delineator panels will not be permitted.

When removing and replacing missing or damaged linear delineator panels, the existing linear delineator panels and any adhesive or bracket when used to secure the existing linear delineator panels shall be removed to the satisfaction of the Engineer. All cost and labor associated with the removal and cleanup of the existing linear delineator panels shall not be paid for separately but shall be included in the cost of this work.

Each panel shall not be less than 34 inches in length and 4.00 inches in width. The panels shall be constructed of cube-corner retroreflective material in standard highway colors permanently bonded to an aluminum substrate. The lateral edges of each panel shall be hemmed. The panel assembly shall have a repeating raised lateral ridge every 2.25 inches. Each ridge shall be 0.34 inches high with a 45° profile and a 0.28-inch radius top.

Daytime color requirements shall be determined from measurement of the retroreflective sheeting applied to aluminum test panels. Daytime color shall be measured instrumentally using a spectrophotometer employing annular 45/0 (or equivalent 0/45) illuminating and viewing geometry. Measurements shall be made in accordance with ASTM E1164 for ordinary colors or ASTM E2153 for fluorescent colors. Chromaticity coordinates shall be calculated for CIE Illuminant D65 and the CIE 1931 (20) Standard Colorimetric Observer in accordance with ASTM E308 for ordinary colors or ASTM E2152 for fluorescent colors.

#### **Chromaticity Limits for White**

		Х	у	Х	у	Х	у	Х	у	Limit Y (%)	
										Min	Max
ĺ	White	0.303	0.287	0.368	0.353	0.340	0.380	0.274	0.316	40	-

#### Chromaticity Limits for Fluorescent Yellow

	x	Y	х	Y	x	у	x	У	Total Luminance Factor YT (%) Min
Fluor. Yellow	0.521	0.424	0.557	0.442	0.479	0.520	0.454	0.491	40

<u>Inspection of Linear Delineator Panels</u>. The linear delineator panels installed under this contract will be inspected following installation. In addition, they will be inspected following a winter performance period that extends 180 days from December 30th.

Within 15 calendar days after the end of the winter performance period, a final performance inspection will be made. If this inspection discloses any work which is not visibly intact and serviceable, the Contractor shall, within 30 calendar days, completely repair or replace such work to the satisfaction of the Engineer.

Measured in its entirety, the work shall be 97 percent intact.

Upon completion of the final performance inspection, or after satisfactory completion of any necessary corrections, the Engineer shall notify the Contractor in writing of the date of such final performance inspection and release him/her from further performance responsibility.

This delay in performance inspection and performance acceptance of the linear delineator panels shall not delay acceptance of the entire project and final payment due if the contractor requires and receives from the subcontractor a third party "performance" bond naming the Department as obligee in the full amount of all linear delineator panels listed in the contract, multiplied by the contract unit price. The bond shall be executed prior to acceptance and final payment of the non-linear delineator panel items and shall be in full force and effect until final performance inspection and performance acceptance of the linear delineator panels. Execution of the third-party bond shall be the option of the Contractor.

<u>Basis of Payment</u>. This work, including all materials, equipment, and labor necessary to complete the work as described will be paid for at the contract unit price per each for LINEAR DELINEATOR PANELS, 4 INCH.

#### STONE RIPRAP, CLASS A4 (SPECIAL)

<u>Description</u>. This work shall include setting stone riprap in a bed of fresh concrete according to plan details and as specified herein.

<u>Materials</u>. The concrete bed material shall be Class SI concrete in accordance with Section 1020 of the Standard Specifications. The stone riprap shall be Class A4 in accordance Section 1005 of the Standard Specifications.

Excavation. The subgrade shall be excavated according to plan details.

<u>Placing Concrete</u>. The concrete shall be thoroughly tamped and spaded and finished to the height shown on the plans. Finishing shall not be required.

<u>Placing Riprap</u>. Stone riprap shall be placed to the lines and grades shown on the plans. There shall be no abrupt changes in the riprap surface. The riprap shall be placed by hand. The finished riprap shall be reasonably well graded with a minimum of voids and to obtain a reasonably well-graded distribution of stone sizes.

Method of Measurement. This work will be measured for payment in square yards.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per square yard for STONE RIPRAP, CLASS A4 (SPECIAL). The concrete is included in the cost of this item.

#### STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS)

<u>Description</u>. This work shall consist of furnishing and erecting short radius steel plate beam guardrail and posts in accordance with plan details and Section 630 of the Standard Specifications.

Method of Measurement. In accordance with Article 630.07 of the Standard Specifications.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per foot for STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS).

#### DETOUR SIGNING

<u>Description</u>. This work shall consist of installing, maintaining, and removing detour signing in accordance with plan details and Section 701 of the Standard Specifications.

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

#### TEMPORARY INFORMATION SIGNING

(Effective September 24, 2013; Revised July 31, 2020)

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

<u>Materials</u>. Materials shall be according to the applicable portions of Section 701 of the Standard Specifications and as shown on the plans.

<u>Construction Requirements</u>. The temporary information signs shall be in place at least one week prior to the beginning of construction activities that impact traffic flow and shall remain in place until the completion of the project. If all lanes are open for an extended period of time during the project, the Contractor shall cover the signs until lane closures resume. If the project is shut down for the winter the signs shall read "Road Work Resumes Spring XXXX."

Signs shall be installed according to the requirements of Section 701.

<u>Method of Measurement</u>. This work will be measured for payment in square feet in place. The auxiliary sign panel will not be measured for payment.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per square foot for TEMPORARY INFORMATION SIGNING.

#### TRAFFIC CONTROL SURVEILLANCE

(Effective January 1, 2016)

Revise the first sentence of Article 701.10 of the Standard Specifications to read:

**701.10 Surveillance.** When open holes, broken pavement, trenches over 3 in. (75 mm) deep and 4 in. (100 mm) wide, or other hazards are present within 8 ft (2.4 m) of the edge of an open lane; when opposing directions of traffic are separated by barrier wall; or on a closed road from the time a structure is removed until the time the structure has been replaced, the Contractor shall furnish traffic control surveillance during all hours when the Contractor is not engaged in construction operations

#### LINEAR TRANSPORTATION PROJECTS (CORPS OF ENGINEERS NWP # 14) (Effective February 25, 2022)

All requests made by the Contractor shall refer to Permit No. <u>DOT-D3-2022-0009</u> for the proposed bridge Linear Transportation Project of <u>SN's 006-2535, 006-2536, 006-2537, 006-2538, 006-2540 (Exist), 006-2620, 006-2621, 006-2622, 006-2623, 006-2609 (Prop)</u>. (This project is considered **Non-Reporting**.)

Contract No. 66F91

• Activities required for crossing of waters of the United States associated with the construction, expansions, modification, or improvement of linear transportation projects in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot

cause the loss of greater than 1/2 acre of waters of the United States. For linear transportation projects in tidal waters\*, the discharge cannot cause the loss of greater than 1/3 of an acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

- This NWP authorizes temporary structures, fills, and work necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills or dewatering of construction sites. Temporary fills must consist of clean coarse aggregate materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.
- The contractor that uses temporary work pads, cofferdams, access roads, and other temporary fills in order to perform work in creeks, streams, or rivers shall maintain flow in these waters by utilizing dam and pumping, fluming, culverts, or other such techniques.

#### IEPA Water Quality Certification Applicable to NWP #14

- The affected area of the stream channel must not exceed 300 linear feet, as measured along the stream corridor.
- The project must be constructed without violating the applicable provisions of the Illinois Environmental Protection Act.
- Water pollution should not be from the construction activities needed to complete this project.
- No violations of the applicable water quality standards of the Illinois Pollution Control Board, Tittle 35, Subtitle C: Water Pollution Rules and Regulation or interference with water use practices near public recreation areas or water supply intake will be allowed as part of this project.
- Interference with water use practices near public recreation areas or water supply intake should not be caused by the construction activities.
- Any spoil material excavated, dredged, or otherwise produced by the construction activities should not be returned to the waterway. The materials should be deposited in a self-contained area in compliance with all state statues, as determined by the Illinois EPA.
- Backfilling, if any, must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- All areas affected by construction shall be mulched and seeded as soon after construction as possible.
- Erosion control methods shall be implemented in accordance with the *Illinois Urban Manual* (*IEPA/USDA, NRCS; 2016*).
- Adequate planning and supervision must be provided on behalf of the Department of Transportation, District 3 during the construction period to ensure construction methods, processes, and cleanup procedures necessary to prevent water pollution and erosion are enforced.
- Haul Roads and Other Temporary Stream Crossings or In-Stream Causeways/Work Pads will
  not be measured or paid for separately, but shall be considered as included in the unit cost of
  the various pay items in the contract.

Should the Contractor desire to deviate from the guidelines currently imposed under the permit as listed above, then full design details including location, material specifications, and hydraulic

analysis should be included in a request to the Illinois Department of Transportation, Attn: **Bridge and Hydraulics Unit**, 700 East Norris Drive, Ottawa, IL 61350.

Any additional request is at the discretion of the Contractor; therefore, any delays in receiving approval for various methods outside of the given parameters will **not** be cause for additional compensation.

The requirements/ conditions of the Nationwide Permit #14 must still be adhered to and can be found at the following link:

https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll7/id/8593.

#### Permit Expiration: March 14, 2026

\***Tidal water** = watercourses in which velocity, depth, and width are influenced by tidal action.

#### **REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES**

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

<u>Contract Specific Work Areas</u>. The excavated soil and groundwater within the work areas listed below shall be managed as either "uncontaminated soil", hazardous waste, special waste or non-special waste. For stationing, the lateral distance is measured from centerline and the farthest distance is the offset distance or construction limit, whichever is less.

<u>Soil Disposal Analysis.</u> When the waste material requires sampling for landfill disposal acceptance, the Contractor shall secure a written list of the specific analytical parameters and analytical methods required by the landfill. The Contractor shall collect and analyze the required number of samples for the parameters required by the landfill using the appropriate analytical procedures. A copy of the required parameters and analytical methods (from landfill email or on landfill letterhead) shall be provided as Attachment 4A of the BDE 2733 (Regulated Substances Final Construction Report). The price shall include all sampling materials and effort necessary for collection and management of the samples, including transportation of samples from the job site to the laboratory. The Contractor shall be responsible for determining the specific disposal facilities to be utilized; and collect and analyze any samples required for disposal facility acceptance using a NELAP certified analytical laboratory registered with the State of Illinois.

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

#### Site 3337-1: Mobile Home Park, 12621-12645 2770 E Street, DePue, Bureau County

• Station 42+00 to Station 47+08, from 0 to 35 ft RT of IL 29 CL, back of Equation 1, this includes a portion of the stream (ISGS Site 3337-2). The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters: Manganese and pH.

#### Site 3337-1: Stream, 27500-28000 Blocks of 1245 N. Road, DePue, Bureau County

- Station 45+66, from 0 to 30 ft LT of IL 29 CL, back of Equation 1. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminant of concern sampling parameter: Manganese.
- Station 45+66, from 0 to 50 ft RT of IL 29 CL, back of Equation 1. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters: Arsenic, cadmium, and manganese.
- Station 51+03, from 0 to 35 ft LT of IL 29 CL, back of Equation 1. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminant of concern sampling parameter: Manganese.
- Station 51+03, from 0 to 50 ft RT of IL 29 CL, Back of Equation 1. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminant of concern sampling parameter: Manganese.
- Station 53+22, from 0 to 60 ft LT of IL 29 CL, ahead of Equation 1. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminant of concern sampling parameter: Manganese.
- Station 53+22, from 0, 50 ft RT of IL 29 CL, ahead of Equation 1. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminant of concern sampling parameter: Manganese.
- Station 57+43, from 0 to 40 ft LT of IL 29 CL, ahead of Equation 1. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters: Cadmium and manganese.
- Station 57+43, from 0 to 45 ft RT of IL 29 CL, ahead of Equation 1. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminant of concern sampling parameter: Manganese.
- Station 63+07, from 0 to 55 ft LT of IL 29 CL, ahead of Equation 1. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminant of concern sampling parameter: Manganese.
- Station 63+07, from 0 to 30 ft RT of IL 29 CL, ahead of Equation 1. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminant of concern sampling parameter: Manganese.

#### Site 3337-3: Storage Buildings, 27500 Block of 1245 N. Road, DePue, Bureau County

• Station 42+00 to Station 46+43, from 0 to 30 ft LT of IL 29 CL, back of Equation 1, this includes a portion of the stream (ISGS Site 3337-2). The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminant of concern sampling parameter: Manganese.

#### Site 3337-6: Residence, 3136 Arlington Drive, DePue, Bureau County

• Station 46+43 to Station 47+53, from 0 to 30 ft LT of IL 29 CL, back of Equation 1. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminant of concern sampling parameter: Cadmium and manganese.

#### Site 3337-7: Residence, 27723 Princeton Road, DePue, Bureau County

• Station 47+08 to Station 47+43, from 0 to 40 ft RT of IL 29 CL, back of Equation 1. The Engineer has determined this material meets the criteria of and shall be managed in

accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters: Arsenic and manganese.

• Station 47+43 to Station 48+51, from 0 to 40 ft RT of IL 29 CL, back of Equation 1. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminant of concern sampling parameter: Manganese.

#### Site 3337-8: Residence, 3138 Arlington Drive, DePue, Bureau County

• Station 47+53 to Station 48+50, from 0 to 30 ft LT of IL 29 CL, back of Equation 1. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters: Cadmium, lead, and manganese.

#### Site 3337-9: Residence, 3100 Block of Arlington Road, DePue, Bureau County

• Station 48+50 to Station 48+68, from 0 to 30 ft LT of IL 29 CL, back of Equation 1. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters: Cadmium, lead, and manganese.

#### Site 3337-10: Residence, 3139 Arlington Road, DePue, Bureau County

• Station 48+68 to Station 50+21, from 0 to 40 ft LT of IL 29 CL, back of Equation 1. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters: Cadmium and manganese.

#### Site 3337-11: Barn, 27700 Block of Princeton Road, DePue, Bureau County

• Station 48+51 to Station 54+15, from 0 to 50 ft RT of IL 29 CL, back of Equation 1, this includes a portion of the stream (ISGS Site 3337-2). The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminant of concern sampling parameter: Manganese.

#### Site 3337-12: Vacant Land, 27700-28000 Blocks of 1245 N. Road, DePue, Bureau County

Station 50+21 to Station 66+00, from 0 to 50 ft LT of IL 29 CL, back of Equation 1, this includes a portion of the stream (ISGS Site 3337-2). The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminant of concern sampling parameter: Cadmium, manganese, and pH.

#### Site 3337-13: Vacant Land, 27700-28000 Blocks of 1245 N. Road, DePue, Bureau County

Station 54+15 to Station 64+48, from 0 to 50 ft RT of IL 29 CL, ahead of Equation 1, this includes a portion of the stream (ISGS Site 3337-2). The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminant of concern sampling parameter: Manganese.

#### Site 3337-14: Stream, 28000 Blocks of 1245 N. Road, DePue, Bureau County

• Station 68+42, from 0 to 40 ft LT of IL 29 CL, ahead of Equation 1. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters: Manganese and pH.

• Station 68+42, from 0 to 70 RT of IL 29 CL, ahead of Equation 1. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminant of concern sampling parameter: Manganese.

#### Site 3337-15: Tavern, 28000 Blocks of 1245 N. Road, DePue, Bureau County

Station 66+00, ahead of Equation 1, to Station 70+40, ahead of Equation 2, from 0 to 35 ft LT of IL 29 CL, this includes a portion of the stream (ISGS Site 3337-14). The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters: Cadmium, lead, manganese, and pH.

#### Site 3337-16: Residence, 28000 Blocks of 1245 N. Road, DePue, Bureau County

- Station 64+48 to Station 67+50, from 0 to 35 ft RT of IL 29 CL, ahead of Equation 1, this includes a portion of the stream (ISGS Site 3337-14). The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters: Cadmium, lead, manganese, and pH.
- Station 67+50 to Station 68+92, from 0 to 35 ft RT of IL 29 CL, ahead of Equation 1, this includes a portion of the stream (ISGS Site 3337-14). The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters: Arsenic, cadmium, lead, manganese, and pH.

#### Site 3337-17: Vacant Land, 28000 Blocks of 1245 N. Road, DePue, Bureau County

• Station 68+92 to Station 70+40, 70 to 30 ft RT of IL 29 CL, ahead of Equation 2. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters: Cadmium, manganese, and pH.

#### Work Zones

Three distinct OSHA HAZWOPER work zones (exclusion, decontamination, and support) shall apply to projects adjacent to or within sites with documented leaking underground storage tank (LUST) incidents, or sites under management in accordance with the requirements of the Site Remediation Program (SRP), Resource Conservation and Recovery Act (RCRA), or Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or as deemed necessary. For this project, the work zones apply for the following ISGS PESA Sites: **Site 3337-16 Residence** 

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

Any waste generated as a special waste, or a waste not certified as a non-special waste from this project, should be manifested off-site using the IEPA Bureau of Land generator number associated IDOT right-of-way in the affected County. **The IEPA generator number for IDOT right-of-way in Bureau County is 0118995006.** 

#### BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE)

Effective: November 2, 2006

Revised: August 1, 2017

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

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

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

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

Where: CA = Cost Adjustment, \$.

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

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

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

Where:	А	= Area of the HMA mixture, sq yd (sq m).
	D	= Depth of the HMA mixture, in. (mm).
	$G_{mb}$	= Average bulk specific gravity of the mixture, from the approved mix design.
	V	= Volume of the bituminous material, gal (L).
	SG	= Specific Gravity of bituminous material as shown on the bill of lading.

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

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

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

#### BLENDED FINELY DIVIDED MINERALS (BDE)

Effective: April 1, 2021

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

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

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

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

(a) Blending shall be accomplished by mechanically or pneumatically intermixing the constituent finely divided minerals into a uniform mixture that is then discharged into a silo for storage or tanker for transportation.

(b) The blended finely divided mineral product will be classified according to its predominant constituent or the manufacturer's designation and shall meet the chemical requirements of its classification. The other finely divided mineral constituent(s) will not be required to conform to their individual standards."

#### COMPENSABLE DELAY COSTS (BDE)

Effective: June 2, 2017

Revised: April 1, 2019

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

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

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

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

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

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

Equipment will be the same as for a minor delay, except Contractor-owned equipment will be limited to two weeks plus the cost of move-out to either the Contractor's yard or another job and the cost to re-mobilize, whichever is less. Rental equipment may be paid for longer than two weeks provided the Contractor presents adequate support to the Department (including lease agreement) to show retaining equipment on the job is the most economical course to follow and in the public interest.

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

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

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

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

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

"(f) Basis of Payment. After resolution of a claim in favor of the Contractor, any adjustment in time required for the work will be made according to Section 108. Any adjustment in the costs to be paid will be made for direct labor, direct materials, direct equipment, direct jobsite overhead, direct offsite overhead, and other direct costs allowed by the resolution. Adjustments in costs will not be made for interest charges, loss of anticipated profit, undocumented loss of efficiency, home office overhead and unabsorbed overhead other than as allowed by Article 109.13, lost opportunity, preparation of claim expenses and other consequential indirect costs regardless of method of calculation.

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

Add the following to Section 109 of the Standard Specifications.

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

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

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

(a) Escalated Material and/or Labor Costs. When the delay causes work, which would have otherwise been completed, to be done after material and/or labor costs have increased, such increases will be paid. Payment for escalated material costs will be limited to the increased costs substantiated by documentation furnished by the Contractor. Payment for escalated labor costs will be limited to those items in Article 109.04(b)(1) and (2), except the 35 percent and 10 percent additives will not be permitted.

- (b) Extended Project Overhead. For the duration of the delay, payment for extended project overhead will be paid as follows.
  - (1) Direct Jobsite and Offsite Overhead. Payment for documented direct jobsite overhead and documented direct offsite overhead, including onsite supervisory and administrative personnel, will be allowed according to the following table.

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

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

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

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

### CONCRETE BOX CULVERTS WITH SKEWS > 30 DEGREES AND DESIGN FILLS $\leq$ 5 FEET (BDE)

Effective: April 1, 2012 Revised: July 1, 2016

Revise the second paragraph of Article 540.04 of the Standard Specifications to read:

"Unless otherwise noted on the plans, the Contractor shall have the option, when a cast-inplace concrete box culvert is specified, of constructing the box culvert using precast box culvert sections when the design cover is 6 in. (150 mm) minimum. The precast box culvert sections shall be designed for the same design cover shown on the plans for cast-in-place box culvert; shall be of equal or larger size opening, and shall satisfy the design requirements of ASTM C 1577."

Add the following after the seventh paragraph of Article 540.06 of the Standard Specifications:

"Precast concrete box culverts with skews greater than 30 degrees and having design covers less than or equal to 5 ft are not covered by the standard design table shown in ASTM C 1577. The design table provided herein is provided to address this design range. The same notes, reinforcement configurations, clearances, and requirements of ASTM C 1577 apply to this special design table. A box designated 7 x 6 x 8 indicates a span of 7 ft, a rise of 6 ft, and top slab, bottom slab, walls and haunches of 8 in. unless otherwise noted on the tables.

3 ft x 2 ft x 4 in.											
Design			Circumf	erential R	einforcem	nent Areas	s, sq in./ f	t			
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2*	0.17	1.10	0.30	0.10	0.28	0.17	0.92	0.14			
2<3	0.14	0.18	0.19	0.10					31		
3-5	0.10	0.12	0.12	0.10					29		

\*top slab 7.0 in., bottom slab 6.0 in.

3 ft x 3 ft x 4 in.										
Design			Circumf	erential R	einforcen	nent Areas	s, sq in./ f	t		
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.	
0<2*	0.17	1.17	0.33	0.10	0.31	0.17	0.92	0.14		
2<3	0.10	0.22	0.22	0.10					31	
3-5	0.10	0.14	0.14	0.10					31	

\*top slab 7.0 in., bottom slab 6.0 in.

4 ft x 2 ft x 5 in.											
Design			Circumf	erential R	einforcem	nent Areas	s, sq in./ f	t			
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2*	0.21	0.88	0.26	0.12	0.28	0.18	0.89	0.14			
2<3	0.20	0.21	0.20	0.12					33		
3-5	0.13	0.13	0.14	0.12					32		

\*top slab 7.5 in., bottom slab 6.0 in.

	4 ft x 3 ft x 5 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2*	0.18	1.02	0.31	0.12	0.32	0.18	0.87	0.14				
2<3	0.16	0.25	0.24	0.12					38			
3-5	0.12	0.16	0.17	0.12					34			

\*top slab 7.5 in., bottom slab 6.0 in.

			4	ft x 4 ft x	5 in.							
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2*	0.18	1.08	0.34	0.12	0.34	0.18	0.86	0.14				
2<3	0.13	0.28	0.27	0.12					38			
3-5	0.12	0.18	0.19	0.12					38			

\*top slab 7.5 in., bottom slab 6.0 in.

	5 ft x 2 ft x 6 in.												
Design		Circumferential Reinforcement Areas, sq in./ ft											
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.				
0<2*	0.27	0.63	0.23	0.14	0.24	0.19	0.19	0.17					
2<3	0.25	0.22	0.20	0.14					37				
3-5	0.17	0.15	0.15	0.14					35				

\*top slab 8.0 in., bottom slab 7.0 in.

5 ft x 3 ft x 6 in.											
Design	Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2*	0.20	0.72	0.27	0.14	0.29	0.19	.0.71	0.17			
2<3	0.21	0.26	0.25	0.14					37		
3-5	0.14	0.18	0.18	0.14					35		

\*top slab 8.0 in., bottom slab 7.0 in.

	5 ft x 4 ft x 6 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2*	0.19	0.78	0.30	0.14	0.31	0.19	0.70	0.17				
2<3	0.18	0.30	0.28	0.14					45			
3-5	0.14	0.20	0.21	0.14					40			

\*top slab 8.0 in., bottom slab 7.0 in.

	5 ft x 5 ft x 6 in.												
Design		Circumferential Reinforcement Areas, sq in./ ft											
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.				
0<2*	0.19	0.82	0.33	0.14	0.34	0.19	0.69	0.17					
2<3	0.16	0.33	0.32	0.14					45				
3-5	0.14	0.22	0.23	0.14					45				

\*top slab 8.0 in., bottom slab 7.0 in.

	6 ft x 2 ft x 7 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2*	0.33	0.51	0.21	0.17	0.23	0.19	0.61	0.17				
2<3	0.31	0.22	0.22	0.17					42			
3-5	0.22	0.17	0.17	0.17					41			

\*top slab 8.0 in.

_			6	ft x 3 ft x	7 in.							
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2*	0.27	0.58	0.26	0.17	0.27	0.19	0.58	0.17				
2<3	0.26	0.27	0.27	0.17					41			
3-5	0.18	0.19	0.20	0.17					39			

\*top slab 8.0 in.

6 ft x 4 ft x 7 in.												
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2*	0.25	0.64	0.30	0.17	0.30	0.19	0.57	0.17				
2<3	0.23	0.31	0.31	0.17					42			
3-5	0.17	0.22	0.23	0.17					41			

\*top slab 8.0 in.

	6 ft x 5 ft x 7 in.											
Design	Circumferential Reinforcement Areas, sq in. / ft											
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2*	0.23	0.68	0.33	0.17	0.32	0.19	0.56	0.17				
2<3	0.20	0.34	0.35	0.17					52			
3-5	0.17	0.24	0.25	0.17					48			

\*top slab 8.0 in.

6 ft x 6 ft x 7 in.													
Design		Circumferential Reinforcement Areas, sq in./ ft											
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.				
0<2*	0.21	0.72	0.37	0.17	0.34	0.19	0.55	0.17					
2<3	0.18	0.37	0.38	0.17					52				
3-5	0.17	0.26	0.28	0.17					52				

\*top slab 8.0 in.

	7 ft x 2 ft x 8 in.											
Design			Circumfe	rential Re	einforcem	ent Areas	s, sq in./ f	t				
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.38	0.60	0.26	0.19	0.22	0.19	0.75	0.19				
2<3	0.38	0.24	0.24	0.19					46			
3-5	0.27	0.19	0.19	0.19					44			

	7 ft x 3 ft x 8 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.36	0.57	0.32	0.19	0.25	0.19	0.71	0.19			
2<3	0.33	0.29	0.30	0.19					44		
3-5	0.23	0.21	0.21	0.19					42		

7 ft x 4 ft x 8 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.34	0.61	0.37	0.19	0.27	0.19	0.70	0.19			
2<3	0.29	0.34	0.34	0.19					44		
3-5	0.21	0.24	0.25	0.19					42		

	7 ft x 5 ft x 8 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As1 As2 As3 As4 As5 As6 As7 As8 "M", in									
0<2	0.32	0.65	0.42	0.19	0.30	0.19	0.69	0.19			
2<3	0.26	0.37	0.38	0.19					49		
3-5	0.19	0.27	0.28	0.19					46		

	7 ft x 6 ft x 8 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.29	0.69	0.46	0.19	0.32	0.19	0.67	0.19			
2<3	0.23	0.40	0.42	0.19					59		
3-5	0.19	0.29	0.30	0.19					55		

			1	7 ft x 7 ft x	: 8 in.					
Design		Circumferential Reinforcement Areas, sq in./ ft								
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.	
0<2	0.27	0.73	0.50	0.19	0.34	0.19	0.65	0.19		
2<3	0.21	0.43	0.45	0.19					59	
3-5	0.19	0.31	0.33	0.19					59	

	8 ft x 2 ft x 8 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As1 As2 As3 As4 As5 As6 As7 As8 "M", in.									
0<2	0.47	0.50	0.29	0.19	0.23	0.19	0.61	0.19			
2<3	0.51	0.30	0.31	0.19					50		
3-5	0.36	0.22	0.22	0.19					48		

8 ft x 3 ft x 8 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.43	0.49	0.35	0.19	0.26	0.19	0.58	0.19			
2<3	0.45	0.36	0.37	0.19					48		
3-5	0.32	0.26	0.27	0.19					45		

8 ft x 4 ft x 8 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.40	0.52	0.40	0.19	0.29	0.19	0.57	0.19			
2<3	0.40	0.42	0.43	0.19					45		
3-5	0.28	0.30	0.31	0.19					45		

	8 ft x 5 ft x 8 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As1 As2 As3 As4 As5 As6 As7 As8 "M", in									
0<2	0.37	0.56	0.45	0.19	0.31	0.19	0.56	0.19			
2<3	0.36	0.46	0.47	0.19					48		
3-5	0.26	0.33	0.34	0.19					45		

	8 ft x 6 ft x 8 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.34	0.61	0.49	0.19	0.33	0.19	0.56	0.19			
2<3	0.33	0.50	0.52	0.19					56		
3-5	0.24	0.36	0.37	0.19					50		

8 ft x 7 ft x 8 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.32	0.65	0.53	0.19	0.35	0.19	0.56	0.19			
2<3	0.30	0.53	0.56	0.19					65		
3-5	0.22	0.38	0.40	0.19					61		

			1	8 ft x 8 ft :	x 8 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As1 As2 As3 As4 As5 As6 As7 As8 "M", ir									
0<2	0.30	0.69	0.57	0.19	0.36	0.19	0.55	0.19			
2<3	0.28	0.56	0.59	0.19					65		
3-5	0.20	0.40	0.43	0.19					65		

	9 ft x 2 ft x 9 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.46	0.35	0.26	0.22	0.22	0.22	0.47	0.22				
2<3	0.58	0.32	0.32	0.22					55			
3-5	0.41	0.23	0.23	0.22					52			

9 ft x 3 ft x 9 in.											
Design	Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.42	0.35	0.32	0.22	0.23	0.22	0.47	0.22			
2<3	0.52	0.38	0.39	0.22					52		
3-5	0.37	0.27	0.28	0.22					49		

	9 ft x 4 ft x 9 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.38	0.38	0.36	0.22	0.25	0.22	0.47	0.22				
2<3	0.47	0.44	0.45	0.22					52			
3-5	0.33	0.31	0.32	0.22					49			

	9 ft x 5 ft x 9 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.35	0.41	0.41	0.22	0.28	0.22	0.47	0.22				
2<3	0.43	0.49	0.50	0.22					49			
3-5	0.30	0.35	0.36	0.22					49			

	9 ft x 6 ft x 9 in.											
Design	Circumferential Reinforcement Areas, sq in. / ft											
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.32	0.44	0.44	0.22	0.29	0.22	0.47	0.22				
2<3	0.39	0.53	0.54	0.22					55			
3-5	0.28	0.38	0.39	0.22					52			

	9 ft x 7 ft x 9 in.											
Design	Circumferential Reinforcement Areas, sq in. / ft											
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.30	0.46	0.48	0.22	0.31	0.22	0.45	0.22				
2<3	0.36	0.56	0.59	0.22					64			
3-5	0.26	0.40	0.42	0.22					58			

	9 ft x 8 ft x 9 in.											
Design	Circumferential Reinforcement Areas, sq in./ ft											
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.28	0.49	0.52	0.22	0.33	0.22	0.45	0.22				
2<3	0.33	0.60	0.63	0.22					72			
3-5	0.24	0.43	0.45	0.22					72			

9 ft x 9 ft x 9 in.											
Design	Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.27	0.51	0.55	0.22	0.34	0.22	0.45	0.22			
2<3	0.31	0.63	0.66	0.22					72		
3-5	0.23	0.45	0.48	0.22					72		

	10 ft x 2 ft x 10 in.											
Design	Circumferential Reinforcement Areas, sq in./ ft											
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.46	0.29	0.24	0.24	0.24	0.24	0.34	0.24				
2<3	0.66	0.33	0.34	0.24					59			
3-5	0.46	0.24	0.24	0.24					59			

	10 ft x 3 ft x 10 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.44	0.33	0.30	0.24	0.24	0.24	0.24	0.24			
2<3	0.59	0.40	0.41	0.24					59		
3-5	0.42	0.29	0.29	0.24					56		

	10 ft x 4 ft x 10 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.40	0.36	0.35	0.24	0.24	0.24	0.24	0.24				
2<3	0.54	0.46	0.47	0.24					56			
3-5	0.38	0.33	0.34	0.24					52			

	10 ft x 5 ft x 10 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As1 As2 As3 As4 As5 As6 As7 As8 "M", in									
0<2	0.37	0.39	0.39	0.24	0.26	0.24	0.24	0.24			
2<3	0.49	0.51	0.52	0.24					52		
3-5	0.35	0.36	0.38	0.24					52		

			10	ft x 6 ft x	10 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.34	0.42	0.43	0.24	0.28	0.24	0.42	0.24			
2<3	0.45	0.55	0.57	0.24					56		
3-5	0.33	0.40	0.41	0.24					52		

10 ft x 7 ft x 10 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.32	0.44	0.46	0.24	0.30	0.24	0.24	0.24			
2<3	0.42	0.59	0.62	0.24					59		
3-5	0.31	0.42	0.45	0.24					56		

	10 ft x 8 ft x 10 in.										
Design		Circumferential Reinforcement Areas, sq in. / ft									
Earth Cover, ft	As1	As1 As2 As3 As4 As5 As6 As7 As8 "M", in									
0<2	0.30	0.47	0.50	0.24	0.31	0.24	0.24	0.24			
2<3	0.39	0.63	0.66	0.24					75		
3-5	0.29	0.45	0.48	0.24					66		

			10	ft x 9 ft x	10 in.					
Design		Circumferential Reinforcement Areas, sq in./ ft								
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.	
0<2	0.28	0.49	0.53	0.24	0.33	0.24	0.24	0.24		
2<3	0.37	0.66	0.70	0.24					79	
3-5	0.27	0.47	0.51	0.24					79	

	10 ft x 10 ft x 10 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.27	0.51	0.56	0.24	0.34	0.24	0.24	0.24			
2<3	0.35	0.69	0.74	0.24					79		
3-5	0.26	0.50	0.54	0.24					79		

	11 ft x 2 ft x 11 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As1 As2 As3 As4 As5 As6 As7 As8 "M", in									
0<2	0.50	0.27	0.26	0.26	0.26	0.26	0.26	0.26			
2<3	0.73	0.35	0.35	0.26					67		
3-5	0.52	0.26	0.26	0.26					63		

	11 ft x 3 ft x 11 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.45	0.31	0.29	0.26	0.26	0.26	0.26	0.26			
2<3	0.67	0.42	0.43	0.26					63		
3-5	0.47	0.30	0.31	0.26					60		

11 ft x 4 ft x 11 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As1 As2 As3 As4 As5 As6 As7 As8 "M", in									
0<2	0.41	0.34	0.33	0.26	0.26	0.26	0.26	0.26			
2<3	0.61	0.48	0.49	0.26					60		
3-5	0.43	0.35	0.35	0.26					56		

			11	ft x 5 ft x	11 in.					
Design		Circumferential Reinforcement Areas, sq in./ ft								
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.	
0<2	0.38	0.37	0.37	0.26	0.26	0.26	0.26	0.26		
2<3	0.56	0.53	0.54	0.26					56	
3-5	0.40	0.38	0.39	0.26					56	

11 ft x 6 ft x 11 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.35	0.40	0.40	0.26	0.26	0.26	0.26	0.26			
2<3	0.52	0.58	0.60	0.26					56		
3-5	0.37	0.42	0.43	0.26					56		

11 ft x 7 ft x 11 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.33	0.42	0.43	0.26	0.28	0.26	0.26	0.26			
2<3	0.48	0.62	0.64	0.26					60		
3-5	0.35	0.44	0.47	0.26					56		

	11 ft x 8 ft x 11 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As1 As2 As3 As4 As5 As6 As7 As8 "M",									
0<2	0.31	0.45	0.47	0.26	0.30	0.26	0.26	0.26			
2<3	0.45	0.66	0.69	0.26					67		
3-5	0.33	0.47	0.50	0.26					63		

11 ft x 9 ft x 11 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.30	0.47	0.50	0.26	0.31	0.26	0.26	0.26			
2<3	0.43	0.69	0.73	0.26					85		
3-5	0.31	0.49	0.53	0.26					70		

	11 ft x 10 ft x 11 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.28	0.49	0.53	0.26	0.33	0.26	0.26	0.26				
2<3	0.41	0.73	0.77	0.26					86			
3-5	0.30	0.52	0.56	0.26					86			

	11 ft x 11 ft x 11 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.27	0.51	0.56	0.26	0.34	0.26	0.26	0.26			
2<3	0.39	0.76	0.81	0.26					86		
3-5	0.29	0.55	0.59	0.26					86		

12 ft x 2 ft x 12 in.												
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.51	0.29	0.29	0.29	0.29	0.29	0.29	0.29				
2<3	0.81	0.37	0.37	0.29					71			
3-5	0.57	0.29	0.29	0.29					68			

	12 ft x 3 ft x 12 in.												
Design		Circumferential Reinforcement Areas, sq in./ ft											
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.				
0<2	0.46	0.29	0.29	0.29	0.29	0.29	0.29	0.29					
2<3	0.74	0.44	0.44	0.29					68				
3-5	0.53	0.32	0.32	0.29					64				

	12 ft x 4 ft x 12 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As1 As2 As3 As4 As5 As6 As7 As8 "M", i									
0<2	0.42	0.33	0.31	0.29	0.29	0.29	0.29	0.29			
2<3	0.68	0.50	0.51	0.29					64		
3-5	0.49	0.36	0.37	0.29					60		

12 ft x 5 ft x 12 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.39	0.35	0.34	0.29	0.29	0.29	0.29	0.29			
2<3	0.63	0.55	0.56	0.29					64		
3-5	0.45	0.40	0.41	0.29					60		

12 ft x 6 ft x 12 in.												
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.36	0.38	0.38	0.29	0.29	0.29	0.29	0.29				
2<3	0.59	0.60	0.62	0.29					60			
3-5	0.42	0.44	0.45	0.29					56			

	12 ft x 7 ft x 11 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As1 As2 As3 As4 As5 As6 As7 As8 "M",									
0<2	0.34	0.41	0.42	0.29	0.29	0.29	0.29	0.29			
2<3	0.55	0.65	0.67	0.29					60		
3-5	0.40	0.47	0.49	0.29					60		

			12	ft x 8 ft x	12 in.				
Design			Circumfer	ential Rei	nforceme	ent Areas	, sq in./ fl	t	
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.32	0.43	0.45	0.29	0.29	0.29	0.29	0.29	
2<3	0.52	0.69	0.72	0.29					67
3-5	0.38	0.50	0.52	0.29					64

			12	ft x 9 ft x	12 in.				
Design			Circumfer	ential Reii	nforceme	nt Areas,	sq in./ ft		
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.30	0.45	0.47	0.29	0.29	0.29	0.29	0.29	
2<3	0.49	0.73	0.76	0.29					75
3-5	0.36	0.52	0.56	0.29					68

			12	ft x 10 ft x	(12 in.				
Design			Circumfer	ential Rei	nforceme	ent Areas	, sq in./ fl	t	
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.29	0.48	0.50	0.29	0.30	0.29	0.29	0.29	
2<3	0.46	0.76	0.80	0.29					93
3-5	0.34	0.55	0.59	0.29					79

			12	ft x 11 ft x	: 12 in.				
Design			Circumfer	ential Rei	nforceme	nt Areas,	sq in./ ft		
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.29	0.50	0.53	0.29	0.32	0.29	0.29	0.29	
2<3	0.44	0.79	0.85	0.29					91
3-5	0.33	0.57	0.62	0.29					79

			12	ft x 12 ft x	: 12 in.				
Design			Circumfer	ential Rei	nforceme	ent Areas	, sq in./ fl	t	
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.29	0.52	0.56	0.29	0.33	0.29	0.29	0.29	
2<3	0.43	0.83	0.89	0.29					93
3-5	0.32	0.60	0.65	0.29					93"

# CORRUGATED PLASTIC PIPE (CULVERT AND STORM SEWER) (BDE)

Effective: January 1, 2021

Revise Tables IIIA and IIIB of Article 542.03 and the storm sewers tables of Article 550.03 of the Standard Specifications to read:

(SEE TABLES ON NEXT 10 PAGES)

							TABL		"PIPE PLAS			RMITT	ED							
				FOR A	A GIVE	N PIPI	e diam	ETER	AND F	ILL HE	IGHT	OVER <sup>-</sup>	THE T	OP OF	THE F	PIPE				
			Туре 1					Туре 2					Гуре З					Туре		
Nominal Diameter	F	ill Heigl wi	nt: 3'a th 1'm		s,	Fill	Height: not ex			n 3',	Fill	Height: not ex			10',	Fill	Height: not e		ter than ng 20'	15',
(in.)	<sup>h.)</sup> PVC CPVC PE CPE CPP PVC CPVC PE									CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP
10	X QPL X QPL NA X QPL X QP									NA	Х	QPL	Х	QPL	NA	Х	QPL	Х	QPL	NA
12	X QPL X QPL NA X QPL X QP X QPL X QPL QPL X QPL X QP									QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL
15	Х	QPL	NA	QPL	QPL	Х	QPL	NA	QPL	QPL	Х	QPL	NA	QPL	QPL	Х	QPL	NA	QPL	QPL
18	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL
21	Х	QPL	NA	QPL	NA	Х	QPL	NA	QPL	NA	Х	QPL	NA	QPL	NA	Х	QPL	NA	NA	NA
24	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	NA	QPL
27	Х	NA	NA	NA	NA	Х	NA	NA	NA	NA	Х	NA	NA	NA	NA	Х	NA	NA	NA	NA
30	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	NA	QPL
36	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	NA	QPL
42	Х	NA	Х	QPL	QPL	Х	NA	Х	QPL	QPL	Х	NA	Х	NA	QPL	Х	NA	Х	NA	NA
48	Х	NA	Х	QPL	QPL	Х	NA	Х	QPL	QPL	Х	NA	Х	NA	QPL	Х	NA	Х	NA	NA
54	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60	NA	NA	NA	QPL	QPL	NA	NA	NA	QPL	QPL	NA	NA	NA	NA	QPL	NA	NA	NA	NA	NA

Notes: PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe with a Smooth Interior

PE Polyethylene Pipe

CPE

Corrugated Polyethylene Pipe with a Smooth Interior Corrugated Polypropylene Pipe with a Smooth Interior CPP

Х Permitted

QPL Permitted for the producers approved for that diameter in the Department's qualified product list

								E IIIA		STIC P	IPÈ PE	RMITT								
				FOR	a give	N PIP	E DIAM	ETER	AND F	-ILL HE	IGHT	OVER '	THE T	OP OF	THE	PIPE				
			Гуре 1				-	Туре 2	)				Гуре З					Type 4		
Nominal		II Height			,	Fill H	leight:			1 m,		leight:			,	Fill He	eight: Gr			m, not
Diameter		with 0.3	m mii	n. cove	r		not ex	ceedir	ng 3 m			not exc	eeding	4.5 m			exce	eding	6 M	
(mm)	<sup>1IIII)</sup> PVC CPVC PE CPE CPP PVC CPVC PE CPE								CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	
250										NA	Х	QPL	Х	QPL	NA	Х	QPL	Х	QPL	NA
300	Х										х	QPL	х	QPL	QPL	Х	QPL	Х	QPL	QPL
375	Х	QPL	NA	QPL	QPL	Х	QPL	NA	QPL	QPL	Х	QPL	NA	QPL	QPL	Х	QPL	NA	QPL	QPL
450	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL
525	Х	QPL	NA	QPL	NA	Х	QPL	NA	QPL	NA	Х	QPL	NA	QPL	NA	Х	QPL	NA	NA	NA
600	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	NA	QPL
675	Х	NA	NA	NA	NA	Х	NA	NA	NA	NA	Х	NA	NA	NA	NA	Х	NA	NA	NA	NA
750	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	NA	QPL
900	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	NA	QPL
1050	Х	NA	Х	QPL	QPL	Х	NA	Х	QPL	QPL	Х	NA	Х	NA	QPL	Х	NA	Х	NA	NA
1200	Х	NA	Х	QPL	QPL	Х	NA	Х	QPL	QPL	Х	NA	Х	NA	QPL	Х	NA	Х	NA	NA
1350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1500	NA	NA	NA	QPL	QPL	NA	NA	NA	QPL	QPL	NA	NA	NA	NA	QPL	NA	NA	NA	NA	NA

Notes: PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe with a Smooth Interior

PE Polyethylene Pipe

CPE

Corrugated Polyethylene Pipe with a Smooth Interior Corrugated Polypropylene Pipe with a Smooth Interior CPP

Permitted Х

QPL Permitted for the producers approved for that diameter in the Department's qualified product list

Not Acceptable NA

		FOR A G	IVEN PIPE		IB: PLAS		ERMITTED		THE PIPE						
			Type 5				Type 6			Type 7					
Nominal Diameter			t: Greater exceeding				nt: Greater exceeding			ht: Greater					
(in.)	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	PVC	CPVC	PE				
10	Х														
12	Х	QPL X QPL QPL X QPL X QPL X													
15	Х	QPL	NA	NA	QPL	Х	QPL	NA	Х	QPL	NA				
18	Х	QPL	Х	NA	NA	Х	QPL	Х	Х	QPL	Х				
21	Х	QPL	NA	NA	NA	Х	QPL	NA	Х	QPL	NA				
24	Х	QPL	Х	NA	NA	Х	QPL	Х	Х	QPL	Х				
27	Х	NA	NA	NA	NA	Х	NA	NA	Х	NA	NA				
30	Х	QPL	Х	NA	QPL	Х	QPL	Х	Х	QPL	Х				
36	Х	QPL	Х	NA	NA	Х	QPL	Х	Х	QPL	Х				
42	Х	NA	Х	NA	NA	Х	NA	Х	Х	NA	Х				
48	Х	NA	Х	NA	NA	Х	NA	Х	Х	NA	Х				
54	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				

Notes: PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe with a Smooth Interior

CPP Corrugated Polypropylene Pipe with a Smooth Interior

X Permitted

QPL Permitted for the producers approved for that diameter in the Department's qualified product list

		FOR A	GIVEN PI	===	IIIB: PLAS		PERMITTED	e top of t	HE PIPE						
			Type 5				Type 6			Type 7					
Nominal Diameter			t: Greater exceeding 7				t: Greater th exceeding			nt: Greater 1 exceeding 10					
(mm)	PVC	CPVC         PE         CPE         CPP         PVC         CPVC         PE         PVC         CPVC         PE           QPL         X         QPL         NA         X         QPL         X         QPL         X         QPL         X													
250	Х														
300	Х	QPL X QPL QPL X QPL X QPL X													
375	Х	QPL	NA	NA	QPL	Х	QPL	NA	Х	QPL	NA				
450	Х	QPL	Х	NA	NA	Х	QPL	Х	Х	QPL	Х				
525	Х	QPL	NA	NA	NA	Х	QPL	NA	Х	QPL	NA				
600	Х	QPL	Х	NA	NA	Х	QPL	Х	Х	QPL	Х				
675	Х	NA	NA	NA	NA	Х	NA	NA	Х	NA	NA				
750	Х	QPL	Х	NA	QPL	Х	QPL	Х	Х	QPL	Х				
900	Х	QPL	Х	NA	NA	Х	QPL	Х	Х	QPL	Х				
1000	Х	NA	Х	NA	NA	Х	NA	Х	Х	NA	Х				
1200	Х	NA	Х	NA	NA	Х	NA	Х	Х	NA	Х				
1350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
1500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				

Notes: PVC

 PVC
 Polyvinyl Chloride Pipe

 CPVC
 Corrugated Polyvinyl Chloride Pipe with a Smooth Interior

CPP Corrugated Polypropylene Pipe with a Smooth Interior

Х Permitted

QPL Permitted for the producers approved for that diameter in the Department's qualified product list

					IND OF M		L PERMI		ID STREM							
			FO		EN PIPE D	DIAMETE	RS AND	FILL HEI	<u>GHTS O\</u> I	/ER THE	TOP OF					
Neminel				Iyp	be 1							Тур	be 2			
Nominal Diameter in.			Fil		3' and les I' min.	SS,						leight: G not exce	reater tha eding 10'	an 3',		
	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP
10	NA	3	Х	Х	QPL	Х	QPL	NA	NA	1	*Х	Х	QPL	Х	QPL	NA
12	IV	NA	Х	Х	QPL	Х	QPL	QPL	II	1	*X	Х	QPL	Х	QPL	QPL
15	IV	NA	NA	Х	QPL	NA	QPL	QPL		1	*X	Х	QPL	NA	QPL	QPL
18	IV	NA	NA	Х	QPL	Х	QPL	QPL	II	2	Х	Х	QPL	Х	QPL	QPL
21		NA	NA	Х	QPL	NA	QPL	NA	II	2	Х	Х	QPL	NA	QPL	NA
24		NA	NA	Х	QPL	Х	QPL	QPL		2	Х	Х	QPL	Х	QPL	QPL
27		NA	NA	Х	NA	NA	NA	NA	II	3	Х	Х	NA	NA	NA	NA
30	IV	NA	NA	Х	QPL	Х	QPL	QPL	11	3	Х	Х	QPL	Х	QPL	QPL
33		NA	NA	NA	NA	NA	NA	NA		NA	Х	NA	NA	NA	NA	NA
36	111	NA	NA	Х	QPL	Х	QPL	QPL	11	NA	Х	Х	QPL	Х	QPL	QPL
42	II	NA	Х	Х	NA	Х	QPL	QPL	II	NA	Х	Х	NA	Х	QPL	QPL
48	II	NA	Х	Х	NA	Х	QPL	QPL		NA	Х	Х	NA	Х	QPL	QPL
54	11	NA	NA	NA	NA	NA	NA	NA	11	NA	NA	NA	NA	NA	NA	NA
60	II	NA	NA	NA	NA	NA	QPL	QPL	II	NA	NA	NA	NA	NA	QPL	QPL
66		NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA
72	11	NA	NA	NA	NA	NA	NA	NA	11	NA	NA	NA	NA	NA	NA	NA
78	II	NA	NA	NA	NA	NA	NA	NA	11	NA	NA	NA	NA	NA	NA	NA
84		NA	NA	NA	NA	NA	NA	NA	11	NA	NA	NA	NA	NA	NA	NA
90	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA
96	11	NA	NA	NA	NA	NA	NA	NA	111	NA	NA	NA	NA	NA	NA	NA
102	11	NA	NA	NA	NA	NA	NA	NA	111	NA	NA	NA	NA	NA	NA	NA
108		NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

CSP Concrete Sewer, Storm drain, and Culvert Pipe (number in column indicates strength class)

ESCP Extra Strength Clay Pipe

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe with a Smooth Interior

Polyethylene Pipe ΡE

CPE

Corrugated Polyethylene Pipe with a Smooth Interior Corrugated Polypropylene Pipe with a Smooth Interior CPP

Permitted Х

QPL Permitted for the producers approved for that diameter in the Department's qualified product list

NA Not Acceptable \*

May also use Standard Strength Clay Pipe

			50		IND OF M	<b>1ATERIA</b>		TTED AN	ID STRÉM				_			
			FO		<u>EN PIPE E</u> be 1	DIAMETE	RS AND	FILL HEI	GHTS O\	/ER THE	TOP OF		E De 2			
Nominal Diameter mm			Fill		1 m and le	ess,						eight: Gr	eater thar eding 3 m			
	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP
250 300 375	NA IV IV	3 NA NA	X X NA	X X X	QPL QPL QPL	X X NA	QPL QPL QPL	NA QPL QPL	NA II II	1 1 1	*X *X *X	X X X	QPL QPL QPL	X X NA	QPL QPL QPL	NA QPL QPL
450 525 600	IV III III	NA NA NA	NA NA NA	X X X	QPL QPL QPL QPL	X NA X	QPL QPL QPL QPL	QPL NA QPL		2 2 2	X X X	X X X	QPL QPL QPL QPL	X NA X	QPL QPL QPL QPL	QPL NA QPL
675 750 825		NA NA NA	NA NA NA	X X NA	NA QPL NA	NA X NA	NA QPL NA	NA QPL NA		3 3 NA	X X X	X X NA	NA QPL NA	NA X NA	NA QPL NA	NA QPL NA
900 1050 1200		NA NA NA	NA X X	X X X	QPL NA NA	X X X	QPL QPL QPL	QPL QPL QPL		NA NA NA	X X X	X X X	QPL NA NA	X X X	QPL QPL QPL	QPL QPL QPL
1350 1500 1650	    	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA QPL NA	NA QPL NA		NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA QPL NA	NA QPL NA
1800 1950 2100	    	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	    	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA
2250 2400 2550 2700	= = =	NA NA NA NA	NA NA NA NA	NA NA NA NA	NA NA NA NA	NA NA NA NA	NA NA NA NA	NA NA NA NA		NA NA NA NA	NA NA NA NA	NA NA NA NA	NA NA NA NA	NA NA NA NA	NA NA NA NA	NA NA NA NA

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

CSP Concrete Sewer, Storm drain, and Culvert Pipe (number in column indicates strength class)

ESCP Extra Strength Clay Pipe

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe with a Smooth Interior

Polyethylene Pipe ΡE

CPE

Corrugated Polyethylene Pipe with a Smooth Interior Corrugated Polypropylene Pipe with a Smooth Interior CPP

Permitted Х

QPL Permitted for the producers approved for that diameter in the Department's qualified product list

NA Not Acceptable \*

May also use Standard Strength Clay Pipe

				К	IND OF M	IATERIA		RM SEWE		IGTH RE	QUIRED					
			FO	r a give	EN PIPE D	DIAMETE	RS AND	FILL HEI	GHTS O\	/ER THE	TOP OF	THE PIP	E			
				Тур	be 3							Тур	be 4			
Nominal Diameter in.			Fill ⊢		reater tha eeding 15						Fill H		reater tha eding 20'	ın 15'		
	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP
10 12 15	NA III III	2 2 3	X X X	X X X	QPL QPL QPL	X X NA	QPL QPL QPL	NA QPL QPL	NA IV IV	3 NA NA	X NA NA	X X X	QPL QPL QPL	X X NA	QPL QPL QPL	NA QPL
15		NA	X	X	QPL	X	QPL		IV	NA	NA	X	QPL	X	QPL	QPL QPL
21		NA	NA	x	QPL	NA	QPL	NA	iv	NA	NA	x	QPL	NA	NA	NA
24	III	NA	NA	X	QPL	X	QPL	QPL	IV	NA	NA	X	QPL	X	NA	QPL
27		NA	NA	Х	NA	NA	NA	NA	IV	NA	NA	Х	NA	NA	NA	NA
30	111	NA	NA	Х	QPL	Х	QPL	QPL	IV	NA	NA	Х	QPL	Х	NA	QPL
33		NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA	NA
36		NA	NA	Х	QPL	Х	QPL	QPL	IV	NA	NA	Х	QPL	Х	NA	QPL
42		NA	NA	Х	NA	Х	NA	QPL	IV	NA	NA	Х	NA	Х	NA	NA
48		NA	NA	Х	NA	Х	NA	QPL	IV	NA	NA	Х	NA	Х	NA	NA
54	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA	NA
60	111	NA	NA	NA	NA	NA	NA	QPL	IV	NA	NA	NA	NA	NA	NA	NA
66		NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA	NA
72	111	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA	NA
78 84		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	IV IV	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
04 90		NA	NA	NA	NA	NA	NA	NA	1680	NA	NA	NA	NA	NA	NA	NA
90 96		NA	NA	NA	NA	NA	NA	NA	1690	NA	NA	NA	NA	NA	NA	NA
102		NA	NA	NA	NA	NA	NA	NA	1700	NA	NA	NA	NA	NA	NA	NA
102	1360	NA	NA	NA	NA	NA	NA	NA	1710	NA	NA	NA	NA	NA	NA	NA

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe (RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the D-load to produce a 0.01 in crack.)

CSP Concrete Sewer, Storm drain, and Culvert Pipe (number in column indicates strength class)

ESCP Extra Strength Clay Pipe

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe with a Smooth Interior

PE Polyethylene Pipe

CPE Corrugated Polyethylene Pipe with a Smooth Interior

CPP Corrugated Polypropylene Pipe with a Smooth Interior

X Permitted

QPL Permitted for the producers approved for that diameter in the Department's qualified product list

	STORM SEWERS (metric) KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED															
	FOR A GIVEN PIPE DIAMETERS AND FILL HE								EIGHTS OVER THE TOP OF THE PIPE							
	Туре 3								Туре 4							
Nominal Diameter mm	Fill Height: Greater than 3 m, not exceeding 4.5 m								Fill Height: Greater than 4.5 m, not exceeding 6 m							
111111	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP
250 300 375	NA III III	2 2 3	X X X	X X X	QPL QPL QPL	X X NA	QPL QPL QPL	NA QPL QPL	NA IV IV	3 NA NA	X NA NA	X X X	QPL QPL QPL	X X NA	QPL QPL QPL	NA QPL QPL
450		NA	X	X	QPL	X	QPL		IV	NA	NA	X	QPL	X		QPL
525	iii	NA	NA	x	QPL	NA	QPL	NA	iv	NA	NA	X	QPL	NA	NA	NA
600	III	NA	NA	X	QPL	X	QPL	QPL	IV	NA	NA	X	QPL	X	NA	QPL
675		NA	NA	Х	NA	NA	NA	NA	IV	NA	NA	Х	NA	NA	NA	NA
750		NA	NA	Х	QPL	Х	QPL	QPL	IV	NA	NA	Х	QPL	Х	NA	QPL
825		NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA	NA
900		NA	NA	Х	QPL	Х	QPL	QPL	IV	NA	NA	Х	QPL	Х	NA	QPL
1050	III	NA	NA	Х	NA	Х	NA	QPL	IV	NA	NA	Х	NA	Х	NA	NA
1200		NA	NA	Х	NA	Х	NA	QPL	IV	NA	NA	Х	NA	Х	NA	NA
1350		NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA	NA
1500		NA	NA	NA	NA	NA	NA	QPL	IV IV	NA	NA	NA	NA	NA	NA	NA
1650		NA	NA NA	NA	NA	NA	NA NA	NA	IV	NA	NA NA	NA NA	NA	NA	NA NA	NA NA
1800 1950		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	IV	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
2100		NA NA	NA NA	NA	NA NA	NA NA	NA NA	NA NA	IV	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
2250		NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	NA	NA	NA	NA
2400		NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	NA	NA	NA	NA
2550		NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	NA	NA	NA	NA
2700	70	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	NA	NA	NA	NA

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe (RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the D-load to produce a 25.4 micro-meter crack.)

CSP Concrete Sewer, Storm drain, and Culvert Pipe (number in column indicates strength class)

ESCP Extra Strength Clay Pipe

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe with a Smooth Interior

PE Polyethylene Pipe

CPE Corrugated Polyethylene Pipe with a Smooth Interior

CPP Corrugated Polypropylene Pipe with a Smooth Interior

X Permitted

QPL Permitted for the producers approved for that diameter in the Department's qualified product list

	STORM SEWERS													
	KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED													
	FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE													
			Тур	e 5				Туре 6			Туре 7			
Nominal		Fill H	leight: Gr	eater tha	n 20'.		Fill H	eiaht: Gi	eater tha	า 25'.	Fill H	eiaht: Gr	eater than	30'.
Diameter			not exce		- ,			not excee		- ,	not exceeding 35'			
in.	RCCP	PVC	CPVC	PE	CPE	CPP	RCCP	PVC	CPVC	PE	RCCP	PVC	CPVC	PE
10	NA	X	QPL	Х	QPL	NA	NA	X	QPL	Х	NA	X	QPL	Х
12	IV	X	QPL	X	QPL	QPL	V	X	QPL	X	V	X	QPL	X
15	iv	X	QPL	NA	NA	QPL	v	X	QPL	ŇĂ	v	X	QPL	NA
18	IV	Х	QPL	Х	NA	NA	V	Х	QPL	Х	V	Х	QPL	Х
21	IV	Х	QPL	NA	NA	NA	V	Х	QPL	NA	V	Х	QPL	NA
24	IV	Х	QPL	Х	NA	NA	V	Х	QPL	Х	V	Х	QPL	Х
27	IV	Х	NA	NA	NA	NA	V	Х	NA	NA	V	Х	NA	NA
30	IV	Х	QPL	Х	NA	QPL	V	Х	QPL	Х	V	Х	QPL	Х
33	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA
36	IV	Х	QPL	Х	NA	NA	V	Х	QPL	Х	V	Х	QPL	Х
42	IV	Х	NA	Х	NA	NA	V	Х	NA	Х	V	Х	NA	Х
48	IV	Х	NA	Х	NA	NA	V	Х	NA	Х	V	Х	NA	Х
54	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA
60	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA
66	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA
72	V	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA
78	2020	NA	NA	NA	NA	NA	2370	NA	NA	NA	2730	NA	NA	NA
84	2020	NA	NA	NA	NA	NA	2380	NA	NA	NA	2740	NA	NA	NA
90	2030	NA	NA	NA	NA	NA	2390	NA	NA	NA	2750	NA	NA	NA
96	2040	NA	NA	NA	NA	NA	2400	NA	NA	NA	2750	NA	NA	NA
102	2050	NA	NA	NA	NA	NA	2410	NA	NA	NA	2760	NA	NA	NA
108	2060	NA	NA	NA	NA	NA	2410	NA	NA	NA	2770	NA	NA	NA

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe (RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the D-load to produce a 0.01 in crack.)

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe with a Smooth Interior

PE Polyethylene Pipe

CPE Corrugated Polyethylene Pipe with a Smooth Interior

CPP Corrugated Polypropylene Pipe with a Smooth Interior

X Permitted

QPL Permitted for the producers approved for that diameter in the Department's qualified product list

				KIND C	OF MATEI		M SEWER		:) ENGTH R	EQUIRED	)			
			FOR A G	SIVEN PIP	PE DIAME	ETERS A	ND FILL H	IEIGHTS	OVER TH	E TOP OF	THE PIPE			
	Туре 5							Туре 6			Type 7 Fill Height: Greater than 9 m, not exceeding 10.5 m			
Nominal Diameter mm	Fill Height: Greater than 6 m, not exceeding 7.5 m						Fill Height: Greater than 7.5 m, not exceeding 9 m							
	RCCP	PVC	CPVC	PE	CPE	CPP	RCCP	PVC	CPVC	PE	RCCP	PVC	CPVC	PE
250	NA	Х	QPL	Х	QPL	NA	NA	Х	QPL	Х	NA	Х	QPL	Х
300	IV	Х	QPL	Х	QPL	QPL	V	Х	QPL	Х	V	Х	QPL	Х
375	IV	Х	QPL	NA	NA	QPL	V	Х	QPL	NA	V	Х	QPL	NA
450	IV	Х	QPL	Х	NA	NA	V	Х	QPL	Х	V	Х	QPL	Х
525	IV	Х	QPL	NA	NA	NA	V	Х	QPL	NA	V	Х	QPL	NA
600	IV	Х	QPL	Х	NA	NA	V	Х	QPL	Х	V	Х	QPL	Х
675	IV	Х	NA	NA	NA	NA	V	Х	NA	NA	V	Х	NA	NA
750	IV	Х	QPL	Х	NA	QPL	V	Х	QPL	Х	V	Х	QPL	Х
825	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA
900	IV	Х	QPL	Х	NA	NA	V	Х	QPL	Х	V	Х	QPL	Х
1050	IV	Х	NA	Х	NA	NA	V	Х	NA	Х	V	Х	NA	Х
1200	IV	Х	NA	Х	NA	NA	V	Х	NA	Х	V	Х	NA	Х
1350	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA
1500	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA
1650	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA
1800	V	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA
1950	100	NA	NA	NA	NA	NA	110	NA	NA	NA	130	NA	NA	NA
2100	100	NA	NA	NA	NA	NA	110	NA	NA	NA	130	NA	NA	NA
2250	100	NA	NA	NA	NA	NA	110	NA	NA	NA	130	NA	NA	NA
2400	100	NA	NA	NA	NA	NA	120	NA	NA	NA	130	NA	NA	NA
2550	100	NA	NA	NA	NA	NA	120	NA	NA	NA	130	NA	NA	NA
2700	100	NA	NA	NA	NA	NA	120	NA	NA	NA	130	NA	NA	NA

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe (RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the D-load to produce a 25.4 micro-meter crack.)

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe with a Smooth Interior

PE Polyethylene Pipe

CPE Corrugated Polyethylene Pipe with a Smooth Interior

CPP Corrugated Polypropylene Pipe with a Smooth Interior

X Permitted

QPL Permitted for the producers approved for that diameter in the Department's qualified product list

Revise the first paragraph of Article 1040.03 of the Standard Specifications to read:

**\*1040.03 Polyvinyl Chloride (PVC) Pipe.** Acceptance testing of PVC pipe and fittings shall be accomplished during the same construction season in which they are installed. The pipe shall meet the following additional requirements."

Revise Article 1040.04(b) of the Standard Specifications to read:

"(b) Corrugated PE Pipe with a Smooth Interior. The manufacturer shall be listed as compliant through the NTPEP program and the pipe shall be according to AASHTO M 294 (nominal size – 12 to 60 in. (300 to 1500 mm)). The pipe shall be Type S or D."

Revise the first paragraph of Article 1040.04(d) of the Standard Specifications to read:

"(d) PE Pipe with a Smooth Interior. The pipe shall be according to ASTM F 714 (DR 32.5) with a minimum cell classification of PE 335434 as defined in ASTM D 3350."

Revise the first paragraph of Article 1040.08 of the Standard Specifications to read:

"**1040.08** Polypropylene (PP) Pipe. Storage and handling shall be according to the manufacturer's recommendations, except in no case shall the pipe be exposed to direct sunlight for more than six months. Acceptance testing of the pipe shall be accomplished during the same construction season in which it is installed. The pipe shall meet the following additional requirements."

#### 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.

<u>STATE OBLIGATION</u>. 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.

<u>OVERALL GOAL SET FOR THE DEPARTMENT</u>. 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.

<u>CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR</u>. 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 **8.00**% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

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

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

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

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

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

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

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

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

participation, even when the Contractor might otherwise prefer to perform these work items with its own forces.

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

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

(c) The bidder may request administrative reconsideration of an adverse determination by emailing the Department at "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.

<u>CALCULATING DBE PARTICIPATION</u>. The Utilization Plan values represent work anticipated to be performed and paid for upon satisfactory completion. The Department is only able to count toward the achievement of the overall goal and the contract goal the value of payments made for the work actually performed by DBE companies. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR Part 26.55(c) on questions of commercially useful functions as it affects the work. Specific counting guidelines are provided in 49 CFR Part 26.55, the provisions of which govern over the summary contained herein.

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.

- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:
  - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
  - (2) The DBE may also lease trucks from a non-DBE firm, including from an owneroperator. 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.

<u>CONTRACT COMPLIANCE</u>. 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 be come 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) <u>TERMINATION AND REPLACEMENT PROCEDURES</u>. 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) <u>FINAL PAYMENT</u>. 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.

## FUEL COST ADJUSTMENT (BDE)

Effective: April 1, 2009

Revised: August 1, 2017

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

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

- (a) Categories of Work.
  - (1) Category A: Earthwork. Contract pay items performed under Sections 202, 204, and 206 including any modified standard or nonstandard items where the character of the work to be performed is considered earthwork. The cumulative total of all applicable item plan quantities shall exceed 25,000 cu yd (20,000 cu m). Included in the fuel usage factor is a weighted average 0.10 gal/cu yd (0.50 liters/cu m) factor for trucking.
  - (2) Category B: Subbases and Aggregate Base Courses. Contract pay items constructed under Sections 311, 312 and 351 including any modified standard or nonstandard items where the character of the work to be performed is considered construction of a subbase or aggregate, stabilized or modified base course. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is a 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.
  - (3) Category C: Hot-Mix Asphalt (HMA) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 355, 406, 407 and 482 including any modified standard or nonstandard items where the character of the work to be performed is considered HMA bases, pavements and shoulders. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.
  - (4) Category D: Portland Cement Concrete (PCC) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 353, 420, 421 and 483 including any modified standard or nonstandard items where the character of the work to be performed is considered PCC base, pavement or shoulder. The cumulative total of all applicable item plan quantities shall exceed 7500 sq yd (6000 sq m). Included in the fuel usage factor is 1.20 gal/cu yd (5.94 liters/cu m) factor for trucking.
  - (5) Category E: Structures. Structure items having a cumulative bid price that exceeds \$250,000 for pay items constructed under Sections 502, 503, 504, 505, 512, 516 and 540 including any modified standard or nonstandard items where the character of the work to be performed is considered structure work when similar to that performed under these sections and not included in categories A through D.
- (b) Fuel Usage Factors.

English Units		
Category	Factor	Units
A - Earthwork	0.34	gal / cu yd
B – Subbase and Aggregate Base courses	0.62	gal / ton

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

(c) Quantity Conversion Factors.

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

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

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

Where: CA = Cost Adjustment, \$

- FPI<sub>P</sub> = Fuel Price Index, as published by the Department for the month the work is performed, \$/gal (\$/liter)
- FPI<sub>L</sub> = Fuel Price Index, as published by the Department for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price, \$/gal (\$/liter)

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

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

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

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

Percent Difference = {( $FPI_L - FPI_P$ ) ÷  $FPI_L$ } × 100

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

## HOT-MIX ASPHALT – PATCHING (BDE)

Effective: April 1, 2022

Replace Article 442.08(b) of the Standard Specifications with the following:

"(b) Density. The density of the compacted HMA shall be according to Articles 1030.06, 1030.09(b), 1030.09(c), and 1030.09(f)."

#### HOT-MIX ASPHALT – START OF PRODUCTION (BDE)

Effective: January 1, 2022

Add the following paragraph between the third and four paragraphs of Article 1030.10 of the Standard Specifications:

"When a test strip is not required, each HMA mixture with a quantity of 3,000 tons (2,750 metric tons) or more 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)."

#### PORTLAND CEMENT CONCRETE – HAUL TIME (BDE)

Effective: July 1, 2020

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

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

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

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

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

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

### STEEL COST ADJUSTMENT (BDE)

Effective: April 2, 2004

#### Revised: January 1, 2022

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

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

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

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

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

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

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

<u>Method of Adjustment</u>. Steel cost adjustments will be computed as follows:

SCA = Q X D

Where: SCA = steel cost adjustment, in dollars

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

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

 $D = MPI_M - MPI_L$ 

- Where:  $MPI_M =$  The Materials Cost Index for steel as published by the Engineering News-Record for the month the steel is shipped from the mill. The indices will be converted from dollars per 100 lb to dollars per lb (kg).
  - MPI<sub>L</sub> = The Materials Cost Index for steel as published by the Engineering News-Record for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price,. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

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

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

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

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

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

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

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

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

### SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)

Effective: April 2, 2018

Add the following to Section 109 of the Standard Specifications.

"**109.14 Subcontractor and Disadvantaged Business Enterprise Payment Reporting.** The Contractor shall report all payments made to the following parties:

- (a) first tier subcontractors;
- (b) lower tier subcontractors affecting disadvantaged business enterprise (DBE) goal credit;
- (c) material suppliers or trucking firms that are part of the Contractor's submitted DBE utilization plan.

The report shall be made through the Department's on-line subcontractor payment reporting system within 21 days of making the payment."

## SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

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

Replace the second paragraph of Article 109.12 of the Standard Specifications with the following:

"This mobilization payment shall be made at least seven days prior to the subcontractor starting work. The amount paid shall be at the following percentage of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor's work.

Value of Subcontract Reported on Form BC 260A	Mobilization Percentage
Less than \$10,000	25%
\$10,000 to less than \$20,000	20%
\$20,000 to less than \$40,000	18%
\$40,000 to less than \$60,000	16%
\$60,000 to less than \$80,000	14%
\$80,000 to less than \$100,000	12%
\$100,000 to less than \$250,000	10%
\$250,000 to less than \$500,000	9%
\$500,000 to \$750,000	8%
Over \$750,000	7%"

## SURFACE TESTING OF PAVEMENTS – IRI (BDE)

Effective: January 1, 2021

Revised: January 1, 2022

<u>Description</u>. This work shall consist of testing the ride quality of the finished surface of pavements, according to Illinois Test Procedure 701, "Ride Quality Testing Using the International Roughness Index (IRI)". Work shall be according to Sections 406, 407, or 420 of the Standard Specifications, except as modified herein.

## Hot-Mix Asphalt (HMA) Overlays

Add Article 406.03(n) to the Standard Specifications:

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

Revise Article 406.11 of the Standard Specifications to read:

**"406.11 Surface Tests.** Prior to pavement improvements, the Engineer will measure the smoothness of the existing high-speed mainline pavement. The Contractor shall measure the smoothness of the finished high-speed mainline, low-speed mainline, and miscellaneous pavements within seven days of paving. Testing shall be performed in the presence of the Engineer and according to Illinois Test Procedure 701. The pavement will be identified as high-speed mainline, low-speed mainline, low-speed mainline, low-speed mainline, low-speed mainline, or miscellaneous as follows.

## (a) Test Sections

- (1) High-Speed Mainline Pavement. High-speed mainline pavement shall consist of pavements, ramps, and loops with a posted speed limit greater than 45 mph. These sections shall be tested with an inertial profiling system (IPS).
- (2) Low-Speed Mainline Pavement. Low-speed mainline pavement shall consist of pavements, ramps, and loops with a posted speed limit of 45 mph or less. These sections shall be tested with an IPS and will be analyzed using the rolling 16 ft (5 m) straightedge simulation in ProVAL.
- (3) Miscellaneous Pavement. Miscellaneous pavement includes segments that either cannot readily be tested by an IPS or conditions beyond the control of the contractor preclude the achievement of smoothness levels typically achievable with mainline pavement construction. This may include the following examples or as determined by the Engineer.
  - (a) Pavement on horizontal curves with a centerline radius of curvature of less than or equal to 1,000 ft (300 m) and the pavement within the superelevation transition of such curves;
  - (b) Pavement on vertical curves having a length less than or equal to 200 ft (60 m) in combination with an algebraic change in tangent grade greater than or equal to 3 percent as may occur on urban ramps or other constricted-space facilities;
  - (c) The first and last 50 ft (15 m) of a pavement section where the Contractor is not responsible for the adjoining surface;
  - (d) Intersections and the 25 ft (7.6 m) before and after an intersection or end of radius return;
  - (e) Variable width pavements;
  - (f) Side street returns, to the end of radius return;
  - (g) Crossovers;
  - (h) Connector pavement from the mainline pavement expansion joint to the bridge approach slab;
  - (i) Bridge approach slab;
  - (j) Pavement that must be constructed in multiple short segments, typically defined as 600 ft (180 m) or less;
  - (k) Pavement within 25 ft (7.6 m) of manholes, utility structures, or other appurtenances;
  - (I) Turn lanes; and

(m)Pavement within 5 ft (1.5 m) of jobsite sampling locations for HMA volumetric testing that fall within the wheel path.

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

- (4) International Roughness Index (IRI). An index computed from a longitudinal profile measurement using a quarter-car simulation at a simulation speed of 50 mph (80 km/h).
- (5) Mean Roughness Index (MRI). The average of the IRI values for the right and left wheel tracks.
- (6) Areas of Localized Roughness (ALR). Isolated areas of roughness, which can cause significant increase in the calculated MRI for a given sublot.
- (7) Lot. A lot will be defined as a continuous strip of pavement 1 mile (1,600 m) long and one lane wide. When the length of a continuous strip of pavement is less than 1 mile (1,600 m), that pavement will be included in an adjacent lot. Structures will be omitted when measuring pavement length, but will not be considered as a discontinuity and the numbering of sublots will not restart. The limits of the structure shall include the entire length between the outside ends of both connector pavements.
- (8) Sublot. Lots will be divided into 0.1 mile (160 m) sublots. A partial sublot greater than or equal to 264 ft (80 m) resulting from an interruption in the pavement will be subject to the same evaluation as a whole sublot. Partial sublots less than 264 ft (80 m) shall be included with the previous sublot for evaluation purposes.
- (b) Corrective Work. Corrective work shall be completed according to the following.
  - (1) High-Speed Mainline Pavement. For high-speed mainline pavement, any 25 ft (7.6 m) interval with an ALR in excess of 150 in./mile (2,400 mm/km) will be identified by the Engineer and shall be corrected by the Contractor. Any sublot having a MRI greater than MRI<sub>D</sub>, including ALR, shall be corrected to reduce the MRI to the MRI<sub>F</sub>, or replaced at the Contractor's option.
  - (2) Low-Speed Mainline Pavement. Bumps in low-speed mainline pavement which exceed the 5/16 in. (8 mm) tolerance using a simulated 16 ft (5 m) straightedge will be identified by the Engineer and shall be corrected by the Contractor.
  - (3) Miscellaneous Pavements. Bumps in miscellaneous pavement which exceed the 5/16 in. (8 mm) tolerance on a 16 ft (5 m) straightedge will be identified by the Engineer and shall be corrected by the Contractor.

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

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

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

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

The upper MRI thresholds for high-speed mainline pavement are dependent on the MRI of the existing pavement before construction (MRI<sub>0</sub>) and shall be determined as follows.

	MRI Thresholds (High-Speed, HMA Overlay)	
Upper MRI Thresholds <sup>1/</sup>	MRI₀ ≤ 125.0 in./mile (≤ 1,975 mm/km)	MRI <sub>0</sub> > 125.0 in./mile <sup>1/</sup> (> 1,975 mm/km)
Incentive (MRI <sub>I</sub> )	45.0 in./mile (710 mm/km)	0.2 × MRI <sub>0</sub> + 20
Full Pay (MRI <sub>F</sub> )	75.0 in./mile (1,190 mm/km)	0.2 × MRI <sub>0</sub> + 50
Disincentive (MRI <sub>D</sub> )	100.0 in./mile (1,975 mm/km)	0.2 × MRI <sub>0</sub> + 75

1/ MRI<sub>0</sub>, MRI<sub>I</sub>, MRI<sub>F</sub>, and MRI<sub>D</sub> shall be in in./mile for calculation.

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

SMOOTHNESS ASSESSMENT SCHEDULE (High-Speed, HMA Overlay)		
Mainline Pavement MRI Range Assessment Per Sublot <sup>1/</sup>		
MRI ≤ MRI₁	+ (MRI <sub>I</sub> – MRI) × \$33.00 <sup>2/</sup>	
MRI₁ < MRI ≤ MRI <sub>F</sub>	+ \$0.00	
MRI <sub>F</sub> < MRI ≤ MRI <sub>D</sub>	– (MRI – MRI <sub>F</sub> ) × \$20.00	
MRI > MRI <sub>D</sub>	- \$500.00	

1/ MRI, MRI<sub>I</sub>, MRI<sub>F</sub>, and MRI<sub>D</sub> shall be in in./mile for calculation.

2/ The maximum incentive amount shall not exceed \$500.00.

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

FAS Route 1252 (IL 29) Project STP-IUGQ(682) Section (R-4)CR Bureau County Contract No. 66F91

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

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

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

Revise Article 407.09 of the Standard Specifications to read:

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

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

SMOOTHNESS ASSESSMENT SCHEDULE (High-Speed, Full-Depth HMA)		
Mainline Pavement MRI, in./mile (mm/km) Assessment Per Sublot <sup>1/</sup>		
≤ 45.0 (710)	+ (45 – MRI) × \$80.00 <sup>2/</sup>	
> 45.0 (710) to 75.0 (1,190)	+ \$0.00	
> 75.0 (1,190) to 100.0 (1,580)	– (MRI – 75) × \$30.00	
> 100.0 (1,580)	- \$750.00	

- 1/ MRI shall be in in./mile for calculation.
- 2/ The maximum incentive amount shall not exceed \$1,200.00."

## Portland Cement Concrete Pavement

Delete Article 420.03(i) of the Standard Specifications.

Revise Article 420.03(j) of the Standard Specifications to read:

"(i) Coring Machine (Note 1)"

Revise Article 420.10 of the Standard Specifications to read:

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

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

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

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

Pavement corrected by removal and replacement, shall be corrected in full panel sizes.

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

SMOOTHNESS ASSESSMENT SCHEDULE (High-Speed, PCC)		
Mainline Pavement MRI, in./mile (mm/km) <sup>3/</sup> Assessment Per Sublot <sup>1/</sup>		
≤ 45.0 (710)	+ (45 – MRI) × \$120.00 <sup>2/</sup>	
> 45.0 (710) to 75.0 (1,190)	+ \$0.00	
> 75.0 (1,190) to 100.0 (1,580)	– (MRI – 75) × \$45.00	
> 100.0 (1,580)	- \$1,125.00	

- 1/ MRI shall be in in./mile for calculation.
- 2/ The maximum incentive amount shall not exceed \$1,800.00.
- 3/ If pavement is constructed with traffic in the lane next to it, then an additional 10 in./mile will be added to the upper thresholds."

## Removal of Existing Pavement and Appurtenances

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

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

FAS Route 1252 (IL 29) Project STP-IUGQ(682) Section (R-4)CR Bureau County Contract No. 66F91

## VEHICLE AND EQUIPMENT WARNING LIGHTS (BDE)

Effective: November 1, 2021

Add the following paragraph after the first paragraph of Article 701.08 of the Standard Specifications:

"The Contractor shall equip all vehicles and equipment with high-intensity oscillating, rotating, or flashing, amber or amber-and-white, warning lights which are visible from all directions. The lights shall be in operation while the vehicle or equipment is engaged in construction operations."

## WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012

Revised: November 1, 2021

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

The report shall be submitted to the Engineer on Department form "SBE 723" within ten business days following the reporting period. The reporting period shall be Sunday through Saturday for each week reportable trucking activities occur.

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

## WORK ZONE TRAFFIC CONTROL DEVICES (BDE)

Effective: March 2, 2020

Add the following to Article 701.03 of the Standard Specifications:

"(q) Temporary Sign 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 **<u>90</u>** working days.

### SWPPP



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



Route	Marked Route	Section Number
FAS 1252	IL 29	(R-4)CR
Project Number	County	Contract Number
STP-IUGQ(682)	Bureau	66F91

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

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

Signature			Date
Mand Herwood			02-04-22
Print Name	Title	Agency	
Masood Ahmad	Regional Engineer	Illinois Department of T	ransportation

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

#### I. Site Description:

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

The project involves approximately 0.5 mile section along IL 29, between Princeton Road and East Street in Bureau County, Illinois. The beginning station of the project is located at approximately N41°19'46", W89°19'26", T16N, R10E, Sec 34 of the 4th PM. The end station of the project is located at approximately N41°20'0.5", W89°,18', 53.5", T16N, 10E, Sec 35 of the 4th PM.

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

Remove and replace six box culverts, 006-2535/2536/2537/2538/2540 and an unnumbered 3'X3', resurfacing between structures, and shoulder widening.

C. Provide the estimated duration of this project:		
Approx. 1 year		
D. The total area of the construction site is estimated to be $4.50$ arces	acres.	

The total area of the site estimated to be disturbed by excavation, grading or other activities is 2,85 acres

E. The following are weighted averages of the runoff coefficient for this project before and after construction activities are completed; see Section 4-102 of the IDOT Drainage Manual:

Pre-Development: 0.60 Post Development: 0.71

F. List all soils found within project boundaries; include map unit name, slope information, and erosivity:
 233B - Birkbeck Silt Loam 2 to 5 percent slopes, 233C2 - Birkbeck Silt load, 5 to 10 percent slopes, eroded,
 194G - Morley Silt Ioam, 35 to 60 percent slopes, 25G - Hennepin Ioam, 35 to 70 percent slopes, 440B - Jasper

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#### silt loam, 2 to 5 percent slopes.

G. If wetlands were delineated for this project, provide an extent of wetland acreage at the site; see Phase I report. N/A

H. Provide a description of potentially erosive areas associated with this project: Potential erosive areas involve water and wind erosion due regrading of the roadway shoulders and channel.

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.):

Construction disturbance will be occur due to the presence of construction equipment, land clearing, demolition of existing culverts, and slope/channel regrading. A majority of the slopes that shall be regraded are steeper than 3:1.

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 nonstructural 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: State

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

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:

Unnamed tributaries which ultimately drains to Illinois 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 waterdependent structures authorized by a Section 404 permit, describe: a) How a 50-foot undisturbed natural buffer will be provided between the construction activity and the Waters of the U.S. or b) How additional erosion and sediment controls will be provided within that area

A majority of the adjacent roadway shoulders are heavily vegetated with natural growth. The limits of the disturbance for the project were minimized to protect the natural vegetation as much possible. No tree clearing shall be conducted between April 1 through September 30 for trees 3 inches or greater at breast height.

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.

None

□ 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:

N/A

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 (silt fence) will be provided in any areas where stormwater runoff from the disturbed

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areas and roadway has the potential to travel offsite.

Temporary Ditch Checks will be used in all ditches where runoff from disturbed areas is expected to flow. Inlet and Pipe Protection shall be used on all drainage structures to prevent siltation. Erosion Control Blankets shall be provided on all disturbed 3:1 slopes to prevent soil loss. Heavy Duty Erosion Control Blankets shall be provided all disturbed 3:1 to 2:1 slopes to prevent soil loss. Rip Rap shall be provided on all disturbed slopes steeper than 2:1 and at end of culverts to prevent soil loss. Temporary Seeding shall be applied throughout job-site for stabilization as required.

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

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

N/A

Applicable Federal, Tribal, State, or Local Programs

N/A

Floodplain

N/A

Historic Preservation

N/A

Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or siltation TMDL (fill out this section if checked above)

The name(s) of the listed water body:

Unnamed Tributary

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

Perimeter Erosion Barrier (silt fence) will be provided in any areas where stormwater runoff from the disturbed areas and roadway has the potential to travel offsite.

Temporary Ditch Checks will be used in all ditches where runoff from disturbed areas is expected to flow. Inlet and Pipe Protection shall be used on all drainage structures to prevent siltation.

Erosion Control Blankets shall be provided on all disturbed 3:1 slopes to prevent soil loss.

Heavy Duty Erosion Control Blankets shall be provided all disturbed 3:1 to 2:1 slopes to prevent soil loss. Rip Rap shall be provided on all disturbed slopes steeper than 2:1 and at end of culverts to prevent soil loss. Temporary Seeding shall be applied throughout job-site for stabilization as required.

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

N/A

Threatened and Endangered Species/Illinois Natural Areas (INAI)/Nature Preserves

Indiana Bat and Northern Long-Eared Bat

Other

Recognized Environmental Conditions

Wetland

N/A

P. The following pollutants of concern will be associated with this construction project: Solid Waste Debris Antifreeze / Coolants

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FAS Route 1252 (IL 29) Project STP-IUGQ(682) Section (R-4)CR Bureau County Contract No. 66F91

Concrete	Solvents
Concrete Curing Compounds	Waste water from cleaning construction equipments
Concrete Truck Waste	Other (Specify)
Fertilizers / Pesticides	Other (Specify)
⊠ Paints	Other (Specify)
Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids)	Other (Specify)
Soil Sediment	Other (Specify)

II. Controls:

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 Contractors, will notify the Resident Engineer of any proposed changes, maintenance, or modifications to keep construction activities compliant with the Permit ILR10. Each such Contractor has signed the required certification on forms which are attached to, and are a part of, this plan:

A. Erosion and Sediment Controls: At a minimum, controls must be coordinated, installed and maintained to:

- 1. Minimize the amount of soil exposed during construction activity;
- 2. Minimize the disturbance of steep slopes;
- 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:

🔀 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)
X Temporary Erosion Control Seeding	Other (Specify)

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

During construction temporary erosion control seeding shall be provided to stabilize any disturbed bare earth areas when construction activities are to cease for extended periods. Erosion Control blankets or Heavy Duty Erosion Control Blankets shall be provided with class 3 seeding for all open areas.

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

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

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

Perimeter Erosion Barrier (silt fence) will be provided in any areas where stormwater runoff from the disturbed areas and roadway has the potential to travel offsite.

Temporary Ditch Checks will be used in all ditches where runoff from disturbed areas is expected to flow. Inlet and Pipe Protection shall be used on all drainage structures to prevent siltation.

Rip Rap shall be provided on all disturbed slopes steeper than 2:1 and at end of culverts to prevent soil loss.

Describe how the structural practices listed above will be utilized after construction activities have been completed: Rip Rap shall remain in place.

#### D. Treatment Chemicals

Will polymer flocculants or treatment chemicals be utilized on this project:

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

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

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

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

2. Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a

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non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., maintenance of hydrologic conditions such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Description of permanent storm water management controls:

N/A

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 approved by local officials:

All management practices, controls and other provisions provided the local plans are in accordance with IDOT standards specifications and the Illinois Urban Manual

- 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.

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- 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.

The maintenance of erosion control systems will be the responsibility of the contractor. Temporary seeding shall be reapplied if stabilization hasn't been achieved. Provide temporary mulch to hold seeds in place if seed has been washed away. Repair/replaced damaged to erosion control blankets, reseeding may be necessary. Repair teared, gaped or undermined Perimeter Erosion Barrier and ensure barrier is taunt. Replace missing or broken stakes immediately. Clean Perimeter Erosions Barrier when sediment reaches 1/3 of barrier height. Remove sediment from upstream side of ditch checks when sediment has reached 50% of height of structure. Repair/ replace ditch checks whenever tears, splits, unraveling or compressed excelsior is apparent. Remove debris when observed from ditch checks. Replace/repair damaged ditch checks. Remove sediment from inlet filter baskets when baskets is 25% full or 50% of fabric pores are covered with silt. Clean inlet filters if standing water is present longer that one hour after rain event. Replace filter if any tears are present.

All locations where vehicles enter and exit the construction site and all other areas subject to erosion should be inspected per the guidelines as described in Section IV below.

#### 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: <u>epa.swnoncomp@illinois.gov</u>, telephone or fax within twenty-four (24) hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Non-Compliance" (ION) report for the identified violation within five (5) days of the incident. The Resident Engineer shall use forms provided by IEPA and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of non-compliance shall be signed by a responsible authority in accordance with Part VI. G of the Permit ILR10.

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

#### V. Failure to Comply:

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

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#### **Contractor Certification Statement**



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

Route	Marked Route	Section Number
FAS 1252	IL 29	(R-4)CR
Project Number	County	Contract Number
STP-UIGQ(682)	Bureau	66F91

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

I certify under penalty of law that I understand the terms of the Permit No. ILR 10 that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

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

Contractor

Sub-Contractor

Signature	Date
Print Name	Title
Name of Firm	Phone
Street Address	City State Zip Code
Items which this Contractor/subcontractor will be responsible for as required in Section II.G. of SWPPP	

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

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

#### ATTACHMENTS

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

#### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

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

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor

performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

#### **II. NONDISCRIMINATION**

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

**1. Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

**3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

**5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

#### 6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information. d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

#### 10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

**11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391.

The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-thejob training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### **III. NONSEGREGATED FACILITIES**

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or singleuser restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

#### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

#### 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH–1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

#### 2. Withholding

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

#### 3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(1) The contractor shall submit weekly for each week in which b any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

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

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice

performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe shall be paid in accordance with that determination.

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

b. Trainees (programs of the USDOL).

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

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

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

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

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

**6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

**7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

**9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

#### 10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

### V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

**1. Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one

and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

**3. Withholding for unpaid wages and liquidated damages.** The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

#### VI. SUBLETTING OR ASSIGNING THE CONTRACT

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

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
 (2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

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

### VII. SAFETY: ACCIDENT PREVENTION

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

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

### **VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS**

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

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

#### 18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

# IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

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

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

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

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

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

### 1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

\* \* \* \* \*

# 2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

#### 2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

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

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\* \* \* \* \*

# XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

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

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

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

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

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

## Contract Provision - Cargo Preference Requirements

In accordance with Title 46 CFR § 381.7 (b), the contractor agrees-

"(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract."

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