

# 23

September 17, 2021 Letting

## Notice to Bidders, Specifications and Proposal



**Illinois Department  
of Transportation**

**Contract No. 66L97  
IROQUOIS County  
Section (136)CLV  
Route FAP 840  
District 3 Construction Funds**

Prepared by

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Checked by

(Printed by authority of the State of Illinois)



- 1. TIME AND PLACE OF OPENING BIDS.** Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. September 17, 2021 prevailing time 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. 66L97  
IROQUOIS County  
Section (136)CLV  
Route FAP 840  
District 3 Construction Funds**

**This project is located at failed 48- diameter pipe culvert at Sta. 391+00 carrying IL 49 over Shavetail Creek approximately 8 miles South of US 24 (Crescent City). This project consists of removal and replacement of existing 48" and 12" storm sewer, catch basin, manhole, pavement patching and other related construction items.**

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

By Order of the  
Illinois Department of Transportation

Omer Osman, P.E.  
Secretary

INDEX  
FOR  
SUPPLEMENTAL SPECIFICATIONS  
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2021

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

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 4-1-16) (Revised 1-1-21)

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## STATE OF ILLINOIS

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### SPECIAL PROVISIONS

The following Special Provisions supplement the “Standard Specifications for Road and Bridge Construction, Adopted April 1, 2016”, the latest edition of the “Manual on Uniform Traffic Control Devices for Streets and Highways”, and the “Manual of Test Procedures 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 FAP Route 840 (IL 49), Section (135)CLV, Iroquois County, Contract No. 66L97 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

This project is located on F.A.P. Route 840 (IL 49) between the Intersections of IL 49/1120N Rd. and the Intersection of IL 49/1300E Rd.

#### DESCRIPTION OF PROJECT

This project consists of the removal of existing 4’ diameter catch basin, 5’ diameter manhole, 12” diameter CMP, 48” diameter CMP storm sewers and replacement with 4” diameter catch basin, 6’ diameter manhole, 15” diameter Storm Sewer, Class B, Type 1 (PE) and 48” diameter Storm Sewer, Class A, Type 1 (RCCP) and other related construction work.

## **LINEAR TRANSPORTATION PROJECTS (CORPS OF ENGINEERS NWP # 14)**

(Effective March 19, 2017)

All requests made by the Contractor shall refer to Permit No. **DOT-D3-2021-0007** for the proposed bridge Linear Transportation Project of **48 in CMP (Exist) 48 in RCP (Prop)**. (This project is considered **Non-Reporting**)

Contract No. **66L97**

- 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  $\frac{1}{2}$  acre of waters of the United States. For linear transportation projects in tidal waters\*, the discharge cannot cause the loss of greater than  $\frac{1}{3}$  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 to 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 Dr., 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/utills/getfile/collection/p16021coll7/id/8593>

Permit Expiration: **March 18, 2022**

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



## KEEPING ROADS OPEN TO TRAFFIC

- One lane of traffic shall remain open to traffic at all times. Road closures shall not be permitted.
- The Contractor shall schedule his work operations so that once the existing pavement has been removed, the Contractor's construction work shall continue until all construction requirements have been completed including final wearing surface on that lane of traffic.
  - a. Daytime traffic control shall be according to Traffic Control and Protection, Standard 701201.
  - b. Nighttime traffic control shall be according to Traffic Control and Protection, Standard 701206 with nighttime work zone lighting

In the event that the Contractor fails to open the lane of traffic as specified above, the Contractor shall backfill the open trench with aggregate approved by the Engineer and capped with 3" Cold-Mix Asphalt at no cost to the Department.

Basis of Payment. Traffic control and protection will be paid for at the contract unit price for TRAFFIC CONTROL AND PROTECTION, STANDARD 701201 per L Sum or TRAFFIC CONTROL AND PROTECTION, STANDARD 70120 per L Sum and NIGHTTIME WORK ZONE LIGHTING per L sum.

## TEMPORARY INFORMATION SIGNING

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

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

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

Construction Requirements. 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.

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

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

## RESTORATION OF WORK AREA

Description. This work shall consist of restoring areas disturbed by construction operations due to completion of contract requirements.

### CONSTRUCTION REQUIREMENTS

General. Embankment areas that have been disturbed due to the Contractor's removal or reconstruction operations shall be restored to their original condition as follows.

#### Restoration Methods:

1. All damage to unmowed lawns or fields shall be fertilized, seeded (Class 2A) and covered with an approved erosion control blanket according to applicable portions of Section 250 and 251 of the Standard Specifications.
2. All damage to mowed lawns shall be replaced with an approved sod and fertilized according to applicable portions of Sections 250 and 252 of the Standard Specifications.
  - a) Whenever additional embankment materials are required to re-establish original grades and slopes, the Contractor shall furnish and place additional embankment materials according to section 205 of the Standard Specifications and as directed by the Engineer.

Basis of Payment. Restoration of the work area (including all ground preparation efforts, fertilizer, seed, sod, erosion control blanket and additional embankment materials when required) will not be paid for separately but shall be included in the cost of the associated pay items.

## AUTOMATED FLAGGER ASSISTANCE DEVICES (BDE)

Effective: January 1, 2008

**Description.** This work shall consist of furnishing and operating automated flagger assistance devices (AFADs) as part of the work zone traffic control and protection for two-lane highways where two-way traffic is maintained over one lane of pavement. Use of these devices shall be at the option of the Contractor.

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

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

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

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

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

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

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

**Flagging Requirements.** Flaggers and flagging requirements shall be according to Article 701.13 of the Standard Specifications and the following.

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

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

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

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

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

## **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 END SECTIONS FOR PIPE CULVERTS (BDE)**

Effective: January 1, 2013

Revised: April 1, 2016

**Description.** This work shall consist of constructing cast-in-place concrete and precast concrete end sections for pipe culverts. These end sections are shown on the plans as Highway Standard 542001 or 542011. This work shall be according to Section 542 of the Standard Specifications except as modified herein.

**Materials.** Materials shall be according to the following Articles of Division 1000 – Materials of the Standard Specifications.

| Item  | Article/Section |
|---|-----------------|
| (a) Portland Cement Concrete (Note 1) ..... | 1020            |
| (b) Precast Concrete End Sections (Note 2)  |                 |
| (c) Coarse Aggregate (Note 3) .....         | 1004.05         |
| (d) Structural Steel (Note 4) .....         | 1006.04         |
| (e) Anchor Bolts and Rods (Note 5) .....    | 1006.09         |
| (f) Reinforcement Bars .....                | 1006.10(a)      |
| (g) Nonshrink Grout .....                   | 1024.02         |
| (h) Chemical Adhesive Resin System .....    | 1027            |
| (i) Mastic Joint Sealer for Pipe .....      | 1055            |
| (j) Hand Hole Plugs .....                   | 1042.16         |

Note 1. Cast-in-place concrete end sections shall be Class SI, except the 14 day mix design shall have a compressive strength of 5000 psi (34,500 kPa) or a flexural strength of (800 psi) 5500 kPa and a minimum cement factor of 6.65 cwt/cu yd (395 kg/cu m).

Note 2. Precast concrete end sections shall be according to Articles 1042.02 and 1042.03(b)(c)(d)(e) of the Standard Specifications. The concrete shall be Class PC according to Section 1020, and shall have a minimum compressive strength of 5000 psi (34,000 kPa) at 28 days.

Joints between precast sections shall be produced with reinforced tongue and groove ends according to the requirements of ASTM C 1577.

Note 3. The granular bedding placed below a precast concrete end section shall be gradation CA 6, CA 9, CA 10, CA 12, CA 17, CA 18, or CA 19.

Note 4. All components of the culvert tie detail shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable.

Note 5. The anchor rods for the culvert ties shall be according to the requirements of ASTM F 1554, Grade 105 (Grade 725).

### **CONSTRUCTION REQUIREMENTS**

The concrete end sections may be precast or cast-in-place construction. Toe walls shall be either precast or cast-in-place, and shall be in proper position and backfilled according to the applicable paragraphs of Article 502.10 of the Standard Specifications prior to the installation of the concrete end sections. If soil conditions permit, cast-in-place toe walls may be poured directly against the soil. When poured directly against the soil, the clear cover of the sides and bottom of the toe wall shall be increased to 3 in. (75 mm) by increasing the thickness of the toe wall.

- (a) Cast-In-Place Concrete End Sections. Cast-in-place concrete end sections shall be constructed according to the requirements of Section 503 of the Standard Specifications and as shown on the plans.



- (b) Precast Concrete End Sections. When the concrete end sections will be precast, shop drawings detailing the slab thickness and reinforcement layout shall be submitted to the Engineer for review and approval.

The excavation and backfilling for precast concrete end sections shall be according to the requirements of Section 502 of the Standard Specifications, except a layer of granular bedding at least 6 in. (150 mm) in thickness shall be placed below the elevation of the bottom of the end section. The granular bedding shall extend a minimum of 2 ft (600 mm) beyond each side of the end section.

Anchor rods connecting precast sections shall be brought to a snug tight condition followed by an additional 2/3 turn on one of the nuts. Match marks shall be provided on the bolt and nut to verify relative rotation between the bolt and the nut.

When individual, precast end sections are placed side-by-side for a multi-pipe culvert installation, a 3 in. (75 mm) space shall be left between adjacent end section walls and the space(s) filled with Class SI concrete.

**Method of Measurement.** This work will be measured for payment as each, with each end of each culvert being one each.

**Basis of Payment.** This work will be paid for at the contract unit price per each for CONCRETE END SECTION, STANDARD 542001 or CONCRETE END SECTION, 542011, of the pipe diameter and slope specified.

## **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)*

| "PIPE CULVERTS<br>TABLE IIIA: PLASTIC PIPE PERMITTED<br>FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE |  |      |    |     |     |  |      |    |     |     |   |      |    |     |     |   |      |    |     |     |
|--|--|------|----|-----|-----|--|------|----|-----|-----|---|------|----|-----|-----|---|------|----|-----|-----|
| Nominal<br>Diameter<br>(in.)   | Type 1                                   |      |    |     |     | Type 2   |      |    |     |     | Type 3  |      |    |     |     | Type 4  |      |    |     |     |
|  | Fill Height: 3' and less,<br>with 1' min |      |    |     |     | Fill Height: Greater than 3',<br>not exceeding 10' |      |    |     |     | Fill Height: Greater than 10',<br>not exceeding 15' |      |    |     |     | Fill Height: Greater than 15',<br>not exceeding 20' |      |    |     |     |
|  | PVC                                      | CPVC | PE | CPE | CPP | PVC  | CPVC | PE | CPE | CPP | PVC   | CPVC | PE | CPE | CPP | PVC   | CPVC | PE | CPE | CPP |
| 10   | X  | QPL  | X  | QPL | NA  | X  | QPL  | X  | QPL | NA  | X   | QPL  | X  | QPL | NA  | X   | QPL  | X  | QPL | NA  |
| 12   | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | QPL | QPL | X   | QPL  | X  | QPL | QPL | X   | QPL  | X  | QPL | QPL |
| 15   | X  | QPL  | NA | QPL | QPL | X  | QPL  | NA | QPL | QPL | X   | QPL  | NA | QPL | QPL | X   | QPL  | NA | QPL | QPL |
| 18   | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | QPL | QPL | X   | QPL  | X  | QPL | QPL | X   | QPL  | X  | QPL | QPL |
| 21   | X  | QPL  | NA | QPL | NA  | X  | QPL  | NA | QPL | NA  | X   | QPL  | NA | QPL | NA  | X   | QPL  | NA | NA  | NA  |
| 24   | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | QPL | QPL | X   | QPL  | X  | QPL | QPL | X   | QPL  | X  | NA  | QPL |
| 27   | X  | NA   | NA | NA  | NA  | X  | NA   | NA | NA  | NA  | X   | NA   | NA | NA  | NA  | X   | NA   | NA | NA  | NA  |
| 30   | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | QPL | QPL | X   | QPL  | X  | QPL | QPL | X   | QPL  | X  | NA  | QPL |
| 36   | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | QPL | QPL | X   | QPL  | X  | QPL | QPL | X   | QPL  | X  | NA  | QPL |
| 42   | X  | NA   | X  | QPL | QPL | X  | NA   | X  | QPL | QPL | X   | NA   | X  | NA  | QPL | X   | NA   | X  | NA  | NA  |
| 48   | X  | NA   | X  | QPL | QPL | X  | NA   | X  | QPL | QPL | X   | NA   | X  | NA  | QPL | X   | NA   | X  | 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  
 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  
 NA Not Acceptable

| PIPE CULVERTS (metric)   |  |      |    |     |     |  |      |    |     |     |  |      |    |     |     |  |      |    |     |     |
|--|--|------|----|-----|-----|--|------|----|-----|-----|--|------|----|-----|-----|--|------|----|-----|-----|
| TABLE IIIA: PLASTIC PIPE PERMITTED                                 |  |      |    |     |     |  |      |    |     |     |  |      |    |     |     |  |      |    |     |     |
| FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE |  |      |    |     |     |  |      |    |     |     |  |      |    |     |     |  |      |    |     |     |
| Nominal Diameter (mm)  | Type 1   |      |    |     |     | Type 2   |      |    |     |     | Type 3   |      |    |     |     | Type 4   |      |    |     |     |
|  | Fill Height: 1 m and less, with 0.3 m min. cover |      |    |     |     | Fill Height: Greater than 1 m, not exceeding 3 m |      |    |     |     | Fill Height: Greater than 3 m, not exceeding 4.5 m |      |    |     |     | Fill Height: Greater than 4.5 m, not exceeding 6 m |      |    |     |     |
|  | PVC  | CPVC | PE | CPE | CPP | PVC  | CPVC | PE | CPE | CPP | PVC  | CPVC | PE | CPE | CPP | PVC  | CPVC | PE | CPE | CPP |
| 250  | X  | QPL  | X  | QPL | NA  | X  | QPL  | X  | QPL | NA  | X  | QPL  | X  | QPL | NA  | X  | QPL  | X  | QPL | NA  |
| 300  | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | QPL | QPL |
| 375  | X  | QPL  | NA | QPL | QPL | X  | QPL  | NA | QPL | QPL | X  | QPL  | NA | QPL | QPL | X  | QPL  | NA | QPL | QPL |
| 450  | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | QPL | QPL |
| 525  | X  | QPL  | NA | QPL | NA  | X  | QPL  | NA | QPL | NA  | X  | QPL  | NA | QPL | NA  | X  | QPL  | NA | NA  | NA  |
| 600  | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | NA  | QPL |
| 675  | X  | NA   | NA | NA  | NA  | X  | NA   | NA | NA  | NA  | X  | NA   | NA | NA  | NA  | X  | NA   | NA | NA  | NA  |
| 750  | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | NA  | QPL |
| 900  | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | NA  | QPL |
| 1050   | X  | NA   | X  | QPL | QPL | X  | NA   | X  | QPL | QPL | X  | NA   | X  | NA  | QPL | X  | NA   | X  | NA  | NA  |
| 1200   | X  | NA   | X  | QPL | QPL | X  | NA   | X  | QPL | QPL | X  | NA   | X  | NA  | QPL | X  | NA   | X  | 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  
 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  
 NA Not Acceptable

| PIPE CULVERTS  |  |      |    |     |     |  |      |    |  |      |    |
|--|--|------|----|-----|-----|--|------|----|--|------|----|
| TABLE IIIB: PLASTIC PIPE PERMITTED                                 |  |      |    |     |     |  |      |    |  |      |    |
| FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE |  |      |    |     |     |  |      |    |  |      |    |
| Nominal Diameter (in.)   | Type 5   |      |    |     |     | Type 6   |      |    | Type 7   |      |    |
|  | Fill Height: Greater than 20', not exceeding 25' |      |    |     |     | Fill Height: Greater than 25', not exceeding 30' |      |    | Fill Height: Greater than 30', not exceeding 35' |      |    |
|  | PVC  | CPVC | PE | CPE | CPP | PVC  | CPVC | PE | PVC  | CPVC | PE |
| 10   | X  | QPL  | X  | QPL | NA  | X  | QPL  | X  | X  | QPL  | X  |
| 12   | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | X  | QPL  | X  |
| 15   | X  | QPL  | NA | NA  | QPL | X  | QPL  | NA | X  | QPL  | NA |
| 18   | X  | QPL  | X  | NA  | NA  | X  | QPL  | X  | X  | QPL  | X  |
| 21   | X  | QPL  | NA | NA  | NA  | X  | QPL  | NA | X  | QPL  | NA |
| 24   | X  | QPL  | X  | NA  | NA  | X  | QPL  | X  | X  | QPL  | X  |
| 27   | X  | NA   | NA | NA  | NA  | X  | NA   | NA | X  | NA   | NA |
| 30   | X  | QPL  | X  | NA  | QPL | X  | QPL  | X  | X  | QPL  | X  |
| 36   | X  | QPL  | X  | NA  | NA  | X  | QPL  | X  | X  | QPL  | X  |
| 42   | X  | NA   | X  | NA  | NA  | X  | NA   | X  | X  | NA   | X  |
| 48   | X  | NA   | X  | NA  | NA  | X  | NA   | X  | X  | NA   | X  |
| 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
  - NA Not Acceptable

| PIPE CULVERTS (metric)   |  |      |    |     |     |  |      |    |   |      |    |
|--|--|------|----|-----|-----|--|------|----|---|------|----|
| TABLE IIIB: PLASTIC PIPE PERMITTED                                 |  |      |    |     |     |  |      |    |   |      |    |
| FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE |  |      |    |     |     |  |      |    |   |      |    |
| Nominal Diameter (mm)  | Type 5   |      |    |     |     | Type 6   |      |    | Type 7  |      |    |
|  | Fill Height: Greater than 6 m, not exceeding 7.5 m |      |    |     |     | Fill Height: Greater than 7.5 m, not exceeding 9 m |      |    | Fill Height: Greater than 9 m, not exceeding 10.5 m |      |    |
|  | PVC  | CPVC | PE | CPE | CPP | PVC  | CPVC | PE | PVC   | CPVC | PE |
| 250  | X  | QPL  | X  | QPL | NA  | X  | QPL  | X  | X   | QPL  | X  |
| 300  | X  | QPL  | X  | QPL | QPL | X  | QPL  | X  | X   | QPL  | X  |
| 375  | X  | QPL  | NA | NA  | QPL | X  | QPL  | NA | X   | QPL  | NA |
| 450  | X  | QPL  | X  | NA  | NA  | X  | QPL  | X  | X   | QPL  | X  |
| 525  | X  | QPL  | NA | NA  | NA  | X  | QPL  | NA | X   | QPL  | NA |
| 600  | X  | QPL  | X  | NA  | NA  | X  | QPL  | X  | X   | QPL  | X  |
| 675  | X  | NA   | NA | NA  | NA  | X  | NA   | NA | X   | NA   | NA |
| 750  | X  | QPL  | X  | NA  | QPL | X  | QPL  | X  | X   | QPL  | X  |
| 900  | X  | QPL  | X  | NA  | NA  | X  | QPL  | X  | X   | QPL  | X  |
| 1000   | X  | NA   | X  | NA  | NA  | X  | NA   | X  | X   | NA   | X  |
| 1200   | X  | NA   | X  | NA  | NA  | X  | NA   | X  | X   | NA   | X  |
| 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 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  
 NA Not Acceptable

| STORM SEWERS   |  |     |      |     |      |    |     |     |   |     |      |     |      |    |     |     |
|--|--|-----|------|-----|------|----|-----|-----|---|-----|------|-----|------|----|-----|-----|
| KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED                     |  |     |      |     |      |    |     |     |   |     |      |     |      |    |     |     |
| FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE |  |     |      |     |      |    |     |     |   |     |      |     |      |    |     |     |
| Nominal Diameter in.   | Type 1                                 |     |      |     |      |    |     |     | Type 2  |     |      |     |      |    |     |     |
|  | Fill Height: 3' and less, with 1' min. |     |      |     |      |    |     |     | Fill Height: Greater than 3', not exceeding 10' |     |      |     |      |    |     |     |
|  | RCCP                                   | CSP | ESCP | PVC | CPVC | PE | CPE | CPP | RCCP  | CSP | ESCP | PVC | CPVC | PE | CPE | CPP |
| 10   | NA                                     | 3   | X    | X   | QPL  | X  | QPL | NA  | NA  | 1   | *X   | X   | QPL  | X  | QPL | NA  |
| 12   | IV                                     | NA  | X    | X   | QPL  | X  | QPL | QPL | II  | 1   | *X   | X   | QPL  | X  | QPL | QPL |
| 15   | IV                                     | NA  | NA   | X   | QPL  | NA | QPL | QPL | II  | 1   | *X   | X   | QPL  | NA | QPL | QPL |
| 18   | IV                                     | NA  | NA   | X   | QPL  | X  | QPL | QPL | II  | 2   | X    | X   | QPL  | X  | QPL | QPL |
| 21   | III                                    | NA  | NA   | X   | QPL  | NA | QPL | NA  | II  | 2   | X    | X   | QPL  | NA | QPL | NA  |
| 24   | III                                    | NA  | NA   | X   | QPL  | X  | QPL | QPL | II  | 2   | X    | X   | QPL  | X  | QPL | QPL |
| 27   | III                                    | NA  | NA   | X   | NA   | NA | NA  | NA  | II  | 3   | X    | X   | NA   | NA | NA  | NA  |
| 30   | IV                                     | NA  | NA   | X   | QPL  | X  | QPL | QPL | II  | 3   | X    | X   | QPL  | X  | QPL | QPL |
| 33   | III                                    | NA  | NA   | NA  | NA   | NA | NA  | NA  | II  | NA  | X    | NA  | NA   | NA | NA  | NA  |
| 36   | III                                    | NA  | NA   | X   | QPL  | X  | QPL | QPL | II  | NA  | X    | X   | QPL  | X  | QPL | QPL |
| 42   | II                                     | NA  | X    | X   | NA   | X  | QPL | QPL | II  | NA  | X    | X   | NA   | X  | QPL | QPL |
| 48   | II                                     | NA  | X    | X   | NA   | X  | QPL | QPL | II  | NA  | X    | X   | NA   | X  | QPL | QPL |
| 54   | II                                     | NA  | NA   | NA  | NA   | NA | NA  | NA  | II  | 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   | II                                     | NA  | NA   | NA  | NA   | NA | NA  | NA  | II  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 72   | II                                     | NA  | NA   | NA  | NA   | NA | NA  | NA  | II  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 78   | II                                     | NA  | NA   | NA  | NA   | NA | NA  | NA  | II  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 84   | II                                     | NA  | NA   | NA  | NA   | NA | NA  | NA  | II  | 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   | II                                     | NA  | NA   | NA  | NA   | NA | NA  | NA  | III   | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 102  | II                                     | NA  | NA   | NA  | NA   | NA | NA  | NA  | III   | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 108  | II                                     | NA  | NA   | NA  | NA   | NA | NA  | NA  | III   | 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
- 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
- NA Not Acceptable
- \* May also use Standard Strength Clay Pipe

| STORM SEWERS (metric)  |   |     |      |     |      |    |     |     |  |     |      |     |      |    |     |     |
|--|---|-----|------|-----|------|----|-----|-----|--|-----|------|-----|------|----|-----|-----|
| KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED                     |   |     |      |     |      |    |     |     |  |     |      |     |      |    |     |     |
| FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE |   |     |      |     |      |    |     |     |  |     |      |     |      |    |     |     |
| Nominal Diameter mm  | Type 1                                      |     |      |     |      |    |     |     | Type 2   |     |      |     |      |    |     |     |
|  | Fill Height: 1 m and less, with 300 mm min. |     |      |     |      |    |     |     | Fill Height: Greater than 1 m, not exceeding 3 m |     |      |     |      |    |     |     |
|  | RCCP  | CSP | ESCP | PVC | CPVC | PE | CPE | CPP | RCCP   | CSP | ESCP | PVC | CPVC | PE | CPE | CPP |
| 250  | NA  | 3   | X    | X   | QPL  | X  | QPL | NA  | NA   | 1   | *X   | X   | QPL  | X  | QPL | NA  |
| 300  | IV  | NA  | X    | X   | QPL  | X  | QPL | QPL | II   | 1   | *X   | X   | QPL  | X  | QPL | QPL |
| 375  | IV  | NA  | NA   | X   | QPL  | NA | QPL | QPL | II   | 1   | *X   | X   | QPL  | NA | QPL | QPL |
| 450  | IV  | NA  | NA   | X   | QPL  | X  | QPL | QPL | II   | 2   | X    | X   | QPL  | X  | QPL | QPL |
| 525  | III   | NA  | NA   | X   | QPL  | NA | QPL | NA  | II   | 2   | X    | X   | QPL  | NA | QPL | NA  |
| 600  | III   | NA  | NA   | X   | QPL  | X  | QPL | QPL | II   | 2   | X    | X   | QPL  | X  | QPL | QPL |
| 675  | III   | NA  | NA   | X   | NA   | NA | NA  | NA  | II   | 3   | X    | X   | NA   | NA | NA  | NA  |
| 750  | IV  | NA  | NA   | X   | QPL  | X  | QPL | QPL | II   | 3   | X    | X   | QPL  | X  | QPL | QPL |
| 825  | III   | NA  | NA   | NA  | NA   | NA | NA  | NA  | II   | NA  | X    | NA  | NA   | NA | NA  | NA  |
| 900  | III   | NA  | NA   | X   | QPL  | X  | QPL | QPL | II   | NA  | X    | X   | QPL  | X  | QPL | QPL |
| 1050   | II  | NA  | X    | X   | NA   | X  | QPL | QPL | II   | NA  | X    | X   | NA   | X  | QPL | QPL |
| 1200   | II  | NA  | X    | X   | NA   | X  | QPL | QPL | II   | NA  | X    | X   | NA   | X  | QPL | QPL |
| 1350   | II  | NA  | NA   | NA  | NA   | NA | NA  | NA  | II   | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 1500   | II  | NA  | NA   | NA  | NA   | NA | QPL | QPL | II   | NA  | NA   | NA  | NA   | NA | QPL | QPL |
| 1650   | II  | NA  | NA   | NA  | NA   | NA | NA  | NA  | II   | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 1800   | II  | NA  | NA   | NA  | NA   | NA | NA  | NA  | II   | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 1950   | II  | NA  | NA   | NA  | NA   | NA | NA  | NA  | II   | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 2100   | II  | NA  | NA   | NA  | NA   | NA | NA  | NA  | II   | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 2250   | II  | NA  | NA   | NA  | NA   | NA | NA  | NA  | II   | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 2400   | II  | NA  | NA   | NA  | NA   | NA | NA  | NA  | III  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 2550   | II  | NA  | NA   | NA  | NA   | NA | NA  | NA  | III  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 2700   | II  | NA  | NA   | NA  | NA   | NA | NA  | NA  | III  | 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
- 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
- NA Not Acceptable
- \* May also use Standard Strength Clay Pipe

| STORM SEWERS   |   |     |      |     |      |    |     |     |   |     |      |     |      |    |     |     |
|--|---|-----|------|-----|------|----|-----|-----|---|-----|------|-----|------|----|-----|-----|
| KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED                     |   |     |      |     |      |    |     |     |   |     |      |     |      |    |     |     |
| FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE |   |     |      |     |      |    |     |     |   |     |      |     |      |    |     |     |
| Nominal Diameter in.   | Type 3  |     |      |     |      |    |     |     | Type 4  |     |      |     |      |    |     |     |
|  | Fill Height: Greater than 10' not exceeding 15' |     |      |     |      |    |     |     | Fill Height: Greater than 15' not exceeding 20' |     |      |     |      |    |     |     |
|  | RCCP  | CSP | ESCP | PVC | CPVC | PE | CPE | CPP | RCCP  | CSP | ESCP | PVC | CPVC | PE | CPE | CPP |
| 10   | NA  | 2   | X    | X   | QPL  | X  | QPL | NA  | NA  | 3   | X    | X   | QPL  | X  | QPL | NA  |
| 12   | III   | 2   | X    | X   | QPL  | X  | QPL | QPL | IV  | NA  | NA   | X   | QPL  | X  | QPL | QPL |
| 15   | III   | 3   | X    | X   | QPL  | NA | QPL | QPL | IV  | NA  | NA   | X   | QPL  | NA | QPL | QPL |
| 18   | III   | NA  | X    | X   | QPL  | X  | QPL | QPL | IV  | NA  | NA   | X   | QPL  | X  | QPL | QPL |
| 21   | III   | 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   | III   | NA  | NA   | X   | NA   | NA | NA  | NA  | IV  | NA  | NA   | X   | NA   | NA | NA  | NA  |
| 30   | III   | NA  | NA   | X   | QPL  | X  | QPL | QPL | IV  | NA  | NA   | X   | QPL  | X  | NA  | QPL |
| 33   | III   | NA  | NA   | NA  | NA   | NA | NA  | NA  | IV  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 36   | III   | NA  | NA   | X   | QPL  | X  | QPL | QPL | IV  | NA  | NA   | X   | QPL  | X  | NA  | QPL |
| 42   | III   | NA  | NA   | X   | NA   | X  | NA  | QPL | IV  | NA  | NA   | X   | NA   | X  | NA  | NA  |
| 48   | III   | NA  | NA   | X   | NA   | X  | NA  | QPL | IV  | NA  | NA   | X   | NA   | X  | NA  | NA  |
| 54   | III   | NA  | NA   | NA  | NA   | NA | NA  | NA  | IV  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 60   | III   | NA  | NA   | NA  | NA   | NA | NA  | QPL | IV  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 66   | III   | NA  | NA   | NA  | NA   | NA | NA  | NA  | IV  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 72   | III   | NA  | NA   | NA  | NA   | NA | NA  | NA  | IV  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 78   | III   | NA  | NA   | NA  | NA   | NA | NA  | NA  | IV  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 84   | III   | NA  | NA   | NA  | NA   | NA | NA  | NA  | IV  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 90   | III   | NA  | NA   | NA  | NA   | NA | NA  | NA  | 1680  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 96   | III   | NA  | NA   | NA  | NA   | NA | NA  | NA  | 1690  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 102  | III   | NA  | NA   | NA  | NA   | NA | NA  | NA  | 1700  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 108  | 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
- NA Not Acceptable



| STORM SEWERS (metric)  |   |     |      |     |      |    |     |     |   |     |      |     |      |    |     |     |
|--|---|-----|------|-----|------|----|-----|-----|---|-----|------|-----|------|----|-----|-----|
| KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED<br>FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE |   |     |      |     |      |    |     |     |   |     |      |     |      |    |     |     |
| Nominal<br>Diameter<br>mm  | Type 3  |     |      |     |      |    |     |     | Type 4  |     |      |     |      |    |     |     |
|  | Fill Height: Greater than 3 m,<br>not exceeding 4.5 m |     |      |     |      |    |     |     | Fill Height: Greater than 4.5 m,<br>not exceeding 6 m |     |      |     |      |    |     |     |
|  | RCCP  | CSP | ESCP | PVC | CPVC | PE | CPE | CPP | RCCP  | CSP | ESCP | PVC | CPVC | PE | CPE | CPP |
| 250  | NA  | 2   | X    | X   | QPL  | X  | QPL | NA  | NA  | 3   | X    | X   | QPL  | X  | QPL | NA  |
| 300  | III   | 2   | X    | X   | QPL  | X  | QPL | QPL | IV  | NA  | NA   | X   | QPL  | X  | QPL | QPL |
| 375  | III   | 3   | X    | X   | QPL  | NA | QPL | QPL | IV  | NA  | NA   | X   | QPL  | NA | QPL | QPL |
| 450  | III   | NA  | X    | X   | QPL  | X  | QPL | QPL | IV  | NA  | NA   | X   | QPL  | X  | QPL | 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  | III   | NA  | NA   | X   | NA   | NA | NA  | NA  | IV  | NA  | NA   | X   | NA   | NA | NA  | NA  |
| 750  | III   | NA  | NA   | X   | QPL  | X  | QPL | QPL | IV  | NA  | NA   | X   | QPL  | X  | NA  | QPL |
| 825  | III   | NA  | NA   | NA  | NA   | NA | NA  | NA  | IV  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 900  | III   | NA  | NA   | X   | QPL  | X  | QPL | QPL | IV  | NA  | NA   | X   | QPL  | X  | NA  | QPL |
| 1050   | III   | NA  | NA   | X   | NA   | X  | NA  | QPL | IV  | NA  | NA   | X   | NA   | X  | NA  | NA  |
| 1200   | III   | NA  | NA   | X   | NA   | X  | NA  | QPL | IV  | NA  | NA   | X   | NA   | X  | NA  | NA  |
| 1350   | III   | NA  | NA   | NA  | NA   | NA | NA  | NA  | IV  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 1500   | III   | NA  | NA   | NA  | NA   | NA | NA  | QPL | IV  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 1650   | III   | NA  | NA   | NA  | NA   | NA | NA  | NA  | IV  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 1800   | III   | NA  | NA   | NA  | NA   | NA | NA  | NA  | IV  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 1950   | III   | NA  | NA   | NA  | NA   | NA | NA  | NA  | IV  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 2100   | III   | NA  | NA   | NA  | NA   | NA | NA  | NA  | IV  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 2250   | III   | NA  | NA   | NA  | NA   | NA | NA  | NA  | 80  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 2400   | III   | NA  | NA   | NA  | NA   | NA | NA  | NA  | 80  | NA  | NA   | NA  | NA   | NA | NA  | NA  |
| 2550   | III   | 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

NA Not Acceptable

| STORM SEWERS<br>KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED<br>FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE |   |     |      |    |     |     |   |     |      |    |   |     |      |    |
|--|---|-----|------|----|-----|-----|---|-----|------|----|---|-----|------|----|
| Nominal<br>Diameter<br>in.   | Type 5  |     |      |    |     |     | Type 6  |     |      |    | Type 7  |     |      |    |
|  | Fill Height: Greater than 20',<br>not exceeding 25' |     |      |    |     |     | Fill Height: Greater than 25',<br>not exceeding 30' |     |      |    | Fill Height: Greater than 30',<br>not exceeding 35' |     |      |    |
|  | RCCP  | PVC | CPVC | PE | CPE | CPP | RCCP  | PVC | CPVC | PE | RCCP  | PVC | CPVC | PE |
| 10   | NA  | X   | QPL  | X  | QPL | NA  | NA  | X   | QPL  | X  | NA  | X   | QPL  | X  |
| 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  | NA | V   | X   | QPL  | NA |
| 18   | IV  | X   | QPL  | X  | NA  | NA  | V   | X   | QPL  | X  | V   | X   | QPL  | X  |
| 21   | IV  | X   | QPL  | NA | NA  | NA  | V   | X   | QPL  | NA | V   | X   | QPL  | NA |
| 24   | IV  | X   | QPL  | X  | NA  | NA  | V   | X   | QPL  | X  | V   | X   | QPL  | X  |
| 27   | IV  | X   | NA   | NA | NA  | NA  | V   | X   | NA   | NA | V   | X   | NA   | NA |
| 30   | IV  | X   | QPL  | X  | NA  | QPL | V   | X   | QPL  | X  | V   | X   | QPL  | X  |
| 33   | IV  | NA  | NA   | NA | NA  | NA  | V   | NA  | NA   | NA | V   | NA  | NA   | NA |
| 36   | IV  | X   | QPL  | X  | NA  | NA  | V   | X   | QPL  | X  | V   | X   | QPL  | X  |
| 42   | IV  | X   | NA   | X  | NA  | NA  | V   | X   | NA   | X  | V   | X   | NA   | X  |
| 48   | IV  | X   | NA   | X  | NA  | NA  | V   | X   | NA   | X  | V   | X   | NA   | X  |
| 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

NA Not Acceptable

| STORM SEWERS (metric)<br>KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED<br>FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE |  |     |      |    |     |     |  |     |      |    |   |     |      |    |
|---|--|-----|------|----|-----|-----|--|-----|------|----|---|-----|------|----|
| Nominal Diameter mm   | Type 5   |     |      |    |     |     | Type 6   |     |      |    | Type 7  |     |      |    |
|   | Fill Height: Greater than 6 m, not exceeding 7.5 m |     |      |    |     |     | Fill Height: Greater than 7.5 m, not exceeding 9 m |     |      |    | Fill Height: Greater than 9 m, not exceeding 10.5 m |     |      |    |
|   | RCCP   | PVC | CPVC | PE | CPE | CPP | RCCP   | PVC | CPVC | PE | RCCP  | PVC | CPVC | PE |
| 250   | NA   | X   | QPL  | X  | QPL | NA  | NA   | X   | QPL  | X  | NA  | X   | QPL  | X  |
| 300   | IV   | X   | QPL  | X  | QPL | QPL | V  | X   | QPL  | X  | V   | X   | QPL  | X  |
| 375   | IV   | X   | QPL  | NA | NA  | QPL | V  | X   | QPL  | NA | V   | X   | QPL  | NA |
| 450   | IV   | X   | QPL  | X  | NA  | NA  | V  | X   | QPL  | X  | V   | X   | QPL  | X  |
| 525   | IV   | X   | QPL  | NA | NA  | NA  | V  | X   | QPL  | NA | V   | X   | QPL  | NA |
| 600   | IV   | X   | QPL  | X  | NA  | NA  | V  | X   | QPL  | X  | V   | X   | QPL  | X  |
| 675   | IV   | X   | NA   | NA | NA  | NA  | V  | X   | NA   | NA | V   | X   | NA   | NA |
| 750   | IV   | X   | QPL  | X  | NA  | QPL | V  | X   | QPL  | X  | V   | X   | QPL  | X  |
| 825   | IV   | NA  | NA   | NA | NA  | NA  | V  | NA  | NA   | NA | V   | NA  | NA   | NA |
| 900   | IV   | X   | QPL  | X  | NA  | NA  | V  | X   | QPL  | X  | V   | X   | QPL  | X  |
| 1050  | IV   | X   | NA   | X  | NA  | NA  | V  | X   | NA   | X  | V   | X   | NA   | X  |
| 1200  | IV   | X   | NA   | X  | NA  | NA  | V  | X   | NA   | X  | V   | X   | NA   | X  |
| 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

NA Not Acceptable"

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

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

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

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

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

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

OVERALL GOAL SET FOR THE DEPARTMENT. As a requirement of compliance with 49 CFR Part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform **0.00%** 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.

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

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

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

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



it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:

- (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
- (2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.

(e) DBE as a material supplier:

- (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
- (2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.
- (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a DBE regular dealer or DBE manufacturer.

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

- (a) **NO AMENDMENT.** No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be emailed to the Department at [DOT.DBE.UP@illinois.gov](mailto:DOT.DBE.UP@illinois.gov).
- (b) **CHANGES TO WORK.** Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A or AER 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing

subcontract, 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) SUBCONTRACT. 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) ALTERNATIVE WORK METHODS. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
- (1) The replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
  - (2) The DBE is aware its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
  - (3) The DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.
- (e) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a) of this part. Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE in the Utilization Plan.

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

should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

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

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the Contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the Contractor's reasonable, nondiscriminatory bond requirements;
- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law.
- (6) The Contractor has determined the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides written notice to the Contractor of its withdrawal;
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the Contractor can self-perform the work for which the DBE contractor was engaged or so that the Contractor can substitute another DBE or non-DBE contractor after contract award.

When a DBE is terminated or fails to complete its work on the Contract for any reason, the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal. The good faith efforts shall be documented by the Contractor. If the Department requests documentation under this provision, the Contractor shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of the Contractor. The Department will provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.

- (f) FINAL PAYMENT. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than 30 calendar days after payment has been made by the Department to the Contractor for

such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Resident Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.

- (g) **ENFORCEMENT**. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (h) **RECONSIDERATION**. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

### **DISPOSAL FEES (BDE)**

Effective: November 1, 2018

Replace Articles 109.04(b)(5) – 109.04(b)(8) of the Standard Specifications with the following:

- "(5) Disposal Fees. When the extra work performed includes paying for disposal fees at a clean construction and demolition debris facility, an uncontaminated soil fill operation or a landfill, the Contractor shall receive, as administrative costs, an amount equal to five percent of the first \$10,000 and one percent of any amount over \$10,000 of the total approved costs of such fees.
- (6) Miscellaneous. No additional allowance will be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.
- (7) Statements. No payment will be made for work performed on a force account basis until the Contractor has furnished the Engineer with itemized statements of the cost of such force account work. Statements shall be accompanied and supported by invoices for all materials used and transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices, the Contractor shall furnish an affidavit certifying that such materials were taken from his/her stock, that the quantity claimed was

actually used, and that the price and transportation claimed represent the actual cost to the Contractor.

Itemized statements at the cost of force account work shall be detailed as follows.

- a. Name, classification, date, daily hours, total hours, rate, and extension for each laborer and foreman. Payrolls shall be submitted to substantiate actual wages paid if so requested by the Engineer.
  - b. Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.
  - c. Quantities of materials, prices and extensions.
  - d. Transportation of materials.
  - e. Cost of property damage, liability and workmen's compensation insurance premiums, unemployment insurance contributions, and social security tax.
- (8) Work Performed by an Approved Subcontractor. When extra work is performed by an approved subcontractor, the Contractor shall receive, as administrative costs, an amount equal to five percent of the total approved costs of such work with the minimum payment being \$100.
- (9) All statements of the cost of force account work shall be furnished to the Engineer not later than 60 days after receipt of the Central Bureau of Construction form "Extra Work Daily Report". If the statement is not received within the specified time frame, all demands for payment for the extra work are waived and the Department is released from any and all such demands. It is the responsibility of the Contractor to ensure that all statements are received within the specified time regardless of the manner or method of delivery."

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

Effective: January 1, 2018 Revised: March 1, 2019

**Description.** In addition to those manufactured according to the current standards included in this contract, manholes, valve vaults, and flat slab tops manufactured prior to March 1, 2019, according to the previous Highway Standards listed below will be accepted on this contract:

| Product  | Previous Standards |           |           |
|--|--------------------|-----------|-----------|
| Precast Manhole Type A, 4' (1.22 m) Diameter     | 602401-05          | 602401-04 | 602401-03 |
| Precast Manhole Type A, 5' (1.52 m) Diameter     | 602402-01          | 602402    | 602401-03 |
| Precast Manhole Type A, 6' (1.83 m) Diameter     | 602406-09          | 602406-08 | 602406-07 |
| Precast Manhole Type A, 7' (2.13 m) Diameter     | 602411-07          | 602411-06 | 602411-05 |
| Precast Manhole Type A, 8' (2.44 m) Diameter     | 602416-07          | 602416-06 | 602416-05 |
| Precast Manhole Type A, 9' (2.74 m) Diameter     | 602421-07          | 602421-06 | 602421-05 |
| Precast Manhole Type A, 10' (3.05 m) Diameter    | 602426-01          | 602426    |           |
| Precast Valve Vault Type A, 4' (1.22 m) Diameter | 602501-04          | 602501-03 | 602501-02 |
| Precast Valve Vault Type A, 5' (1.52 m) Diameter | 602506-01          | 602506    | 602501-02 |
| Precast Reinforced Concrete Flat Slab Top        | 602601-05          | 602601-04 |           |

The following revisions to the Standard Specifications shall apply to manholes, valve vaults, and flat slab tops manufactured according to the current standards included in this contract:

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

“(g) Structural Steel (Note 4) ..... 1006.04

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

Add the following to Article 602.02 of the Standard Specifications:

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

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

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

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

**MOBILIZATION (BDE)**

Effective: April 1, 2020

Replace Articles 671.02(a), (b), and (c) of the Standard Specifications with the following:

- “(a) Upon execution of the contract, 90 percent of the pay item will be paid.
- (b) When 90 percent of the adjusted contract value is earned, the remaining ten percent of the pay item will be paid along with any amount bid in excess of six percent of the original contract amount.”

**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<br>at Point of Discharge,<br>°F (°C) | Maximum Haul Time <sup>1/</sup><br>(minutes) |                      |
|---|--|----------------------|
|   | Truck Mixer or<br>Truck Agitator             | Nonagitator<br>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.”

## **PORTLAND CEMENT CONCRETE PAVEMENT PATCHING (BDE)**

Effective: July 1, 2020

Revise Article 701.17(e)(3)b. of the Standard Specifications to read:

- “b. Strength Tests. For patches constructed with Class PP-1, PP-2, PP-3, PP-4, or PP-5 concrete, the pavement may be opened to traffic when test specimens have obtained a minimum flexural strength of 250 psi (1725 kPa) or a minimum compressive strength of 1600 psi (11,000 kPa) according to Article 1020.09. However, the concrete mixture shall obtain a minimum flexural strength of 600 psi (4150 kPa) or a minimum compressive strength of 3200 psi (22,100 kPa) in the time specified in Table 1 of Article 1020.04.

With the approval of the Engineer, concrete strength may be determined according to Illinois Modified AASHTO T 325.”

Revise Article 1001.01(d) of the Standard Specifications to read:

“(d) Rapid Hardening Cement. Rapid hardening cement shall be used according to Article 1020.04 or when approved by the Engineer. The cement shall be on the Department’s qualified product list, and shall be according to ASTM C 1600 in addition to the following.

- (1) The cement shall have a minimum final set of 10 minutes, according to Illinois Modified AASHTO T 131.
- (2) The cement shall have a minimum compressive strength of 2000 psi (13,800 kPa) at 3.0 hours, 3200 psi (22,100 kPa) at 6.0 hours, and 4000 psi (27,600 kPa) at 24.0 hours, according to Illinois Modified AASHTO T 106.
- (3) The cement shall have a maximum drying shrinkage of 0.07 percent at 28 days, according to Illinois Modified ASTM C 596.
- (4) The cement shall have a maximum expansion of 0.04 percent at 14 days, according to Illinois Modified ASTM C 1038.”

Revise the first paragraph of Article 1020.05(b)(5) of the Standard Specifications to read:

“(5) For Class PP-4 concrete, a high range water-reducing admixture shall be used in addition to the air-entraining admixture. The Contractor has the option to use a water-reducing admixture with the high range water-reducing admixture. An accelerator shall not be used. A mobile portland cement concrete plant shall be used to produce the patching mixture.”



## REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE)

Effective: January 1, 2019

Revised: January 1, 2020

Revise Section 669 of the Standard Specifications to read:

### “SECTION 669. REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

**669.01 Description.** This work shall consist of the transportation and proper disposal of regulated substances. This work shall also consist of the removal, transportation, and proper disposal of underground storage tanks (UST), their contents and associated underground piping to the point where the piping is above the ground, including determining the content types and estimated quantities.

**669.02 Equipment.** The Contractor shall notify the Engineer of the delivery of all excavation, storage, and transportation equipment to a work area location. The equipment shall comply with OSHA and American Petroleum Institute (API) guidelines and shall be furnished in a clean condition. Clean condition means the equipment does not contain any residual material classified as a non-special waste, non-hazardous special waste, or hazardous waste. Residual materials include, but are not limited to, petroleum products, chemical products, sludges, or any other material present in or on equipment.

Before beginning any associated soil or groundwater management activity, the Contractor shall provide the Engineer with the opportunity to visually inspect and approve the equipment. If the equipment contains any contaminated residual material, decontamination shall be performed on the equipment as appropriate to the regulated substance and degree of contamination present according to OSHA and API guidelines. All cleaning fluids used shall be treated as the contaminant unless laboratory testing proves otherwise.

**669.03 Pre-Construction Submittals and Qualifications.** Prior to beginning this work, or working in areas with regulated substances, the Contractor shall submit a “Regulated Substances Pre-Construction Plan (RSPCP)” to the Engineer for review and approval using form BDE 2730. The form shall be signed by an Illinois licensed Professional Engineer or Professional Geologist.

As part of the RSPCP, the Contractor(s) or firm(s) performing the work shall meet the following qualifications.

- (a) Regulated Substances Monitoring. Qualification for environmental observation and field screening of regulated substances work and environmental observation of UST removal shall require either pre-qualification in Hazardous Waste by the Department or demonstration of acceptable project experience in remediation and operations for contaminated sites in accordance with applicable Federal, State, or local regulatory requirements using BDE 2730.

Qualification for each individual performing regulated substances monitoring shall require a minimum of one-year of experience in similar activities as those required for the project.

- (b) Underground Storage Tank Removal. Qualification for underground storage tank (UST) removal work shall require licensing and certification with the Office of the State Fire Marshall (OSFM) and possession of all permits required to perform the work. A copy of the permit shall be provided to the Engineer prior to tank removal.

The qualified Contractor(s) or firm(s) shall also document it does not have any current or former ties with any of the properties contained within, adjoining, or potentially affecting the work.

The Engineer will require up to 21 calendar days for review of the RSPCP. The review may involve rejection or revision and resubmittal; in which case, an additional 21 days will be required for each subsequent review. Work shall not commence until the RSPCP has been approved by the Engineer. After approval, the RSPCP shall be revised as necessary to reflect changed conditions in the field and documented using BDE 2730A "Regulated Substances Pre-Construction Plan (RSPCP) Addendum" and submitted to the Engineer for approval.

## CONSTRUCTION REQUIREMENTS

**669.04 Regulated Substances Monitoring.** Regulated substances monitoring includes environmental observation and field screening during regulated substances management activities at the contract specific work areas. As part of the regulated substances monitoring, the monitoring personnel shall perform and document the applicable duties listed on form BDE 2732 "Regulated Substances Monitoring Daily Record (RSMDR)".

- (a) Environmental Observation. Prior to beginning excavation, the Contractor shall mark the limits of the contract specific work areas. Once work begins, the monitoring personnel shall be present on-site continuously during the excavation and loading of material.
- (b) Field Screening. Field screening shall be performed during the excavation and loading of material from the contract specific work areas, except for material classified according to Article 669.05(b)(1) or 669.05(c) where field screening is not required.

Field screening shall be performed with either a photoionization detector (PID) (minimum 10.6eV lamp) or a flame ionization detector (FID), and other equipment as appropriate, to monitor for potential contaminants associated with regulated substances. The PID or FID shall be calibrated on-site, and background level readings taken and recorded daily, and as field and weather conditions change. Field screen readings on the PID or FID in excess of background levels indicates the potential presence of regulated substances requiring handling as a non-special waste, special waste, or hazardous waste. PID or FID readings may be used as the basis of increasing the limits of removal with the approval of the Engineer but shall in no case be used to decrease the limits.

**669.05 Regulated Substances Management and Disposal.** The management and disposal of soil and/or groundwater containing regulated substances shall be according to the following:

- (a) Soil Analytical Results Exceed Most Stringent MAC. When the soil analytical results indicate detected levels exceed the most stringent maximum allowable concentration (MAC) for chemical constituents in soil established pursuant to Subpart F of 35 Ill. Adm. Code 1100.605, the soil shall be managed as follows:
  - (1) When analytical results indicate inorganic chemical constituents exceed the most stringent MAC, but still considered within area background levels by the Engineer, the excavated soil can be utilized within the right-of-way as embankment or fill, when

- suitable. If the soils cannot be utilized within the right-of-way, they shall be managed and disposed of at a landfill as a non-special waste.
- (2) When analytical results indicate inorganic chemical constituents exceed the most stringent MAC but do not exceed the MAC for a Metropolitan Statistical Area (MSA) County identified in 35 Ill. Admin. Code 742 Appendix A. Table G, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of at a clean construction and demolition debris (CCDD) facility or an uncontaminated soil fill operation (USFO) within an MSA County provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
  - (3) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, or the MAC within the Chicago corporate limits, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site at a CCDD facility or an USFO within an MSA County excluding Chicago or within the Chicago corporate limits provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
  - (4) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site at a CCDD facility or an USFO within an MSA County excluding Chicago provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
  - (5) When the Engineer determines soil cannot be managed according to Articles 669.05(a)(1) through (a)(4) above and the materials do not contain special waste or hazardous waste, as determined by the Engineer, the soil shall be managed and disposed of at a landfill as a non-special waste.
  - (6) When analytical results indicate soil is hazardous by characteristic or listing pursuant to 35 Ill. Admin. Code 721, contains radiological constituents, or the Engineer otherwise determines the soil cannot be managed according to Articles 669.05(a)(1) through (a)(5) above, the soil shall be managed and disposed of off-site as a special waste or hazardous waste as applicable.
- (b) **Soil Analytical Results Do Not Exceed Most Stringent MAC.** When the soil analytical results indicate that detected levels do not exceed the most stringent MAC, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site according to Article 202.03. However, the excavated soil cannot be taken to a CCDD facility or an USFO for any of the following reasons.
- (1) The pH of the soil is less than 6.25 or greater than 9.0.
  - (2) The soil exhibited PID or FID readings in excess of background levels.
- (c) **Soil Analytical Results Exceed Most Stringent MAC but Do Not Exceed Tiered Approach to Corrective Action Objectives (TACO) Residential.** When the soil analytical results indicate that detected levels exceed the most stringent MAC but do not exceed TACO Tier 1 Soil Remediation Objectives for Residential Properties pursuant to 35 Ill. Admin. Code 742 Appendix B Table A, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site according to

Article 202.03. However, the excavated soil cannot be taken to a CCDD facility or an USFO.

- (d) Groundwater. When groundwater analytical results indicate the detected levels are above Appendix B, Table E of 35 Ill. Admin. Code 742, the most stringent Tier 1 Groundwater Remediation Objectives for Groundwater Component of the Groundwater Ingestion Route for Class 1 groundwater, the groundwater shall be managed off-site as a special waste or hazardous waste as applicable. Special waste groundwater shall be containerized and trucked to an off-site treatment facility, or may be discharged to a sanitary sewer or combined sewer when permitted by the local sewer authority. Groundwater discharged to a sanitary sewer or combined sewer shall be pre-treated to remove particulates and measured with a calibrated flow meter to comply with applicable discharge limits. A copy of the permit shall be provided to the Engineer prior to discharging groundwater to the sanitary sewer or combined sewer.

Groundwater encountered within trenches may be managed within the trench and allowed to infiltrate back into the ground. If the groundwater cannot be managed within the trench, it may be discharged to a sanitary sewer or combined sewer when permitted by the local sewer authority, or it shall be containerized and trucked to an off-site treatment facility as a special waste or hazardous waste. The Contractor is prohibited from discharging groundwater within the trench through a storm sewer. The Contractor shall install backfill plugs within the area of groundwater contamination.

One backfill plug shall be placed down gradient to the area of groundwater contamination. Backfill plugs shall be installed at intervals not to exceed 50 ft (15 m). Backfill plugs are to be 4 ft (1.2 m) long, measured parallel to the trench, full trench width and depth. Backfill plugs shall not have any fine aggregate bedding or backfill, but shall be entirely cohesive soil or any class of concrete. The Contractor shall provide test data that the material has a permeability of less than  $10^{-7}$  cm/sec according to ASTM D 5084, Method A or per another test method approved by the Engineer.

The Contractor shall use due care when transferring contaminated material from the area of origin to the transporter. Should releases of contaminated material to the environment occur (i.e., spillage onto the ground, etc.), the Contractor shall clean-up spilled material and place in the appropriate storage containers as previously specified. Clean-up shall include, but not be limited to, sampling beneath the material staging area to determine complete removal of the spilled material.

The Contractor shall provide engineered barriers, when required, and shall include materials sufficient to completely line excavation surfaces, including sloped surfaces, bottoms, and sidewall faces, within the areas designated for protection.

The Contractor shall obtain all documentation including any permits and/or licenses required to transport the material containing regulated substances to the disposal facility. The Contractor shall coordinate with the Engineer on the completion of all documentation. The Contractor shall make all arrangements for collection and analysis of landfill acceptance testing. The Contractor shall coordinate waste disposal approvals with the disposal facility.

The Contractor shall provide the Engineer with all transport-related documentation within two days of transport or receipt of said document(s). For management of special or hazardous waste, the Contractor shall provide the Engineer with documentation that the Contractor is operating with

a valid Illinois special waste transporter permit at least two weeks before transporting the first load of contaminated material.

Transportation and disposal of material classified according to Article 669.05(a)(5) or 669.05(a)(6) shall be completed each day so that none of the material remains on-site by the close of business, except when temporary staging has been approved.

Any waste generated as a special or hazardous waste from a non-fixed facility shall be manifested off-site using the Department's county generator number provided by the Bureau of Design and Environment. An authorized representative of the Department shall sign all manifests for the disposal of the contaminated material and confirm the Contractor's transported volume. Any waste generated as a non-special waste may be managed off-site without a manifest, a special waste transporter, or a generator number.

The Contractor shall select a landfill permitted for disposal of the contaminant within the State of Illinois. The Department will review and approve or reject the facility proposed by the Contractor to use as a landfill. The Contractor shall verify whether the selected disposal facility is compliant with those applicable standards as mandated by their permit and whether the disposal facility is presently, has previously been, or has never been, on the United States Environmental Protection Agency (U.S. EPA) National Priorities List or the Resource Conservation and Recovery Act (RCRA) List of Violating Facilities. The use of a Contractor selected landfill shall in no manner delay the construction schedule or alter the Contractor's responsibilities as set forth.

**669.06 Non-Special Waste Certification.** An authorized representative of the Department shall sign and date all non-special waste certifications. The Contractor shall be responsible for providing the Engineer with the required information that will allow the Engineer to certify the waste is not a special waste.

(a) Definition. A waste is considered a non-special waste as long as it is not:

- (1) a potentially infectious medical waste;
- (2) a hazardous waste as defined in 35 Ill. Admin. Code 721;
- (3) an industrial process waste or pollution control waste that contains liquids, as determined using the paint filter test set forth in subdivision (3)(A) of subsection (m) of 35 Ill. Admin. Code 811.107;
- (4) a regulated asbestos-containing waste material, as defined under the National Emission Standards for Hazardous Air Pollutants in 40 CFR Part 61.141;
- (5) a material containing polychlorinated biphenyls (PCB's) regulated pursuant to 40 CFR Part 761;
- (6) a material subject to the waste analysis and recordkeeping requirements of 35 Ill. Admin. Code 728.107 under land disposal restrictions of 35 Ill. Admin. Code 728;
- (7) a waste material generated by processing recyclable metals by shredding and required to be managed as a special waste under Section 22.29 of the Environmental Protection Act; or

- (8) an empty portable device or container in which a special or hazardous waste has been stored, transported, treated, disposed of, or otherwise handled.
- (b) Certification Information. All information used to determine the waste is not a special waste shall be attached to the certification. The information shall include but not be limited to:
  - (1) the means by which the generator has determined the waste is not a hazardous waste;
  - (2) the means by which the generator has determined the waste is not a liquid;
  - (3) if the waste undergoes testing, the analytic results obtained from testing, signed and dated by the person responsible for completing the analysis;
  - (4) if the waste does not undergo testing, an explanation as to why no testing is needed;
  - (5) a description of the process generating the waste; and
  - (6) relevant material safety data sheets.

**669.07 Temporary Staging.** Soil classified according to Articles 669.05(a)(2), (b)(1), or (c) may be temporarily staged at the Contractor's option. Soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) shall be managed and disposed of without temporary staging to the greatest extent practicable. If circumstances beyond the Contractor's control require temporary staging of these latter materials, the Contractor shall request approval from the Engineer in writing.

Temporary staging shall be accomplished within the right-of-way and the Contractor's means and methods shall be described in the approved or amended RSPCP. Staging areas shall not be located within 200 feet (61 m) of a public or private water supply well; nor within 100 feet (30 m) of sensitive environmental receptor areas, including wetlands, rivers, streams, lakes, or designated habitat zones.

The method of staging shall consist of containerization or stockpiling as applicable for the type, classification, and physical state (i.e., liquid, solid, semisolid) of the material. Materials of different classifications shall be staged separately with no mixing or co-mingling.

When containers are used, the containers and their contents shall remain intact and inaccessible to unauthorized persons until the manner of disposal is determined. The Contractor shall be responsible for all activities associated with the storage containers including, but not limited to, the procurement, transport, and labeling of the containers. The Contractor shall not use a storage container if visual inspection of the container reveals the presence of free liquids or other substances that could cause the waste to be reclassified as a hazardous or special waste.

When stockpiles are used, they shall be covered with a minimum 20-mil plastic sheeting or tarps secured using weights or tie-downs. Perimeter berms or diversionary trenches shall be provided to contain and collect for disposal any water that drains from the soil. Stockpiles shall be managed to prevent or reduce potential dust generation.

When staging non-special waste, special waste, or hazardous waste, the following additional requirements shall apply:

- (a) Non-Special Waste. When stockpiling soil classified according to Article 669.05(a)(1) or 669.05(a)(5), an impermeable surface barrier between the materials and the ground surface shall be installed. The impermeable barrier shall consist of a minimum 20-mil plastic liner material and the surface of the stockpile area shall be clean and free of debris prior to placement of the liner. Measures shall also be taken to limit or discourage access to the staging area.
- (b) Special Waste and Hazardous Waste. Soil classified according to Article 669.05(a)(6) shall not be stockpiled but shall be containerized immediately upon generation in containers, tanks or containment buildings as defined by RCRA, Toxic Substances Control Act (TSCA), and other applicable State or local regulations and requirements, including 35 Ill. Admin. Code Part 722, Standards Applicable to Generators of Hazardous Waste.

The staging area(s) shall be enclosed (by a fence or other structure) to restrict direct access to the area, and all required regulatory identification signs applicable to a staging area containing special waste or hazardous waste shall be deployed.

Storage containers shall be placed on an all-weather gravel-packed, asphalt, or concrete surface. Containers shall be in good condition and free of leaks, large dents, or severe rusting, which may compromise containment integrity. Containers must be constructed of, or lined with, materials that will not react or be otherwise incompatible with the hazardous or special waste contents. Containers used to store liquids shall not be filled more than 80 percent of the rated capacity. Incompatible wastes shall not be placed in the same container or comingled.

All containers shall be legibly labeled and marked using pre-printed labels and permanent marker in accordance with applicable regulations, clearly showing the date of waste generation, location and/or area of waste generation, and type of waste. The Contractor shall place these identifying markings on an exterior side surface of the container.

Storage containers shall be kept closed, and storage pads covered, except when access is needed by authorized personnel.

Special waste and hazardous waste shall be transported and disposed within 90 days from the date of generation.

**669.08 Underground Storage Tank Removal.** For the purposes of this section, an underground storage tank (UST) includes the underground storage tank, piping, electrical controls, pump island, vent pipes and appurtenances.

Prior to removing an UST, the Engineer shall determine whether the Department is considered an "owner" or "operator" of the UST as defined by the UST regulations (41 Ill. Adm. Code Part 176). Ownership of the UST refers to the Department's owning title to the UST during storage, use or dispensing of regulated substances. The Department may be considered an "operator" of the UST if it has control of, or has responsibility for, the daily operation of the UST. The Department may however voluntarily undertake actions to remove an UST from the ground without being deemed an "operator" of the UST.

In the event the Department is deemed not to be the "owner" or "operator" of the UST, the OSFM removal permit shall reflect who was the past "owner" or "operator" of the UST. If the "owner" or "operator" cannot be determined from past UST registration documents from OSFM, then the OSFM removal permit will state the "owner" or "operator" of the UST is the Department.

The Department's Office of Chief Counsel (OCC) will review all UST removal permits prior to submitting any removal permit to the OSFM. If the Department is not the "owner" or "operator" of the UST then it will not register the UST or pay any registration fee.

The Contractor shall be responsible for obtaining permits required for removing the UST, notification to the OSFM, using an OSFM certified tank contractor, removal and disposal of the UST and its contents, and preparation and submittal of the OSFM Site Assessment Report in accordance with 41 Ill. Admin. Code Part 176.330.

The Contractor shall contact the Engineer and the OSFM's office at least 72 hours prior to removal to confirm the OSFM inspector's presence during the UST removal. Removal, transport, and disposal of the UST shall be according to the applicable portions of the latest revision of the "American Petroleum Institute (API) Recommended Practice 1604".

The Contractor shall collect and analyze tank content (sludge) for disposal purposes. The Contractor shall remove as much of the regulated substance from the UST system as necessary to prevent further release into the environment. All contents within the tank shall be removed, transported and disposed of, or recycled. The tank shall be removed and rendered empty according to IEPA definition.

The Contractor shall collect soil samples from the bottom and sidewalls of the excavated area in accordance with 35 Ill. Admin. Code Part 734.210(h) after the required backfill has been removed during the initial response action, to determine the level of contamination remaining in the ground, regardless if a release is confirmed or not by the OSFM on-site inspector.

In the event the UST is designated a leaking underground storage tank (LUST) by the OSFM's inspector, or confirmation by analytical results, the Contractor shall notify the Engineer and the District Environmental Studies Unit (DESU). Upon confirmation of a release of contaminants and notifications to the Engineer and DESU, the Contractor shall report the release to the Illinois Emergency Management Agency (IEMA) (e.g., by telephone or electronic mail) and provide them with whatever information is available ("owner" or "operator" shall be stated as the past registered "owner" or "operator", or the IDOT District in which the tank is located and the DESU Manager).

The Contractor shall perform the following initial response actions if a release is indicated by the OSFM inspector:

- (a) Take immediate action to prevent any further release of the regulated substance to the environment, which may include removing, at the Engineer's discretion, and disposing of up to 4 ft (1.2 m) of the contaminated material, as measured from the outside dimension of the tank;
- (b) Identify and mitigate fire, explosion and vapor hazards;
- (c) Visually inspect any above ground releases or exposed below ground releases and prevent further migration of the released substance into surrounding soils and groundwater; and
- (d) Continue to monitor and mitigate any additional fire and safety hazards posed by vapors and free product that have migrated from the tank excavation zone and entered into subsurface structures (such as sewers or basements).



The tank excavation shall be backfilled according to applicable portions of Sections 205, 208, and 550 with a material that will compact and develop stability. All uncontaminated concrete and soil removed during tank extraction may be used to backfill the excavation, at the discretion of the Engineer.

After backfilling the excavation, the site shall be graded and cleaned.

**669.09 Regulated Substances Final Construction Report.** Not later than 90 days after completing this work, the Contractor shall submit a "Regulated Substances Final Construction Report (RSFCR)" to the Engineer using form BDE 2733 and required attachments. The form shall be signed by an Illinois licensed Professional Engineer or Professional Geologist.

**669.10 Method of Measurement.** Non-special waste, special waste, and hazardous waste soil will be measured for payment according to Article 202.07(b) when performing earth excavation, Article 502.12(b) when excavating for structures, or by computing the volume of the trench using the maximum trench width permitted and the actual depth of the trench.

Groundwater containerized and transported off-site for management, storage, and disposal will be measured for payment in gallons (liters).

Backfill plugs will be measured in cubic yards (cubic meters) in place, except the quantity for which payment will be made shall not exceed the volume of the trench, as computed by using the maximum width of trench permitted by the Specifications and the actual depth of the trench, with a deduction for the volume of the pipe.

Engineered Barriers will be measured for payment in square yards (square meters).

**669.11 Basis of Payment.** The work of preparing, submitting and administering a Regulated Substances Pre-Construction Plan will be paid for at the contract lump sum price for REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN.

Regulated substances monitoring, including completion of form BDE 2732 for each day of work, will be paid for at the contract unit price per calendar day, or fraction thereof to the nearest 0.5 calendar day, for REGULATED SUBSTANCES MONITORING.

The installation of engineered barriers will be paid for at the contract unit price per square yard (square meter) for ENGINEERED BARRIER.

The work of UST removal, soil excavation, soil and content sampling, the management of excavated soil and UST content, and UST disposal, will be paid for at the contract unit price per each for UNDERGROUND STORAGE TANK REMOVAL.

The transportation and disposal of soil and other materials from an excavation determined to be contaminated will be paid for at the contract unit price per cubic yard (cubic meter) for NON-SPECIAL WASTE DISPOSAL, SPECIAL WASTE DISPOSAL, or HAZARDOUS WASTE DISPOSAL.

The transportation and disposal of groundwater from an excavation determined to be contaminated will be paid for at the contract unit price per gallon (liter) for SPECIAL WASTE GROUNDWATER DISPOSAL or HAZARDOUS WASTE GROUNDWATER DISPOSAL. When groundwater is discharged to a sanitary or combined sewer by permit, the cost will be paid for according to Article 109.05.

Backfill plugs will be paid for at the contract unit price per cubic yard (cubic meter) for BACKFILL PLUGS.

Payment for temporary staging of soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) will be paid for according to Article 109.04. The Department will not be responsible for any additional costs incurred, if mismanagement of the staging area, storage containers, or their contents by the Contractor results in excess cost expenditure for disposal or other material management requirements.

Payment for accumulated stormwater removal and disposal will be according to Article 109.04. Payment will only be allowed if appropriate stormwater and erosion control methods were used.

Payment for decontamination, labor, material, and equipment for monitoring areas beyond the specified areas, with the Engineer's prior written approval, will be according to Article 109.04.

When the waste material for disposal requires sampling for landfill disposal acceptance, the samples shall be analyzed for TCLP VOCs, SVOCs, RCRA metals, pH, ignitability, and paint filter test. The analysis will be paid for at the contract unit price per each for SOIL DISPOSAL ANALYSIS using EPA Methods 1311 (extraction), 8260B for VOCs, 8270C for SVOCs, 6010B and 7470A for RCRA metals, 9045C for pH, 1030 for ignitability, and 9095A for paint filter.

The work of preparing, submitting and administering a Regulated Substances Final Construction Report will be paid for at the contract lump sum price REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT.”

#### **SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)**

Effective: April 2, 2018

Add the following to Section 109 of the Standard Specifications.

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

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

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

**SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)**

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

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

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

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

**SUBMISSION OF PAYROLL RECORDS (BDE)**

Effective: April 1, 2021

Revise Item 3 of Section IV of Check Sheet #5 of the Recurring Special Provisions to read:

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

**TRAFFIC CONTROL DEVICES - CONES (BDE)**

Effective: January 1, 2019

Revise Article 701.15(a) of the Standard Specifications to read:

“(a) Cones. Cones are used to channelize traffic. Cones used to channelize traffic at night shall be reflectorized; however, cones shall not be used in nighttime lane closure tapers or nighttime lane shifts.”

Revise Article 1106.02(b) of the Standard Specifications to read:

“(b) Cones. Cones shall be predominantly orange. Cones used at night that are 28 to 36 in. (700 to 900 mm) in height shall have two white circumferential stripes. If non-reflective spaces are left between the stripes, the spaces shall be no more than 2 in. (50mm) in width. Cones used at night that are taller than 36 in. (900 mm) shall have a minimum of two white and two fluorescent orange alternating, circumferential stripes with the top stripe being fluorescent orange. If non-reflective spaces are left between the stripes, the spaces shall be no more than 3 in. (75 mm) in width.

The minimum weights for the various cone heights shall be 4 lb for 18 in. (2 kg for 450 mm), 7 lb for 28 in. (3 kg for 700 mm), and 10 lb for 36 in. (5 kg for 900 mm) with a minimum of 60 percent of the total weight in the base. Cones taller than 36 in. shall be weighted per the manufacturer’s specifications such that they are not moved by wind or passing traffic.”

**WEEKLY DBE TRUCKING REPORTS (BDE)**

Effective: June 2, 2012

Revised: April 2, 2015

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

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

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

**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.

(l) 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 **15** working days.

**ILLINOIS WORKS APPRENTICESHIP INITIATIVE – STATE FUNDED CONTRACTS (BDE)**

Effective: June 2, 2021

Revised: September 2, 2021

Illinois Works Jobs Program Act (30 ILCS 559/20-1 et seq.). For contracts having an awarded contract value of \$500,000 or more, the Contractor shall comply with the Illinois Works Apprenticeship Initiative (30 ILCS 559/20-20 to 20-25) and all applicable administrative rules. The goal of the Illinois Apprenticeship Works Initiative is that apprentices will perform either 10% of the total labor hours actually worked in each prevailing wage classification or 10% of the estimated labor hours in each prevailing wage classification, whichever is less. The Contractor may seek from the Department of Commerce and Economic Opportunity (DCEO) a waiver or reduction of this goal in certain circumstances pursuant to 30 ILCS 559/20-20(b). The Contractor shall ensure compliance during the term of the contract and will be required to report on and certify its compliance. An apprentice use plan, apprentice hours, and a compliance certification shall be submitted to the Engineer on forms provided by the Department and/or DCEO.

## **REVISIONS TO THE ILLINOIS PREVAILING WAGE RATES**

The Prevailing rates of wages are included in the Contract proposals which are subject to Check Sheet #5 of the Supplemental Specifications and Recurring Special Provisions. The rates have been ascertained and certified by the Illinois Department of Labor for the locality in which the work is to be performed and for each craft or type of work or mechanic needed to execute the work of the Contract. As required by Prevailing Wage Act (820 ILCS 130/0.01, et seq.) and Check Sheet #5 of the Contract, not less than the rates of wages ascertained by the Illinois Department of Labor and as revised during the performance of a Contract shall be paid to all laborers, workers and mechanics performing work under the Contract. Post the scale of wages in a prominent and easily accessible place at the site of work.

If the Illinois Department of Labor revises the prevailing rates of wages to be paid as listed in the specification of rates, the contractor shall post the revised rates of wages and shall pay not less than the revised rates of wages. Current wage rate information shall be obtained by visiting the Illinois Department of Labor web site at <http://www.state.il.us/agency/idol/> or by calling 312-793-2814. It is the responsibility of the contractor to review the rates applicable to the work of the contract at regular intervals in order to insure the timely payment of current rates. Provision of this information to the contractor by means of the Illinois Department of Labor web site satisfies the notification of revisions by the Department to the contractor pursuant to the Act, and the contractor agrees that no additional notice is required. The contractor shall notify each of its subcontractors of the revised rates of wages.