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June 16, 2023 Letting

Notice to Bidders, Specifications and Proposal



Contract No. 46932 FRANKLIN County Section FITZGERRELL PARKING Route IDNR PARK ROAD District 9 Construction Funds





NOTICE TO BIDDERS

- 1. TIME AND PLACE OF OPENING BIDS. Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. June 16, 2023 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. 46932 FRANKLIN County Section FITZGERRELL PARKING Route IDNR PARK ROAD District 9 Construction Funds

Parking lot resurfacing, sealing, striping, ADA sidewalk improvements, lighting and signing at the Wayne Fitzgerrell State Recreation Area.

- **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, Secretary INDEX

FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2023

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

ERRATA Standard Specifications for Road and Bridge Construction

(Adopted 1-1-22) (Revised 1-1-23)

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STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction" adopted January 1, 2022, the latest edition of the "Illinois 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 IDNR Park Road, Section Fitzgerrell Parking, Franklin County, Contract No. 46932, and in case of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and shall govern.

IDNR Park Road Section Fitzgerrell Parking Franklin County Contract No. 46932

LOCATION OF PROJECT

The project limits are within the Wayne Fitzgerrell State Recreation Area, located at 11094 Ranger Road, Whittington, IL in Franklin County.

DESCRIPTION

The proposed improvements for this project consist of the sealing of about 17,800 square yards of the access roads and parking lots, milling and resurfacing about 19,000 square yards of the access roads and parking lots, removing and replacing about 5,300 square yards of pavement, replacing light poles and fixtures, expanding the circle drive at the main entrance to the hotel/convention center, removing and replacing sidewalks, and all other necessary work to complete the project within the Rend Lake Resort area of the Wayne Fitzgerrell State Recreation Area in Franklin County.

TRAFFIC CONTROL PLAN

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

Special attention is called to Sections 107 and 701 through 705 of the Standard Specifications for Road and Bridge Construction and as amended by the Supplemental Specifications, Recurring Special Provisions, the special provisions contained herein, and the following highway standards relating to traffic control:

HIGHWAY STANDARDS:

701006 701201 701901

Limitations of Construction: The Contractor shall coordinate the items of work in order to keep hazards and traffic inconveniences to a minimum, as specified below.

- 1. The Contractor shall provide, erect, and maintain all the necessary barricades, cones, drums, and lights for the warning and protection of traffic as required by Sections 107 and 701 through 703 of the Standard Specifications and as modified.
- 2. The Contractor will be responsible for the traffic control devices at all times during construction activities and shall coordinate the items of work in order to keep hazardous traffic inconveniences to a minimum.
- 3. The Contractor will be responsible for the traffic control devices at all times during any construction shut-down periods.
- 4. Traffic control devices shall be in new or like-new condition equipped with new reflective sheeting at the time of use. The Engineer will be the sole judge of the condition of the devices. All warning signs shall be 48 inches by 48 inches and have a black legend on a fluorescent orange reflectorized background.
- 5. At the direction of the Engineer when closing the park road to traffic, type III barricades with standard sign R11-2 or R11-4 (ROAD CLOSED) mounted shall be used. Barricades shall be placed on the Main Park Road west of Franklin Road and on both Windy Lane intersections with the Main Park Road.
- 6. At the direction of the Engineer, W20-I103(0)-48 (ROAD CONSTRUCTION AHEAD) signs shall be placed prior to active work areas.
- 7. At the direction of the Engineer, R11-I101-2418 (SIDEWALK CLOSED) signs shall be used to denote sidewalk closure at sidewalk repair areas.

<u>Sequence and Limits of Construction</u>: This parking lot project will be constructed during a period when the parking lots are closed. The Main Park Road will remain open to traffic during the construction period. Appropriate traffic control shall be provided at both of the Windy Lake-Main

Park Road intersections during the period of the reconstruction of Windy Lane. The installation of the traffic control devices at these intersections shall be coordinated with site personnel to avoid width restrictions on the Main Park Road during times of greater traffic usage.

Subsequent to the start of this parking lot project, there will be a project for the reconstruction of the facilities and sidewalks at this parking lot project site. Access to the site shall be coordinated with surveyors and other individuals involved in the design or construction of that project. At all locations where the construction of this parking lot project will leave a temporary hazard to individuals or vehicles in place for the completion of the work to be completed during the facilities reconstruction project, appropriate temporary measures or signage shall be installed. The temporary measures would typically be the placement and compaction of aggregate along the sidewalk alignments.

<u>Measurement and Payment for Traffic Control and Protection</u>: Traffic control and protection will be accomplished in accordance with the Traffic Control and Protection (Special) special provision.

CONSTRUCTION COORDINATION WITH SITE OPERATIONS

The work at the Wayne Fitzgerrell State Recreation Area will require coordination with site personnel to assure the maximum possible use of the other facilities in this park by the public during the construction period.

For the various project components to be constructed, the work may be limited to certain areas prior to and during holiday weekends. Safety measures, including barricades, lighting, and traffic control measures, must be provided and maintained during the entire period from initiation of work at a location within the site until all the work at that location is completed.

The costs involved with providing the necessary staging and related safety measures will not be paid for separately but shall be considered incidental to the contract.

BOLLARDS

This item shall consist of the installation of pipe bollards and foundations in accordance with the details and at the locations noted in the plans to encase telescoping steel sign supports. The pipes shall be Schedule 40 either ASTM A36 or A53 steel, primed, and painted. The paint color shall be applied by the bollard manufacturer and shall be yellow. The bollard shall be filled with concrete. The concrete shall encase the sign support and extend above the top of the pipe bollard and smoothed to form a rounded cap at the top of the bollard.

The cost of all the labor, materials, and equipment necessary to complete the work as indicated in this special provision and the details in the plans shall be included in the contract unit price per EACH for BOLLARDS.

CLEANING DRAINAGE SYSTEM

All existing storm sewers, pipe culverts, manholes, catch basins, and inlets shall be considered as drainage structures in the system insofar as the interpretation of this special provision is concerned. All the drainage structures within the project limits shall be cleaned in accordance with Article 602.15 of the Standard Specifications. The existing fire hydrants within the project limits shall be used as the source of water for the cleaning. The site personnel have indicated that there will not be a cost for the water that is used for this purpose.

At the outlets of the drainage structures, measures shall be taken to capture the debris and sediment for removal and disposal as unsuitable material, in accordance with Article 202.03 of the Standard Specifications, outside the limits of the park.

The cost of all the labor, materials, and equipment necessary to complete the work as indicated in this special provision shall be included in the contract unit price This work will be paid for at the contract unit price per LUMP SUM for CLEANING DRAINAGE SYSTEM.

FLOOD LIGHTING UNIT

<u>Description:</u> This work shall consist of furnishing and installing a flood light luminaire on a concrete foundation complete with all hardware and accessories required for the permanent use of the flood light.

Material:

<u>Flood Light Luminaire</u>. Fixture housing shall be of die cast aluminum (type A360), galvanized steel internal brackets, black silicone gaskets, and stainless-steel fasteners. Yoke mounting shall be "taper lock" providing infinite adjustment from 0 to 90 degrees aiming. Electrical power supply connection shall be with 18-3 STW flexible cord, factory supplied, and connected to fixture with 10'-0" cable length for connection to the lighting circuit wiring.

Exterior parts shall be protected by a zinc-infused super durable TGIC thermoset powder coat finish for superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that will withstand extreme climates without cracking or peeling.

The light source shall be "white" LED, 34 watts, 4000 degrees K with 70 CRI. Lumen maintenance of individual sources has been independently tested using IESNA LM80 standards. All LED chips are within 3 MacAdam ellipses. The optics shall provide horizontal flood pattern (see manufacturer's data for the HFL distribution). The LED chips shall be protected by a lens of flat tempered glass providing maximum resistance to impact. The integral LED power supply shall accept supply voltages of 120 to 277V. Driver shall be programmable with 0-10V dimming, 550mA drive current. Fixture shall be listed wet location by laboratory tests conducted by CSA to UL Standards UL 1598 & UL 8750. Provide five-year limited warranty.

Flood light luminaire shall be Acuity Brands Lighting Hydrel, Series TPS1, or an approved equal, with architectural junction box with taper lock (ARTL), full glare shield (FGS), and black color finish.

Flood light luminaire for sign lighting shall be Acuity Brands Lighting Hydrel, model number TPS1-18LED-WHT41K-MVOLT-HFL-YM-BL (horizontal flood) or an approved equal.

Flood light luminaire for flag lighting shall be Acuity Brands Lighting Hydrel, model number TPS1-18LED-WHT41K-MVOLT-MFL-YM-BL (medium flood) or an approved equal.

<u>Concrete Foundation.</u> Provide cast-in-place concrete foundation for the flood light luminaires. Conduit with lighting circuit conductors shall be cast into the concrete foundation and enter the bottom of the architectural junction box. Foundation materials shall be according to Section 836 of the Standard Specifications. See foundation detail in the plans. Provide concrete foundations constructed according to Article 836.03(a). Top of the foundation shall be 3" above finished grade. The architectural junction box shall be secured to the top of the foundation with expansion anchors. See details on the plans for installation. Provide nighttime aiming of the fixtures for maximum sign and flag coverage and to minimize glare.

<u>Method of Measurement:</u> Each flood lighting unit will be measured per each including flood light luminaire, mounting junction box, concrete foundation, and lighting circuit connection.

Basis of Payment: This work will be paid for at the contract unit price per EACH for FLOOD LIGHTING UNIT.

GRADING AND SHAPING DITCHES, (SPECIAL)

This item shall consist of grading and shaping the existing ditches at the locations noted in the plans. The ditches in the area to be graded and shaped shall be trapezoidal in shape to provide a top of riprap configuration with a 2 ft. bottom width and 4 horizontal to 1 vertical side slopes. Where the ditch connects to a culvert, the ditch bottom width shall be transitioned to meet the culvert end section within 20 feet of the end section. The ditch shall be uniformly sloped from the outlet of the culvert to the top of the riprap at the lake. Excess and unsuitable materials shall be disposed outside the limits of the park in accordance with Article 202.03 of the Standard Specifications.

The cost of all the labor, materials, and equipment necessary to complete the work as indicated in this special provision shall be included in the contract unit price per FOOT for GRADING AND SHAPING DITCHES (SPECIAL).

INLETS TO BE RECONSTRUCTED (SPECIAL)

This work shall consist of reconstructing storm sewer inlets at the locations indicated on the plans in accordance with Section 602 of the Standard Specifications and the notes in the project plans. The Contractor shall carefully excavate the area at the curb opening of the existing inlet and if necessary, all around the inlet to determine of the source of the soil and other material loss around the inlet and the condition of the inlet. The Engineer shall make a determination as to the appropriate means to assure the future competence of the inlet and the prevention of the future loss of soil around the inlets and the connecting storm sewer.

This work shall be measured for payment and will be paid for at the contract unit price per EACH for INLETS TO BE RECONSTRUCTED (SPECIAL). The price shall include the costs of all labor, material, and equipment necessary for the excavation and disposal of unsuitable material, sheeting and bracing, control of water, final soil backfill, and compaction.

Controlled low-strength material has been included in the contract quantities for the purpose of the initial backfilling at the inlet and the storm sewer, which shall be installed and paid in accordance with Section 593 of the Standard Specifications. The controlled low-strength material shall be placed such that top of the material will be at least 1 foot below the top of the inlet. The final soil backfill shall be placed to the top of the inlet elevation.

LIGHT POLE, ALUMINUM (SPECIAL)

<u>Description</u>: This work shall consist of furnishing and installing a light pole complete with an arm(s) and all hardware and accessories required for the intended permanent use of the pole. Work shall be according to Section 830 of the Standard Specifications, except as modified herein.

Revise the second paragraph of Article 1069.01(h) to read:

(h) Poles, arms, and attachments shall be a black anodized aluminum made of ASTM B211 Alloy 3003-H14 or 5052-H32, 0.0625 in. (1.6 mm) thick minimum.

Basis of Payment: Add the following to Article 830.05: LIGHT POLE, ALUMINUM 25 FT M.H., 4 FT. ARM (SPECIAL) and LIGHT POLE, ALUMINUM 25 FT M.H., 4 FT. ARM,TWIN (SPECIAL).

LIGHT POLE FOUNDATION, SPECIAL

<u>Description</u>: This work shall consist of constructing and installing a parking lot light pole foundation. Work shall be according to Section 836 of the Standard Specifications, except as modified herein.

Replace the first paragraph of Article 836.03 with the following:

836.03 Installation. Parking lot foundations shall be constructed in accordance with the plans for concrete light pole foundation, except that the foundation shall protrude 3 ft above the finished grade with anchor rods included. The final location shall be as directed by the Engineer.

Add the following to the fourth paragraph of Article 836.03(a):

The anchor rod length indicated in the plans shall be modified to include the protrusion above the finished grade.

Basis of Payment: This work will be paid for at the contract unit price per FOOT for LIGHT POLE FOUNDATION, SPECIAL.

LUMINAIRE, LED, ROADWAY

<u>Description:</u> This work shall consist of furnishing and installing a light emitting diode (LED) luminaire according to the Supplemental Specifications and Recurring Special Provisions, January 1, 2023, except as modified herein.

Finish. The LED luminaire shall have a black powder coat finish.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per EACH for LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION F.

PARKING LOT SEAL COAT

<u>Description</u>. This work will consist of applying a seal coat to the existing HMA pavement. This application is to occur prior to the placement of any proposed asphalt binder or surface course material in areas adjacent to the existing pavement.

The seal coat consists of two applications of coal tar pitch emulsion slurry. The Contractor shall coordinate the construction of this work with site personnel so as to minimize the time that access to the site is restricted. Application of the seal coats in the access areas to the restrooms shall be accomplished at times when the site is not open to the public.

Materials.

- (a) Coal tar pitch emulsion used for seal coat shall meet the requirements of ASTM D5727 Standard Specification for Emulsified Refined Coal Tar (Mineral Colloid Type) with a latex additive.
- (b) Aggregate for the seal coat shall meet the requirements of Article 1003.01 of the Standard Specifications, be clean, dry, hard, angular, and meet the following gradation: 95% to 100% passing the No. 16 sieve, 40% to 85% passing the No. 40 sieve, and 0% to 5% passing the No. 200 sieve.
- (c) Crack filler materials shall be accordance with Article 451.02 of the Standard Specifications. Seal coat and crack filler materials must be compatible.

<u>Surface Preparation.</u> Pavement markings shall be removed according to Article 783.03(a) of the Standard Specifications. Only very small particles of tightly adhering existing markings may remain in place. All loose aggregate, pavement material, and dirt shall be removed from the existing pavement surface using a method approved by the Engineer. Waste material produced during pavement cleaning operations shall be removed at the close of each day's work and shall be disposed of according to Article 202.03.

Joints and cracks shall be cleaned of loose and unsound material and filled with a crack filler material. Routing in accordance with Article 451.04 of the Standard Specifications is not required. Crack filling shall occur as specified in Article 451.03 and 451.04 of the Standard Specifications, with the exception that care shall be taken to ensure the cleaned cracks are only filled to the top and are not overfilled and feathered out.

<u>Construction Requirements.</u> Construction requirements shall be according to Article 403.04 of the Standard Specifications and as specified below.

No work shall be started if local weather forecasts indicate the possibility of rain within 24 hours.

The mix design and application rate shall be in accordance with the sealer manufacturer's requirements. The Contractor shall provide documentation for review by the Engineer prior to beginning work on this item, including the sealer manufacturer's recommendations and requirements, the mix design, latex additive information, and sand type and gradation.

During the entire mixing process, there shall be no breaking, segregating, or hardening of the emulsion nor balling, lumping, or swelling of the aggregate. After the required mixing period, the slurry shall be spread over the designated area while the slurry is of the proper consistency. Each application of the slurry shall be applied uniformly at a rate that is in accordance with the manufacturer's recommendations for a moderate traffic area. The exact rate of application will be determined by the Engineer.

The application of the slurry shall be in accordance with the manufacturer's recommendations either by hand methods using rubber squeegees for spreading or by any other suitable mechanical method approved by the Engineer. The slurry shall be applied at a uniform rate as specified. Care shall be taken to ensure slurry is not placed on existing concrete or buildings.

A suitable spray type applicator or distributor approved by the Engineer may be used for applying the slurry. Such equipment shall be equipped with an agitator to keep the slurry uniformly mixed before and during application and so designed to uniformly spread the slurry on the HMA surface at the specified rate of application.

The first coat of slurry shall be cured for a time sufficient to prevent damage from equipment placing the final coat of slurry as determined by the Engineer. The final coat of slurry shall be cured for 24 hours prior to the placement of pavement markings.

<u>Method of Measurement.</u> The cleaning and filling of cracks as noted above will be measured for payment in accordance with Article 451.05 of the Standard Specifications. The sealing of the area designated in the plans shall be measured for payment in gallons of the parking lot seal coat of the prepared slurry applied.

<u>Basis of Payment.</u> The cleaning and filling of cracks will be paid for at the contract unit price per POUND for CRACK FILLING, which price shall include all labor, materials, and equipment necessary to complete the work as indicated in this special provision and noted on the plans. The slurry sealing will be paid for at the contract unit price per GALLON for PARKING LOT SEAL COAT, which price shall include all labor, materials, and equipment necessary to complete the work as indicated in this special provision and noted on the plans.

PAVEMENT REMOVAL (SPECIAL)

This item shall consist of the removal of the existing pavement, all noted asphalt curbs, and the excavation and grading of all materials necessary for the placement of the proposed pavements and appurtenant items. This work shall be done in accordance with applicable portions of Sections 440, 202, and 205 of the Standard Specifications and this special provision. Excess and unsuitable materials shall be disposed outside the limits of the park in accordance with Article 202.03 of the Standard Specifications.

The cost of all the labor, removal, shaping, disposal, transport, subgrade preparation, borrow, embankment placement, materials, and equipment necessary to complete the work as indicated in this special provision shall be included in the contract unit price per SQUARE YARD for PAVEMENT REMOVAL (SPECIAL).

PRECAST CONCRETE PARKING BLOCKS

This work shall consist of furnishing and installing precast concrete parking blocks at the locations noted in the plans and in accordance with details in the plans and this special provision. The block shall be machine made with 3,500 psi concrete and reinforced with two #3 deformed steel bars. Dowel holes shall be cast in the block to receive two #6 deformed steel bar pins 36" in length that shall be driven through the holes provided in the parking blocks into the new asphalt surface, or through drilled holes in a concrete or asphalt surface, to be 1" below the top of the parking block to hold the parking blocks in place. The new pins and the drilling of the holes for the pins shall not be paid for separately but shall be considered included in this pay item.

This work will be paid for at the contract unit price per EACH for PRECAST CONCRETE PARKING BLOCKS. This price shall include all labor, equipment, and material needed to complete the work as specified above and as shown in the plans.

REMOVE AND REATTACH EXISTING RECEPTACLE OUTLET APPARATUS ONTO LIGHT POLE

<u>Description</u>: This work shall consist of detaching a host campsite receptable outlet post, with disconnect and fuse box, complete with all hardware and accessories from an existing light pole to be removed and reattaching post to new light pole at the same location.

Basis of Payment: This work will be paid for at the contract unit price per EACH for REMOVE AND REATTACH EXISTING RECEPTACLE OUTLET APPARATUS ONTO LIGHT POLE.

TOPSOIL FURNISH AND PLACE, 4" (SPECIAL)

This item shall consist of furnishing and placing topsoil at locations, depths, and slopes designated on the plans and the provision and placing of seeding class 1, fertilizer nutrients, and mulch method 3. All topsoil shall be supplied from within the construction limits of the project and be compatible for the class 1 seeding and fertilizer nutrients. All work shall comply with Sections 211, 250, and 251 of the Standard Specifications.

This work will be measured for payment in square yards at the surface of the topsoil.

This work shall be paid for at the contract unit price per SQUARE YARD for TOPSOIL FURNISH AND PLACE, 4" (SPECIAL), which price shall include all labor, materials, and equipment, and no additional compensation will be allowed.

TRAFFIC CONTROL AND PROTECTION, (SPECIAL)

This item of work shall include furnishing, installing, maintaining, replacing, relocating, and removing all traffic control devices used for the purpose of regulating, warning, or directing vehicular and pedestrian traffic during the construction of this project.

Traffic control and protection (special) shall be provided as called for in these special provisions, applicable highway standards, applicable sections of the Standard Specifications, or as directed by the Engineer.

All traffic control devices used on this project shall conform to the special provisions, traffic control standards, Illinois Supplement to the National Manual on Uniform Traffic Control Devices, and Manual on Uniform Traffic Control Devices. No modification of these requirements will be allowed without prior written approval of the Engineer. Traffic control devices include signs and their supports, signals, barricades with sandbags, channelizing devices, warning lights, arrow boards, flaggers, or any other device used for the purpose of regulating, detouring, warning, or guiding traffic through or around the construction zone.

When directed by the Engineer, the Contractor shall remove all traffic control devices which were furnished, installed, and maintained under this contract, and such devices shall remain the property of the Contractor. Lane closures and the prohibition of access to portions of the site shall only be left in place as long as they are needed. At all other times, traffic control shall be

removed unless directed by the Engineer. Failure to restore lanes to full width will result in a traffic control deficiency as specified in Article 105.03.

All traffic control and protection items shall be considered as included in the cost of traffic control and protection (special). This work will be measured for payment on a lump sum basis and paid for at the contract unit price per LUMP SUM for TRAFFIC CONTROL AND PROTECTION, (SPECIAL) with no additional compensation allowed.

TRANSITIONAL COMBINATION CONCRETE CURB AND GUTTER

This work shall consist of constructing concrete curb and gutter with variable gutter flag width and curb height dimensions at the locations noted on the plans in accordance with Section 606 of the Standard Specifications, this special provision, and as directed by the Engineer.

The new curb and gutter shall be installed to match with the remaining roadway curb and the top of the inlet. The gutter flags from the inlet to the general curb line for the road shall be placed completely across the opening at the front of the inlet and shall match the proposed roadway elevation at the edge of pavement.

This work will be paid for at the contract unit price per FOOT for TRANSITIONAL COMBINATION CONCRETE CURB AND GUTTER. This price shall include all labor, equipment, and material needed to complete the work as specified above and as shown in the plans.

BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE)

Effective: November 2, 2006

Revised: August 1, 2017

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

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

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

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

Where: CA = Cost Adjustment, \$.

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

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

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

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

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

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

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

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."

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 TABLE IIIA: PLASTIC PIPE PERMITTED																			
	FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE																			
	Туре 1						Туре2		01	=:		ГуреЗ		101			Type		4.51	
Nominal	Fill Height: 3' and less, with 1' min				FIII	Height		ater tha ing 10'	n 3',	FIII	Height: note			n 10°,	FIII	0		ater thar ling20'	n 15',	
Diameter (in.)					_									U					Ŭ	
()	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP
10	Х	QPL	Х	QPL	NA	Х	QPL	Х	QPL	NA	Х	QPL	Х	QPL	NA	Х	QPL	Х	QPL	NA
12	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL
15	Х	QPL	NA	QPL	QPL	Х	QPL	NA	QPL	QPL	Х	QPL	NA	QPL	QPL	Х	QPL	NA	QPL	QPL
18	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL
21	Х	QPL	NA	QPL	NA	Х	QPL	NA	QPL	NA	Х	QPL	NA	QPL	NA	Х	QPL	NA	NA	NA
24	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	NA	QPL
27	Х	NA	NA	NA	NA	Х	NA	NA	NA	NA	Х	NA	NA	NA	NA	Х	NA	NA	NA	NA
30	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	NA	QPL
36	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	NA	QPL
42	Х	NA	Х	QPL	QPL	Х	NA	Х	QPL	QPL	Х	NA	Х	NA	QPL	Х	NA	Х	NA	NA
48	Х	NA	Х	QPL	QPL	Х	NA	Х	QPL	QPL	Х	NA	Х	NA	QPL	Х	NA	Х	NA	NA
54	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60 Notos: R	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

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

CPP

Permitted Х

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

	PIPE CULVERTS (metric) TABLE IIIA: PLASTIC PIPE PERMITTED																			
	FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE																			
	Type1					Type2						-	ГуреЗ	3				Туре	4	
Nominal Diameter	with 0.2 m min cover				Fill	Height: notex		ter thar ng3 m	n 1 m,	Fill	Height: not exc				Fill He	eight: Gi	reater eeding		im, not	
(mm)	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP
250	Х	QPL	Х	QPL	NA	Х	QPL	Х	QPL	NA	Х	QPL	Х	QPL	NA	Х	QPL	Х	QPL	NA
300	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL
375	Х	QPL	NA	QPL	QPL	Х	QPL	NA	QPL	QPL	Х	QPL	NA	QPL	QPL	Х	QPL	NA	QPL	QPL
450	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL
525	Х	QPL	NA	QPL	NA	Х	QPL	NA	QPL	NA	Х	QPL	NA	QPL	NA	Х	QPL	NA	NA	NA
600	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	NA	QPL
675	Х	NA	NA	NA	NA	Х	NA	NA	NA	NA	Х	NA	NA	NA	NA	Х	NA	NA	NA	NA
750	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	NA	QPL
900	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Х	NA	QPL
1050	Х	NA	Х	QPL	QPL	Х	NA	Х	QPL	QPL	Х	NA	Х	NA	QPL	Х	NA	Х	NA	NA
1200	Х	NA	Х	QPL	QPL	Х	NA	Х	QPL	QPL	Х	NA	Х	NA	QPL	Х	NA	Х	NA	NA
1350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1500	NA	NA	NA	QPL	QPL	NA	NA	NA	QPL	QPL	NA	NA	NA	NA	QPL	NA	NA	NA	NA	NA
	PVC			nloride																
	CPVC PE			Polyvii e Pipe	nyl Chl	oride F	Pipewith	n a Sm	ooth In	terior										
(CPE CPP CPP	Corru	gated gated	Polyet			vith a Sr with a S													
0	IPC	OPI Permitted for the producers approved for that diameter in the Department's qualified product list																		

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

	PIPE CULVERTS TABLE IIIB: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE													
Nominal Diameter			Type5 nt: Greate exceeding			0	Type6 ht: Greater texceeding	,	Type 7 Fill Height: Greater than 30', not exceeding 35'					
(in.)	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	PVC	CPVC	PE			
10 12	X X	QPL QPL	X X	QPL QPL	NA QPL	X X	QPL QPL	X X	X X	QPL QPL	X X			
15 18 21	X X X	QPL QPL QPL	NA X NA	NA NA NA	QPL NA NA	X X X	QPL QPL QPL	NA X NA	X X X	QPL QPL QPL	NA X NA			
24 27	X X X	QPL NA	X	NA NA	NA NA	X X	QPL NA	X	X X	QPL NA	X			
30 36	X X	QPL QPL	X X	NA NA	QPL NA	X X	QPL QPL	X X	X X	QPL QPL	X X			
42 48	X X	NA NA	X X	NA NA	NA NA	X X	NANA	X X	X X	NANA	X X			
54 60	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA			

Polyvinyl Chloride Pipe Notes: PVC

CPVC Corrugated Polyvinyl Chloride Pipe with a Smooth Interior CPP Corrugated Polypropylene Pipe with a Smooth Interior

Х Permitted

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

	PIPE CULVERTS (metric) TABLE IIIB: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE													
		Fill Llaiat	Type5	then C m			Type6	han 7 F m	Fill Lai e	Type7	them 0 m			
Nominal Diameter			nt: Greater			0	t: Greater t texceeding	,	Fill Height: Greater than 9 m, not exceeding 10.5 m					
(mm)	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	PVC	CPVC	PE			
250	Х	QPL	Х	QPL	NA	Х	QPL	Х	Х	QPL	Х			
300	Х	QPL	Х	QPL	QPL	Х	QPL	Х	Х	QPL	Х			
375	Х	QPL	NA	NA	QPL	Х	QPL	NA	Х	QPL	NA			
450	Х	QPL	Х	NA	NA	Х	QPL	Х	Х	QPL	Х			
525	Х	QPL	NA	NA	NA	Х	QPL	NA	Х	QPL	NA			
600	Х	QPL	Х	NA	NA	Х	QPL	Х	Х	QPL	Х			
675	Х	NA	NA	NA	NA	Х	NA	NA	Х	NA	NA			
750	Х	QPL	Х	NA	QPL	Х	QPL	Х	Х	QPL	Х			
900	Х	QPL	Х	NA	NA	Х	QPL	Х	Х	QPL	Х			
1000	Х	NA	Х	NA	NA	Х	NA	Х	Х	NA	Х			
1200	Х	NA	Х	NA	NA	Х	NA	Х	Х	NA	Х			
1350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
1500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			

Notes: PVC

 PVC
 Polyvinyl Chloride Pipe

 CPVC
 Corrugated Polyvinyl Chloride Pipe with a Smooth Interior

 CPP
 Corrugated Polypropylene Pipe with a Smooth Interior

Permitted Х

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

	STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED																
			FO	RAGIVE	EN PIPE [DIAMETE	IGHTS OVER THE TOP OF THE PIPE										
				Ту	be1			Туре 2									
Nominal Diameter in.	heter 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	Х	Х	QPL	Х	QPL	NA	NA	1	*Х	Х	QPL	Х	QPL	NA	
12	IV	NA	Х	Х	QPL	Х	QPL	QPL	II	1	*X	Х	QPL	Х	QPL	QPL	
15	IV	NA	NA	X	QPL	NA	QPL	QPL		1	*X	X	QPL	NA	QPL	QPL	
18	IV	NA	NA	Х	QPL	Х	QPL	QPL	II	2	X	Х	QPL	Х	QPL	QPL	
21	111	NA	NA	X	QPL	NA	QPL	NA		2	X	X	QPL	NA	QPL	NA	
24 27		NA	NA	X	QPL	X	QPL	QPL		2	X X	X	QPL	X	QPL	QPL	
27 30		NA	NA	X	NA	NA	NA	NA		3	X	X	NA	NA	NA	NA	
30 33	IV III	NA NA	NA NA	X NA	QPL NA	X NA	QPL NA	QPL NA		3 NA	X	X NA	QPL NA	X NA	QPL NA	QPL NA	
33		NA NA				X					X			X			
30 42		NA	NA X	X X	QPL NA	X	QPL QPL	QPL QPL		NA NA	X	X X	QPL NA	X	QPL QPL	QPL QPL	
42 48		NA	x	x	NA	x	QPL	QPL		NA	x	X	NA	x	QPL	QPL	
54	 	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	
60		NA	NA	NA	NA	NA	QPL	QPL	" "	NA	NA	NA	NA	NA	QPL	QPL	
66	ü Ü	NA	NA	NA	NA	NA	NA	NA	ii ii	NA	NA	NA	NA	NA	NA	NA	
72		NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	
78	ü	NA	NA	NA	NA	NA	NA	NA	ü	NA	NA	NA	NA	NA	NA	NA	
84	II.	NA	NA	NA	NA	NA	NA	NA	Î	NA	NA	NA	NA	NA	NA	NA	
90		NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	
96	П	NA	NA	NA	NA	NA	NA	NA	111	NA	NA	NA	NA	NA	NA	NA	
102	Ш	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	
108		NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

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

ESCP

PVC

Extra Strength Clay Pipe Polyvinyl Chloride Pipe Corrugated Polyvinyl Chloride Pipe with a Smooth Interior Polyethylene Pipe CPVC

PE

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

CPP

Permitted Х

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

NA Not Acceptable

May also use Standard Strength Clay Pipe *

	STORM SEWERS (metric) KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE															
			FU			JIAMETE										
Nominal Diameter mm			Fill		1 m and le	ess,		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
250 300 375	NA IV IV	3 NA NA	X X NA	X X X	QPL QPL QPL	X X NA	QPL QPL QPL	NA QPL QPL	NA II II	1 1 1	*X *X *X	X X X	QPL QPL QPL	X X NA	QPL QPL QPL	NA QPL QPL
450 525	IV III	NA NA	NA NA	X X	QPL QPL	XNA	QPL QPL	QPL NA	=	2	X X	X X	QPL QPL	X NA	QPL QPL	QPL NA
600 675		NA NA	NA NA	X X	QPL NA	X NA	QPL NA	QPL NA		2	X X	X X	QPL NA	X NA	QPL NA	QPL NA
750 825	IV III	NA NA	NA NA	X	QPL NA	X	QPL NA	QPL NA		3 NA	X X	X NA	QPL NA	X NA	QPL NA	QPL NA
900 1050 1200	 	NA NA NA	NA X X	X X X	QPL NA NA	X X X	QPL QPL QPL	QPL QPL QPL	=	NA NA NA	X X X	X X X	QPL NA NA	X X X	QPL QPL QPL	QPL QPL QPL
1200		NA	NA	NA	NA	NA	NA	NA		NA	NA NA	NA	NA	NA	NA	NA
1500 1650	 	NA NA	NA NA	NA NA	NA NA	NA NA	QPL NA	QPL NA		NA NA	NA NA	NA NA	NA NA	NA NA	QPL NA	QPL NA
1800 1950		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	=	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
2100	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA
2250 2400 2550	= = =	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	= = =	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA
2550		NA	NA		NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

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

ESCP

PVC

Extra Strength Clay Pipe Polyvinyl Chloride Pipe Corrugated Polyvinyl Chloride Pipe with a Smooth Interior Polyethylene Pipe CPVC

PE

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

CPP

Permitted Х

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

NA Not Acceptable

May also use Standard Strength Clay Pipe *

		FO	RAGIVE	EN PIPE D		STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED													
			T.//			IGHTSOVER THE TOP OF THE PIPE													
	Type 3 Fill Height: Greater than 10' not exceeding15'									Type 4 Fill Height: Greater than 15' not exceeding 20'									
RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP				
NA	2	X	X	QPL	X	QPL	NA	NA	3	X	X	QPL	X	QPL	NA				
III	2	X	X	QPL	X	QPL	QPL	IV	NA	NA	X	QPL	X	QPL	QPL				
III	3	X	X	QPL	NA	QPL	QPL	IV	NA	NA	X	QPL	NA	QPL	QPL				
	NA	X	X	QPL	X	QPL	QPL	IV	NA	NA	X	QPL	X	QPL	QPL				
	NA	NA	X	QPL	NA	QPL	NA	IV	NA	NA	X	QPL	NA	NA	NA				
	NA	NA	X	QPL	X	QPL	QPL	IV	NA	NA	X	QPL	X	NA	QPL				
	NA	NA	X	NA	NA	NA	NA	IV	NA	NA	X	NA	NA	NA	NA				
	NA	NA	X	QPL	X	QPL	QPL	IV	NA	NA	X	QPL	X	NA	QPL				
	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA	NA				
	NA	NA	X	QPL	X	QPL	QPL	IV	NA	NA	X	QPL	X	NA	QPL				
	NA	NA	X	NA	X	NA	QPL	IV	NA	NA	X	NA	X	NA	NA				
	NA	NA	X	NA	X	NA	QPL	IV	NA	NA	X	NA	X	NA	NA				
	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA	NA				
	NA	NA	NA	NA	NA	NA	QPL	IV	NA	NA	NA	NA	NA	NA	NA				
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<td>NA2XXQPLXQPLQPLQPLQPLIII2XXQPLXQPLQPLQPLQPLIII3XXQPLNAQPLQPLQPLIIINAXXQPLXQPLQPLQPLIIINANAXQPLXQPLQPLQPLIIINANAXQPLXQPLQPLQPLIIINANAXQPLXQPLQPLQPLIIINANANANANANANANAIIINANANANANANANANAIIINANANANANANAQPLQPLIIINANANANANANAQPLIIINANANANANANAQPLIIINANANANANANANAIIINANANANANANANAIIINANANANANANANAIIINANANANANANANAIIINANANANANANANAIIINANANANANANANAIIINANANANANANANAIIINA</td> <td>NA2XXQPLXQPLNANAIII2XXQPLXQPLQPLIVIII3XXQPLNAQPLQPLIVIIINAXXQPLNAQPLQPLIVIIINANAXQPLNAQPLNAIVIIINANAXQPLNAQPLNAIVIIINANANAXQPLXQPLQPLIVIIINANANAXQPLXQPLQPLIVIIINANANANANANANAIVIIINANANANANANAIVIIINANANANANANAIVIIINANANANANANAIVIIINANANANANANAIVIIINANANANANANAIVIIINANANANANANAIVIIINANANANANANAIVIIINANANANANANAIVIIINANANANANANAIVIIINANANANANANAIVIIINANANAN</td> <td>NA2XXQPLXQPLNANA3III2XXQPLXQPLQPLIVNAIII3XXQPLNAQPLQPLIVNAIIINAXXQPLXQPLQPLIVNAIIINANAXQPLNAQPLQPLIVNAIIINANAXQPLNAQPLQPLIVNAIIINANAXQPLXQPLQPLIVNAIIINANANANANANANAIVNAIIINANANANANANANAIVNAIIINANANANANANANAIVNAIIINANANANANANANANANAIIINANANANANANANANAIIINANANANANANANANAIIINANANANANANANANAIIINANANANANANANANAIIINANANANANANANANAIIINANANANANANANANAIIINANANANA</td> <td>NA2XXQPLXQPLNANANA3XIII2XXQPLNAQPLQPLQPLIVNANAIII3XXQPLNAQPLQPLIVNANAIIINAXXQPLNAQPLQPLIVNANAIIINANAXQPLNAQPLNAIVNANAIIINANAXQPLXQPLQPLIVNANAIIINANAXQPLXQPLQPLIVNANAIIINANANANANANANANANANAIIINANAXQPLXQPLQPLIVNANAIIINANANANANANANANANANAIIINANANANANANANANANAIIINANANANANANANANANAIIINANANANANANANANANAIIINANANANANANANANANAIIINANANANANANANANANAIIINANANANANANANANA<</td> <td>NA2XXQPLXQPLNANA3XXIII2XXQPLNAQPLQPLIVNANAXIII3XXQPLNAQPLQPLIVNANAXIIINAXXQPLXQPLQPLIVNANAXIIINANAXQPLNAQPLNAIVNANAXIIINANAXQPLXQPLQPLIVNANAXIIINANAXQPLXQPLQPLIVNANAXIIINANANANANANANANANAXIIINANANANANANANANANANAIIINANANANANANANANANANAIIINANANANANANANANANANAIIINANANANANANANANANANAIIINANANANANANANANANANAIIINANANANANANANANANANAIIINANANANANANANANANANA<t< td=""><td>NA2XXQPLXQPLNANA3XXQPLIII2XXQPLNAQPLQPLIVNANANAXQPLIII3XXQPLNAQPLQPLIVNANAXQPLIIINANAXQPLXQPLQPLIVNANAXQPLIIINANAXQPLXQPLQPLNAIVNANAXQPLIIINANANAXQPLXQPLQPLIVNANAXQPLIIINANANANANANANANANANANANAIIINANANANANANANANANANANANAIIINANANANANANANANANANANANAIIINANANANANANANANANANANAIIINANANANANANANANANANANAIIINANANANANANANANANANANAIIINANANANANANANANANANANAIIINANANANA<t< td=""><td>NA 2 X X QPL X QPL NA NA 3 X X QPL X III 2 X X QPL X QPL QPL QPL IV NA NA X QPL X III 3 X X QPL NA QPL QPL IV NA NA X QPL NA III NA X QPL X QPL QPL QPL IV NA NA X QPL NA III NA NA X QPL X QPL QPL IV NA NA X QPL NA III NA NA X QPL X QPL QPL IV NA NA X QPL X III 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QPL X NA III NA NA X QPL X QPL QPL IV NA NA NA NA NA NA NA NA</td></td<></td></t<></td></t<>	NA2XXQPLXQPLNANA3XXQPLIII2XXQPLNAQPLQPLIVNANANAXQPLIII3XXQPLNAQPLQPLIVNANAXQPLIIINANAXQPLXQPLQPLIVNANAXQPLIIINANAXQPLXQPLQPLNAIVNANAXQPLIIINANANAXQPLXQPLQPLIVNANAXQPLIIINANANANANANANANANANANANAIIINANANANANANANANANANANANAIIINANANANANANANANANANANANAIIINANANANANANANANANANANAIIINANANANANANANANANANANAIIINANANANANANANANANANANAIIINANANANANANANANANANANAIIINANANANA <t< td=""><td>NA 2 X X QPL X QPL NA NA 3 X X QPL X III 2 X X QPL X QPL QPL QPL IV NA NA X QPL X III 3 X X QPL NA QPL QPL IV NA NA X QPL NA III NA X QPL X QPL QPL QPL IV NA NA X QPL NA III NA NA X QPL X QPL QPL IV NA NA X QPL NA III NA NA X QPL X QPL QPL IV NA NA X QPL X III NA NA X QPL X QPL QPL IV NA NA X QPL X III NA NA X QPL X QPL QPL IV NA NA NA NA III NA NA X QPL X QPL <td< td=""><td>NA 2 X X QPL X QPL X QPL NA NA 3 X X QPL X QPL III 2 X X QPL X QPL QPL QPL IV NA NA X QPL X QPL III 3 X X QPL X QPL QPL QPL IV NA NA X QPL NA QPL III NA X 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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

| | | FU |
 | | | STORM SEWERS (metric)
KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED
FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE
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 | eater tha | |
 | Fill Height: Greater than 4.5 m,
not exceeding 6 m |
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 | | | | |
| RCCP | CSP | ESCP | PVC
 | CPVC | PE | CPE
 | CPP | RCCP
 | CSP | ESCP | PVC | CPVC
 | PE | CPE | CPP
 | | | | |
| NA | 2 | X | X
 | QPL | X | QPL
 | NA | NA
 | 3 | X | X | QPL
 | X | QPL | NA
 | | | | |
| III | 2 | X | X
 | QPL | X | QPL
 | QPL | IV
 | NA | NA | X | QPL
 | X | QPL | QPL
 | | | | |
| III | 3 | X | X
 | QPL | NA | QPL
 | QPL | IV
 | NA | NA | X | QPL
 | NA | QPL | QPL
 | | | | |
| | NA | X | X
 | QPL | X | QPL
 | QPL | IV
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 | NA | NA | NA
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| | NA | NA | X
 | QPL | X | QPL
 | QPL | IV
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 | X | NA | QPL
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| | NA | NA | NA
 | NA | NA | NA
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 | NA | NA | NA | NA
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| | NA | NA | X
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 | QPL | IV
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 | QPL | IV
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 | X | NA | NA
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| | NA | NA | NA
 | NA | NA | NA
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 | QPL | IV
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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 KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED														
		F	ORAGIN	/EN PIPE	DIAMET	ERSAN	D FILL HE	EIGHTS	OVER TH	ΕΤΟΡΟ	F THE PIF	ΡE			
			Тур	be5				Ту	pe6		Туре7				
Nominal Diameter in.		Fill F	leight: Gi not exce		n 20',			leight: G not exce	reater tha eding 30'	an 25',	Fill Height: Greater than 30', not exceeding 35'				
	RCCP	PVC	CPVC	PE	CPE	CPP	RCCP	PVC	CPVC	PE	RCCP	PVC	CPVC	PE	
10 12 15	NA IV IV	X X X	QPL QPL QPL	X X NA	QPL QPL NA	NA QPL QPL	NA V V	X X X	QPL QPL QPL	X X NA	NA V V	X X X	QPL QPL QPL	X X NA	
18 21 24	IV IV IV	X X X	QPL QPL QPL QPL	X NA X	NA NA NA	NA NA NA	V V V	X X X	QPL QPL QPL QPL	X NA X	V V V	X X X	QPL QPL QPL QPL	X NA X	
27	IV	X	NA	NA	NA	NA	V	Х	NA	NA	V	X	NA	NA	
30 33	IV IV	X NA	QPL NA	X NA	NA NA	QPL NA	V V	X NA	QPL NA	X NA	V V	X NA	QPL NA	X NA	
36 42	IV IV	X X	QPL NA	X X	NA NA	NA NA	V V	X X	QPL NA	X X	V V	X X	QPL NA	X X	
48	IV	Х	NA	Х	NA	NA	V	Х	NA	Х	V	Х	NA	Х	
54 60 66	IV IV IV	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	>	NA NA NA	NA NA NA	NA NA NA	>	NA NA NA	NA NA NA	NA NA NA	
72 78	V 2020	NA	NA NA	NA NA	NA NA	NA	V 2370	NA	NA NA	NA	V 2730	NA	NA NA	NA NA	
84	2020	NA	NA	NA	NA	NA	2380	NA	NA	NA	2740	NA	NA	NA	
90 96 102	2030 2040 2050	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	2390 2400 2410	NA NA NA	NA NA NA	NA NA NA	2750 2750 2760	NA NA NA	NA NA NA	NA NA NA	
102	2050 2060	NA NA	NA NA	NA NA	NA NA	NA NA	2410 2410	NA NA	NA NA	NA NA	2760 2770	NA NA	NA NA	NA NA	

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.) RCCP

PVC

Polyvinyl Chloride Pipe Corrugated Polyvinyl Chloride Pipe with a Smooth Interior CPVC

PE Polyethylene Pipe

CPE Corrugated Polyethylene Pipe with a Smooth Interior

Corrugated Polypropylene Pipe with a Smooth Interior CPP

Х Permitted

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

NA Not Acceptable

	STORM SEWERS (metric) KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED														
			FORAG	IVEN PIF	PE DIAME	ETERS A	ND FILL H	IEIGHTS	OVER TH	ETOPO	F THE PIPI	E			
			Тур	e5				Ту	be6		Type7				
Nominal Diameter mm			leight: Gr not excee				Fill H		eater than eding9 m	7.5 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 X X	QPL	X	QPL	NA	NA	X	QPL	X	NA	X	QPL	X	
300	IV		QPL	X	QPL	QPL	V	X	QPL	X	V	X	QPL	X	
375	IV		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	Х	NA	NA	V	Х	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	Х	NA	Х	NA	NA	V	Х	NA	Х	V	Х	NA	Х	
1350	IV	NA	NA	NA	NA	NA	V	NA	NA	NA		NA	NA	NA	
1500	IV	NA	NA	NA	NA	NA	V	NA	NA	NA		NA	NA	NA	
1650	IV	NA	NA	NA	NA	NA	V	NA	NA	NA		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	

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.) RCCP

PVC

Polyvinyl Chloride Pipe Corrugated Polyvinyl Chloride Pipe with a Smooth Interior CPVC

PE Polyeth ylene Pipe

CPE Corrugated Polyethylene Pipe with a Smooth Interior

Corrugated Polypropylene Pipe with a Smooth Interior CPP

Х Permitted

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- (b) If the Department determines the bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided it is otherwise eligible for award. If the Department determines the bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification will also include a statement of reasons for the adverse determination. If the Utilization Plan is not approved because it is deficient as a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no more than a five calendar day period to cure the deficiency.
- (c) The bidder may request administrative reconsideration of an adverse determination by emailing the Department at "DOT.DBE.UP@illinois.gov" within the five calendar days after the receipt of the notification of the determination. The determination shall become final if a request is not made on or before the fifth calendar day. A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be reviewed by the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer. the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

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

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

from the Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.

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

<u>CONTRACT COMPLIANCE</u>. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Utilization Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall be come the amended contract goal. All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the DBE Participation Commitment Statement.

- (a) <u>NO AMENDMENT</u>. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be emailed to the Department at <u>DOT.DBE.UP@illinois.gov</u>.
- (b) <u>CHANGES TO WORK</u>. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as

provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A or AER 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, a new Request for Approval of Subcontractor will not be required. However, the Contractor must document efforts to assure the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.

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

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

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

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

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

- (f) <u>FINAL PAYMENT</u>. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than 30 calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Resident Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.
- (g) <u>ENFORCEMENT</u>. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (h) <u>RECONSIDERATION</u>. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

GRADING AND SHAPING DITCHES (BDE)

Effective: January 1, 2023

Delete the second paragraph of Article 214.03 of the Standard Specifications.

Delete the second paragraph of Article 214.04 of the Standard Specifications.

ILLINOIS WORKS APPRENTICESHIP INITIATIVE – STATE FUNDED CONTRACTS (BDE)

Effective: June 2, 2021 Revised: September 2, 2021

<u>Illinois Works Jobs Program Act (30 ILCS 559/20-1 et seq.)</u>. 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.

PERFORMANCE GRADED ASPHALT BINDER (BDE)

Effective: January 1, 2023

Revise Article 1032.05 of the Standard Specifications to read:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The following grades may be specified as tack coats.

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

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

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

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

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the RAP/RASABR shall not exceed 50 percent of the mixture.
- 2/ When RAP/RAS ABR exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28).
- 3/ The maximum ABR percentages for ground tire rubber (GTR) modified mixes shall be equivalent to the percentages specified for SBS/SBR polymer modified mixes.
- (2) FRAP/RAS. When FRAP is used alone or FRAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the following table.

HMA Mixtures - FRAP/RAS Maximum ABR % 1/2/			
Ndesign	Binder	Surface	Polymer Modified Binder or Surface ^{3/}
30	55	45	15
50	45	40	15
70	45	35	15
90	45	35	15
SMA			25
IL-4.75			35

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the FRAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When FRAP/RAS ABR exceeds 20 percent for all mixes, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28).

3/ The maximum ABR percentages for GTR modified mixes shall be equivalent to the percentages specified for SBS/SBR polymer modified mixes."

Add the following to the end of Note 2 of Article 1030.03 of the Standard Specifications.

"A dedicated storage tank for the ground tire rubber (GTR) modified asphalt binder shall be provided. This tank shall be capable of providing continuous mechanical mixing throughout and/or recirculation of the asphalt binder to provide a uniform mixture. The tank shall be heated and capable of maintaining the temperature of the asphalt binder at 300 °F to 350 °F (149 °C to 177 °C). The asphalt binder metering systems of dryer drum plants shall be calibrated with the actual GTR modified asphalt binder material with an accuracy of ± 0.40 percent."

SEEDING (BDE)

Effective: November 1, 2022

Revise Article 250.07 of the Standard Specifications to read:

"**250.07 Seeding Mixtures.** The classes of seeding mixtures and combinations of mixtures will be designated in the plans.

When an area is to be seeded with two or more seeding classes, those mixtures shall be applied separately on the designated area within a seven day period. Seeding shall occur prior to placement of mulch cover. A Class 7 mixture can be applied at any time prior to applying any seeding class or added to them and applied at the same time.

		TABLE 1 - SEEDING MIXTURES	
Class-	- Туре	Seeds	lb/acre (kg/hectare)
1	Lawn Mixture 1/	Kentucky Bluegrass	100 (110)
		Perennial Ryegrass	60 (70)
		Festuca rubra ssp. rubra (Creeping Red Fescue)	40 (50)
1A	Salt Tolerant	Kentucky Bluegrass	60 (70)
	Lawn Mixture 1/	Perennial Ryegrass	20 (20)
		Festuca rubra ssp. rubra (Creeping Red Fescue)	20 (20)
		Festuca brevipilla (Hard Fescue)	20 (20)
		Puccinellia distans (Fults Saltgrass or Salty Alkaligrass)	60 (70)
1B	Low Maintenance	Turf-Type Fine Fescue 3/	150 (170)
	Lawn Mixture 1/	Perennial Ryegrass	20 (20)
		Red Top <i>Festuca rubra</i> ssp. <i>rubra</i> (Creeping Red Fescue)	10 (10) 20 (20)
2	Roadside Mixture 1/	Lolium arundinaceum (Tall Fescue)	100 (110)
2	Roadside Mixture 1/	Perennial Ryegrass	50 (55)
		Festuca rubra ssp. rubra (Creeping Red Fescue)	40 (50)
		Red Top	10 (10)
2A	Salt Tolerant	Lolium arundinaceum (Tall Fescue)	60 (70)
	Roadside Mixture 1/	Perennial Ryegrass	20 (20)
		Festuca rubra ssp. rubra (Creeping Red Fescue)	30 (20)
		Festuca brevipila (Hard Fescue)	30 (20)
		Puccinellia distans (Fults Saltgrass or Salty Alkaligrass)	60 (70)
3	Northern Illinois	Elymus canadensis	5 (5)
	Slope Mixture 1/	(Canada Wild Rye) 5/	
	•	Perennial Ryegrass	20 (20)
		Alsike Clover 4/	5 (5)
		Desmanthus illinoensis	2 (2)
		(Illinois Bundleflower) 4/5/	40 (40)
		Schizachyrium scoparium (Little Bluestem) 5/	12 (12)
		Bouteloua curtipendula	10 (10)
		(Side-Oats Grama) 5/	10 (10)
		Puccinellia distans (Fults Saltgrass or Salty Alkaligrass)	30 (35)
		Oats, Spring	50 (55)
		Slender Wheat Grass 5/	15 (15)
		Buffalo Grass 5/ 7/	5 (5)
ЗA	Southern Illinois	Perennial Ryegrass	20 (20)
	Slope Mixture 1/	Elymus canadensis	20 (20)
		(Canada Wild Rye) 5/	
		Panicum virgatum (Switchgrass) 5/	10 (10)
		Schizachyrium scoparium (Little Blue Stem) 5/	12 (12)
		Bouteloua curtipendula	10 (10)
		(Side-Oats Grama) 5/	10(10)
		Dalea candida	5 (5)
		(White Prairie Clover) 4/ 5/	- \-/
		Rudbeckia hirta (Black-Eyed Susan) 5/	5 (5)
		Oats, Spring	50 (55)

Class	– Туре	Seeds	lb/acre (kg/hectare)
4	Native Grass 2/ 6/	Andropogon gerardi	4 (4)
		(Big Blue Stem) 5/	
		Schizachyrium scoparium	5 (5)
		(Little Blue Stem) 5/	
		Bouteloua curtipendula	5 (5)
		(Side-Oats Grama) 5/	
		Elymus canadensis	1 (1)
		(Canada Wild Rye) 5/	. ,
		Panicum virgatum (Switch Grass) 5/	1 (1)
		Sorghastrum nutans (Indian Grass) 5/	2 (2)
		Annual Ryegrass	25 (25)
		Oats, Spring	25 (25)
		Perennial Ryegrass	15 (15)
4A	Low Profile	Schizachyrium scoparium	5 (5)
	Native Grass 2/6/	(Little Blue Stem) 5/	、 <i>,</i> , ,
		Bouteloua curtipendula	5 (5)
		(Side-Oats Grama) 5/	()
		Elymus canadensis	1 (1)
		(Canada Wild Rye) 5/	()
		Sporobolus heterolepis	0.5 (0.5)
		(Prairie Dropseed) 5/	(),
		Annual Ryegrass	25 (25)
		Oats, Spring	25 (25)
		Perennial Ryegrass	15 (Ì15)́
4B	Wetland Grass and	Annual Ryegrass	25 (25)
	Sedge Mixture 2/6/	Oats, Spring	25 (25)
		Wetland Grasses (species below) 5/	6 (6)
	Species:		% By Weight
		adensis (Blue Joint Grass)	12
	Carex lacustris (Lak		6
	Carex slipata (AwI-F		6
	Carex stricta (Tusso		6
	Carex vulpinoidea (6
		is (Needle Spike Rush)	3
	Eleocharis obtusa (I		3
	<i>Glyceria striata</i> (Fowl Manna Grass)		14
	Juncus effusus (Common Rush)		6
	Juncus tenuis (Slender Rush)		6
	Juncus torreyi (Torrey's Rush)		6
	Leersia oryzoides (Rice Cut Grass)		10
		rd-Stemmed Bulrush)	3
	Scirpus atrovirens (I		3
		<i>riatilis</i> (River Bulrush)	3
	Schoenoplectus tab	pernaemontani (Softstem Bulrush)	3

Class	s– Туре	Seeds	lb/acre (kg/hectare)
5	Forb with	Annuals Mixture (Below)	1 (1)
	Annuals Mixture 2/ 5/ 6/	Forb Mixture (Below)	10 (10)
		not exceeding 25 % by weight of pecies, of the following:	
	Correctorio la macalata (C		
	Coreopsis lanceolata (S Leucanthemum maximu	and Coreopsis) um (Shasta Daisu)	
	Gaillardia pulchella (Bla		
	Ratibida columnifera (Pi		
	Rudbeckia hirta (Black-I		
		_yeu Susan)	
		exceeding 5 % by weight PLS of	
	any one spe	cies, of the following:	
	Amorpha canescens (Le	ead Plant) 4/	
	Anemone cylindrica (Th	mble Weed)	
	Asclepias tuberosa (But	terfly Weed)	
	Aster azureus (Sky Blue	Aster)	
	Symphyotrichum leave (Smooth Aster)	
	Aster novae-angliae (Ne		
	Baptisia leucantha (Whi		
	Coreopsis palmata (Pra		
	<i>Echinacea pallida</i> (Pale		
	Eryngium yuccifolium (R		
	<i>Helianthus mollis</i> (Dowr		
	Heliopsis helianthoides		
	<i>Liatris aspera</i> (Rough Bl		
	<i>Liatris pycnostachya</i> (Pr		
	<i>Monarda fistulosa</i> (Prair		
	Parthenium integrifoliun		
	Dalea candida (White Pi		
	<i>Dalea purpurea</i> (Purple		
	Physostegia virginiana (
	<i>Potentilla arguta</i> (Prairie		
	Ratibida pinnata (Yellow		
		sa (Fragrant Coneflower)	
	Silphium laciniatum (Co		
	Silphium terebinthinace		
	Oligoneuron rigidum (Ri		
	Tradescantia ohiensis (S		
	Veronicastrum virginicu	m (Culver's Root)	

Class-	– Туре	Seeds	lb/acre (kg/hectare)
5A	Large Flower Native Forb Mixture 2/ 5/ 6/	Forb Mixture (see below)	5 (5)
	Species:		<u>% By Weight</u>
	Aster novae-angliae (New England Aster)		5
	Echinacea pallida (Pale Purple Coneflower)		10
	Helianthus mollis (Dov	vny Sunflower)	10
	Heliopsis helianthoides (Ox-Eye)		10
	<i>Liatris pycnostachya</i> (Prairie Blazing Star) <i>Ratibida pinnata</i> (Yellow Coneflower)		10
			5
	Rudbeckia hirta (Black		10
	<i>Silphium laciniatum</i> (Compass Plant) <i>Silphium terebinthinaceum</i> (Prairie Dock)		10
	Oligoneuron rigidum (20 10
5B	Wetland Forb 2/ 5/ 6/	Forb Mixture (see below)	2 (2)
50			
	<u>Species:</u>		<u>% By Weight</u>
	Acorus calamus (Swe		3
	Angelica atropurpurea (Angelica)		6 2
	<i>Asclepias incarnata</i> (Swamp Milkweed) <i>Aster puniceus</i> (Purple Stemmed Aster)		10
	Bidens cernua (Beggarticks)		7
		n (Spotted Joe Pye Weed)	7
	Eupatorium perfoliatum (Boneset)		7
	Helenium autumnale (Autumn Sneeze Weed)		2
	Iris virginica shrevei (Blue Flag Iris)		2
	Lobelia cardinalis (Cardinal Flower)		5
	Lobelia siphilitica (Great Blue Lobelia)		5
	Lythrum alatum (Winged Loosestrife)		2
	Physostegia virginiana (False Dragonhead)		5
	Persicaria pensylvanica (Pennsylvania Smartweed)		10
	Persicaria lapathifolia (Curlytop Knotweed)		10 5
	<i>Pychanthemum virginianum</i> (Mountain Mint) <i>Rudbeckia laciniat</i> a (Cut-leaf Coneflower)		5
	Oligoneuron riddellii (Riddell Goldenrod)		2
	Sparganium eurycarpum (Giant Burreed)		5
6	Conservation	Schizachyrium scoparium	5 (5)
	Mixture 2/6/	(Little Blue Stem) 5/	o (o)
		Elymus canadensis	2 (2)
		(Canada Wild Rye) 5/ Buffalo Grass 5/ 7/	5 (5)
		Vernal Alfalfa 4/	5 (5) 15 (15)
		Oats, Spring	48 (55)
6A	Salt Tolerant	Schizachyrium scoparium	5 (5)
<i></i>	Conservation	(Little Blue Stem) 5/	
	Mixture 2/6/	Elymus canadensis	2 (2)
		(Canada Wild Rye) 5/	- \-/
		Buffalo Grass 5/ 7/	5 (5)
		Vernal Alfalfa 4/	15 (Ì́5)
		Oats, Spring	48 (55)
		Puccinellia distans (Fults Saltgrass or Salty Alkaligrass)	20 (20)
7	Temporary Turf	Perennial Ryegrass	50 (55)
	Cover Mixture	Oats, Spring	64 (70)

Notes:

- 1/ Seeding shall be performed when the ambient temperature has been between 45 °F (7 °C) and 80 °F (27 °C) for a minimum of seven (7) consecutive days and is forecasted to be the same for the next five (5) days according to the National Weather Service.
- 2/ Seeding shall be performed in late fall through spring beginning when the ambient temperature has been below 45 °F (7 °C) for a minimum of seven (7) consecutive days and ending when the ambient temperature exceeds 80 °F (27 °C) according to the National Weather Service.
- 3/ Specific variety as shown in the plans or approved by the Engineer.
- 4/ Inoculation required.
- 5/ Pure Live Seed (PLS) shall be used.
- 6/ Fertilizer shall not be used.
- 7/ Seed shall be primed with KNO₃ to break dormancy and dyed to indicate such.

Seeding will be inspected after a period of establishment. The period of establishment shall be six (6) months minimum, but not to exceed nine (9) months. After the period of establishment, areas not exhibiting 75 percent uniform growth shall be interseeded or reseeded, as determined by the Engineer, at no additional cost to the Department."

SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)

Effective: April 2, 2018

Add the following to Section 109 of the Standard Specifications.

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

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

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

SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

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

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

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

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

SUBMISSION OF PAYROLL RECORDS (BDE)

Effective: April 1, 2021

Revised: November 1, 2022

<u>FEDERAL AID CONTRACTS</u>. Revise the following section of Check Sheet #1 of the Recurring Special Provisions to read:

"STATEMENTS AND PAYROLLS

The payroll records shall include the worker's name, the worker's address, the worker's telephone number when available, the worker's social security number, the worker's classification or classifications, the worker's gross and net wages paid in each pay period, the worker's number of hours worked each day, and the worker's starting and ending times of work each day. However, any Contractor or subcontractor who remits contributions to a fringe benefit fund that is not jointly maintained and jointly governed by one or more employers and one or more labor organization must additionally submit the worker's hourly wage rate, the worker's hourly overtime wage rate, the worker's hourly fringe benefit rates, the name and address of each fringe benefit fund, the plan sponsor of each fringe benefit, if applicable, and the plan administrator of each fringe benefit, if applicable.

The Contractor and each subcontractor shall certify and submit payroll records to the Department each week from the start to the completion of their respective work, except that full

social security numbers shall not be included on weekly submittals. Instead, the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted. The submittals shall be made using LCPtracker Pro software. The software is web-based and can be accessed at https://lcptracker.com/. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option ("No Work", "Suspended", or "Complete") selected."

<u>STATE CONTRACTS</u>. Revise Item 3 of Section IV of Check Sheet #5 of the Recurring Special Provisions to read:

"3. Submission of Payroll Records. The Contractor and each subcontractor shall, no later than the 15th 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 <u>https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Prevailing-Wage-Portal.aspx</u>. Payrolls shall be submitted in the format prescribed by the IDOL.

In addition to filing certified payroll(s) with the IDOL, the Contractor and each subcontractor shall certify and submit payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers shall not be included on weekly submittals. Instead, the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted. The submittals shall be made using LCPtracker Pro software. The software is web-based and can be accessed at https://lcptracker.com/. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option ("No Work", "Suspended", or "Complete") selected."

SURFACE TESTING OF PAVEMENTS – IRI (BDE)

Effective: January 1, 2021

Revised: January 1, 2023

<u>Description</u>. This work shall consist of testing the ride quality of the finished surface of pavement sections with new concrete pavement, PCC overlays, full-depth HMA, and HMA overlays with at least 2.25 in. (57 mm) total thickness of new HMA combined with either HMA binder or HMA surface removal, according to Illinois Test Procedure 701, "Ride Quality Testing Using the International Roughness Index (IRI)". Work shall be according to Sections 406, 407, or 420 of the Standard Specifications, except as modified herein.

Hot-Mix Asphalt (HMA) Overlays

Add the following to Article 406.03 of the Standard Specifications:

Revise Article 406.11 of the Standard Specifications to read:

"406.11 Surface Tests. Prior to HMA overlay pavement improvements, the Engineer will measure the smoothness of the existing high-speed mainline pavement. The Contractor shall measure the smoothness of the finished high-speed mainline, low-speed mainline, and miscellaneous pavements after the pavement improvement is complete but within the same construction season. Testing shall be performed in the presence of the Engineer and according to Illinois Test Procedure 701. The pavement will be identified as high-speed mainline, low-speed mainline, or miscellaneous as follows.

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

- j. Pavement that must be constructed in segments of 600 ft (180 m) or less;
- k. Pavement within 25 ft (7.6 m) of manholes, utility structures, at-grade railroad crossings, or other appurtenances;
- I. Turn lanes; and
- m. Pavement within 5 ft (1.5 m) of jobsite sampling locations for HMA volumetric testing that fall within the wheel path.

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

- (4) International Roughness Index (IRI). An index computed from a longitudinal profile measurement using a quarter-car simulation at a simulation speed of 50 mph (80 km/h).
- (5) Mean Roughness Index (MRI). The average of the IRI values for the right and left wheel tracks.
 - a. MRIo. The MRI of the existing pavement prior to construction.
 - b. MRI. The MRI value that warrants an incentive payment.
 - c. MRIF. The MRI value that warrants full payment.
 - d. MRID. The MRI value that warrants a financial disincentive.
- (6) Areas of Localized Roughness (ALR). Isolated areas of roughness, which can cause significant increase in the calculated MRI for a given sublot.
- (7) Sublot. A continuous strip of pavement 0.1 mile (160 m) long and one lane wide. A partial sublot greater than or equal to 264 ft (80 m) will be subject to the same evaluation as a whole sublot. Partial sublots less than 264 ft (80 m) shall be included with the previous sublot for evaluation purposes.
- (b) Corrective Work. Corrective work shall be completed according to the following.
 - (1) High-Speed Mainline Pavement. For high-speed mainline pavement, any 25 ft (7.6 m) interval with an ALR in excess of 200 in./mile (3,200 mm/km) will be identified by the Engineer and shall be corrected by the Contractor. Any sublot having a MRI greater than MRI_D, including ALR, shall be corrected to reduce the MRI to the MRI_F, or replaced at the Contractor's option.
 - (2) Low-Speed Mainline Pavement. Surface variations in low-speed mainline pavement which exceed the 5/16 in. (8 mm) tolerance will be identified by the Engineer and shall be corrected by the Contractor.
 - (3) Miscellaneous Pavements. Surface variations in miscellaneous pavement which exceed the 5/16 in. (8 mm) tolerance will be identified by the Engineer and shall be corrected by the Contractor.

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

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

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

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

The upper MRI thresholds for high-speed mainline pavement are dependent on the MRI of the existing pavement before construction (MRI₀) and shall be determined as follows.

	MRI Thresholds (High-Speed, HMA Overlay)		
Upper MRI Thresholds ^{1/}	MRI₀ ≤ 125.0 in./mile (≤ 1,975 mm/km)	MRI₀ > 125.0 in./mile ¹/ (> 1,975 mm/km)	
Incentive (MRIı)	45.0 in./mile (710 mm/km)	0.2 × MRI ₀ + 20	
Full Pay (MRI⊧)	75.0 in./mile (1,190 mm/km)	0.2 × MRI ₀ + 50	
Disincentive (MRI _D)	100.0 in./mile (1,975 mm/km)	0.2 × MRI₀ + 75	

1/ MRI₀, MRI₁, MRI_F, and MRI_D shall be in in./mile for calculation.

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

SMOOTHNESS ASSESSMENT SCHEDULE (High-Speed, HMA Overlay)		
Mainline Pavement MRI Range	Assessment Per Sublot ^{1/}	
MRI≤MRI	+ (MRIı – MRI) × \$20.00 ^{2/}	
MRI₁ < MRI ≤ MRI⊧	+ \$0.00	
MRI⊧ < MRI ≤ MRID	– (MRI – MRI⊧) × \$8.00	
MRI > MRI _D	- \$200.00	

1/ MRI, MRI, MRIF, and MRID shall be in in./mile for calculation.

2/ The maximum incentive amount shall not exceed \$300.00.

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

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

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

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

Revise Article 407.09 of the Standard Specifications to read:

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

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

SMOOTHNESSASSESSMENT SCHEDULE (High-Speed, Full-Depth HMA)		
Mainline Pavement MRI, in./mile (mm/km)	Assessment Per Sublot ^{1/}	
≤ 45.0 (710)	+ (45 – MRI) × \$45.00 ^{2/}	
> 45.0 (710) to 75.0 (1,190)	+ \$0.00	
> 75.0 (1,190) to 100.0 (1,580)	– (MRI – 75) × \$20.00	
> 100.0 (1,580)	- \$500.00	

- 1/ MRI shall be in in./mile for calculation.
- 2/ The maximum incentive amount shall not exceed \$800.00."

Portland Cement Concrete Pavement

Delete Article 420.03(i) of the Standard Specifications.

Revise Article 420.10 of the Standard Specifications to read:

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

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

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

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

Jointed portland cement concrete pavement corrected by removal and replacement, shall be corrected in full panel sizes.

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

SMOOTHNESSASSESSMENT SCHEDULE (High-Speed, PCC)		
Mainline Pavement MRI, in./mile (mm/km) ^{3/}	Assessment Per Sublot ^{1/}	
≤ 45.0 (710)	+ (45 – MRI) × \$60.00 ^{2/}	
> 45.0 (710) to 75.0 (1,190)	+ \$0.00	
> 75.0 (1,190) to 100.0 (1,580)	– (MRI – 75) × \$37.50	
> 100.0 (1,580)	- \$750.00	

- 1/ MRI shall be in in./mile for calculation.
- 2/ The maximum incentive amount shall not exceed \$1200.00.
- 3/ If pavement is constructed with traffic in the lane next to it, then an additional 10 in./mile will be added to the upper thresholds."

Removal of Existing Pavement and Appurtenances

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

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

General Equipment

Revise Article 1101.04 of the Standard Specifications to read:

"**1101.04 Pavement Surface Grinding Equipment.** The pavement surface grinding device shall have a minimum effective head width of 3 ft (0.9 m).

(a) Diamond Saw Blade Machine. The machine shall be self-propelled with multiple diamond saw blades.

(b) Profile Milling Machine. The profile milling machine shall be a drum device with carbide or diamond teeth with spacing of 0.315 in. (8 mm) or less and maintain proper forward speed for surface texture according to the manufacturer's specifications."

VEHICLE AND EQUIPMENT WARNING LIGHTS (BDE)

Effective: November 1, 2021 Revised: November 1, 2022

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

"The Contractor shall equip all vehicles and equipment with high-intensity oscillating, rotating, or flashing, amber or amber-and-white, warning lights which are visible from all directions. In accordance with 625 ILCS 5/12-215, the lights may only be in operation while the vehicle or equipment is engaged in construction operations."

WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012

Revised: November 1, 2021

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

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

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

WORK ZONE TRAFFIC CONTROL DEVICES (BDE)

Effective: March 2, 2020

Add the following to Article 701.03 of the Standard Specifications:

"(q) Temporary Sign Supports 1106.02"

Revise the third paragraph of Article 701.14 of the Standard Specifications to read:

"For temporary sign supports, the Contractor shall provide a FHWA eligibility letter for each device used on the contract. The letter shall provide information for the set-up and use of the device as well as a detailed drawing of the device. The signs shall be supported within 20 degrees of vertical. Weights used to stabilize signs shall be attached to the sign support per the manufacturer's specifications."

Revise the first paragraph of Article 701.15 of the Standard Specifications to read:

"701.15 Traffic Control Devices. For devices that must meet crashworthiness standards, the Contractor shall provide a manufacturer's self-certification or a FHWA eligibility letter for each Category 1 device and a FHWA eligibility letter for each Category 2 and Category 3 device used on the contract. The self-certification or letter shall provide information for the set-up and use of the device as well as a detailed drawing of the device."

Revise the first six paragraphs of Article 1106.02 of the Standard Specifications to read:

"1106.02 Devices. Work zone traffic control devices and combinations of devices shall meet crashworthiness standards for their respective categories. The categories are as follows.

Category 1 includes small, lightweight, channelizing and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These include cones, tubular markers, plastic drums, and delineators, with no attachments (e.g. lights). Category 1 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 1 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2024.

Category 2 includes devices that are not expected to produce significant vehicular velocity change but may otherwise be hazardous. These include vertical panels with lights, barricades, temporary sign supports, and Category 1 devices with attachments (e.g. drums with lights). Category 2 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 2 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2024.

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions (impact attenuators), truck mounted attenuators, and other devices not meeting the definitions of Category 1 or 2. Category 3 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 3 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2029. Category 3 devices shall be crash tested for Test Level 3 or the test level specified.

Category 4 includes portable or trailer-mounted devices such as arrow boards, changeable message signs, temporary traffic signals, and area lighting supports. It is preferable for Category 4 devices manufactured after December 31, 2019 to be MASH-16 compliant; however, there are currently no crash tested devices in this category, so it remains exempt from the NCHRP 350 or MASH compliance requirement.

For each type of device, when no more than one MASH-16 compliant is available, an NCHRP 350 or MASH-2009 compliant device may be used, even if manufactured after December 31, 2019."

Revise Articles 1106.02(g), 1106.02(k), and 1106.02(l) to read:

- "(g) Truck Mounted/Trailer Mounted Attenuators. The attenuator shall be approved for use at Test Level 3. Test Level 2 may be used for normal posted speeds less than or equal to 45 mph.
- (k) Temporary Water Filled Barrier. The water filled barrier shall be a lightweight plastic shell designed to accept water ballast and be on the Department's qualified product list.

Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings.

(I) Movable Traffic Barrier. The movable traffic barrier shall be on the Department's qualified product list.

Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings. The barrier shall be capable of being moved on and off the roadway on a daily basis."

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within <u>75</u> working days.

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.