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### Letting November 17, 2023

## Notice to Bidders, Specifications and Proposal



Contract No. 61J89
COOK County
Section 20-00133-00-FP (Brookfield)
Route MUN 4020 (DuBois & Burlington Ave.)
Project ZLI3-141 ()
District 1 Construction Funds

Prepared by

# Illinois Department of Transportation

#### **NOTICE TO BIDDERS**

- 1. **TIME AND PLACE OF OPENING BIDS.** Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. November 17, 2023 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. 61J89
COOK County
Section 20-00133-00-FP (Brookfield)
Project ZLI3-141 ()
Route MUN 4020 (DuBois & Burlington Ave.)
District 1 Construction Funds

Reconstruction of Dubois Boulevard from Ogden Avenue to Burlington Avenue, and the reconstruction of Burlington Avenue from Dubois Boulevard to Grove Ave. in Brookfield.

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

By Order of the Illinois Department of Transportation

Omer Osman, Secretary

#### **CONTRACT 61J89**

## INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

#### Adopted January 1, 2023

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

ERRATA Standard Specifications for Road and Bridge Construction

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

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#### LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

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#### **BDE SPECIAL PROVISIONS**

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

	<u>File</u> Name	Pg.		Special Provision Title	<b>Effective</b>	Revised
	80099			Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2022
	80274	119	$\boxtimes$	Aggregate Subgrade Improvement	April 1, 2012	April 1, 2022
	80192		Ħ	Automated Flagger Assistance Device	Jan. 1, 2008	April 1, 2023
	80173	122	$\boxtimes$	Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
	80426		Ħ	Bituminous Surface Treatment with Fog Seal	Jan. 1, 2020	Jan. 1, 2022
	80436	124	$\boxtimes$	Blended Finely Divided Minerals	April 1, 2021	, -
	80241			Bridge Demolition Debris	July 1, 2009	
	50531			Building Removal	Sept. 1, 1990	Aug. 1, 2022
	50261			Building Removal with Asbestos Abatement	Sept. 1, 1990	Aug. 1, 2022
	80449	125	$\boxtimes$	Cement, Type IL	Aug. 1, 2023	_
	80384	126	$\boxtimes$	Compensable Delay Costs	June 2, 2017	April 1, 2019
	80198			Completion Date (via calendar days)	April 1, 2008	
	80199			Completion Date (via calendar days) Plus Working Days	April 1, 2008	
*	80453			Concrete Sealer	Nov. 1, 2023	
	80261	130	$\boxtimes$	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
	80434	133	$\boxtimes$	Corrugated Plastic Pipe (Culvert and Storm Sewer)	Jan. 1, 2021	
	80029	145	$\boxtimes$	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Mar. 2, 2019
	80229		$\sqcup$	Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
*	80452		Ц	Full Lane Sealant Waterproofing System	Nov. 1, 2023	
	80447		닏	Grading and Shaping Ditches	Jan 1, 2023	
	80433		닏	Green Preformed Thermoplastic Pavement Markings	Jan. 1, 2021	Jan. 1, 2022
	80443		Ц	High Tension Cable Median Barrier Removal	April 1, 2022	
	80446	155	$\bowtie$	Hot-Mix Asphalt – Longitudinal Joint Sealant	Nov. 1, 2022	Aug. 1, 2023
	80438		$\mathbb{H}$	Illinois Works Apprenticeship Initiative – State Funded Contracts	June 2, 2021	Sept. 2, 2021
	80045		님	Material Transfer Device	June 15, 1999	Jan. 1, 2022
	80450	457	$\mathbb{H}$	Mechanically Stabilized Earth Retaining Walls	Aug. 1, 2023	
	80441	157		Performance Graded Asphalt Binder	Jan 1, 2023	
	80451	162		Portland Cement Concrete	Aug. 1, 2023	lan 1 2022
	34261	163	$\boxtimes$	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2022
	80445 80448	164 170		Seeding Source of Supply and Quality Requirements	Nov. 1, 2022 Jan. 2, 2023	
	80340	170	$\forall$	Speed Display Trailer	April 2, 2014	Jan. 1, 2022
	80127		H	Steel Cost Adjustment	April 2, 2014 April 2, 2014	Jan. 1, 2022 Jan. 1, 2022
	80397	171		Subcontractor and DBE Payment Reporting	April 2, 2014 April 2, 2018	Jan. 1, 2022
	80391	172		Subcontractor Mobilization Payments	Nov. 2, 2017	April 1, 2019
	80437	173	X	Submission of Payroll Records	April 1, 2021	Nov. 1, 2022
	80435	170	H	Surface Testing of Pavements – IRI	Jan. 1, 2021	Jan. 1, 2023
	80410		Ħ	Traffic Spotters	Jan. 1, 2019	0dii. 1, 2020
	20338	175		Training Special Provisions	Oct. 15, 1975	Sept. 2, 2021
	80429	., 0	H	Ultra-Thin Bonded Wearing Course	April 1, 2020	Jan. 1, 2022
	80439	178	$\boxtimes$	Vehicle and Equipment Warning Lights	Nov. 1, 2021	Nov. 1, 2022
	80440		Ħ	Waterproofing Membrane System	Nov. 1, 2021	, -
	80302	179	$\boxtimes$	Weekly DBE Trucking Reports	June 2, 2012	Nov. 1, 2021
*	80454			Wood Sign Support	Nov. 1, 2023	
	80427	180	$\overline{\boxtimes}$	Work Zone Traffic Control Devices	Mar. 2, 2020	
	80071			Working Days	Jan. 1, 2002	
				- <i>*</i>	•	

#### **STATE OF ILLINOIS**

#### **SPECIAL PROVISIONS**

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", adopted January 1, 2022, herein referred to as the Standard Specifications, 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, herein referred to as the Specifications, and the "Supplemental Specifications and Recurring Special Provisions" indicated on the Check Sheet included herein which apply to and govern and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern the construction of:

DU BOIS BOULEVARD (OGDEN AVENUE TO BURLINGTON AVENUE)
BURLINGTON AVENUE (DUBOIS BOULEVARD TO GROVE AVENUE)
PROJECT NO. ZLI3(141)
SECTION NO. 20-00133-00-FP
VILLAGE OF BROOKFIELD
COOK COUNTY
CONTRACT NO. 61J89

#### **LOCATION OF PROJECT**

The project is located on DuBois Boulevard from Ogden Avenue (STA 1+47) to Burlington Avenue (STA 5+50) and on Burlington Avenue from DuBois Boulevard (STA 5+50) to Grove Avenue (STA 51+51) in the Village of Brookfield in Cook County, Illinois. There is a project omission on Burlington Avenue at Maple Avenue from STA 22+71 to STA 24+18. The project has a gross length of 5,004 feet (0.948 miles) and a net length of 4,857 feet (0.920 miles).

#### **DESCRIPTION OF PROJECT**

The work on the project will include point repairs to the combined sewer system, repair and replacement of deteriorated drainage structures, storm sewer and outfall installation, removal of existing pavement, earth excavation, pavement widening, removal and replacement of curb and gutter, driveway aprons, and sections of sidewalk, installation of aggregate base course, hot-mix asphalt (HMA) binder and surface course installation, pavement marking, brick paver plaza work, and restoration of disturbed areas with topsoil and sod along with all other incidental and collateral work to complete the project as shown on the plans and described herein.

#### PROJECT STAGING AND LOCAL ACCESS

During the construction of the project, DuBois Boulevard and Burlington Avenue will have varying levels of accessibility to traffic and pedestrians. The construction is planned to be broken up into five stages between three areas laid out in the Maintenance of Traffic (MOT) Plan. The Contractor will be required to adhere to the MOT as well as the following:

#### **Stage 1 Construction – Utility Work**

Stage 1 consists of water main relocation, water service boring, storm sewer installation, drainage structure repair/replacement, storm lateral replacement, combined sewer point repairs, and other related work.

#### **Stage 2 Construction – Concrete Improvements (North Side)**

Stage 2 consists of removal and replacement of curb and gutter, driveway aprons, intermittent sidewalk replacement, earth excavation, pavement widening, pavement patching, plaza improvements at the Congress Park Metra Station, and other related work on the north side of Burlington Avenue and the west side of DuBois Boulevard.

- 2A and 2C: Once the contractor begins removals for this stage, the concrete improvements and restoration work shall be completed within 14 calendar days.
- 2B: Once the contractor begins removals for this stage, the concrete improvements and restoration work shall be completed within 21 calendar days.

#### **Stage 3 Construction – Concrete Improvements (South Side)**

Stage 3 consists of removal and replacement of curb and gutter, driveway aprons, intermittent sidewalk replacement, earth excavation, pavement widening, pavement patching, and other related work on the south side of Burlington Avenue and the east side of DuBois Boulevard.

- 3A and 3C: Once the contractor begins removals for this stage, the concrete improvements and restoration work shall be completed within 14 calendar days.
- 3B: Once the contractor begins removals for this stage, the concrete improvements and restoration work shall be completed within 21 calendar days.

#### **Stage 4 Construction – Roadway Improvements (Phase I)**

Stage 4 consists of pavement milling, pavement patching, pavement removal, installation of aggregate base course, installation of hot-mix asphalt binder course, landscaping restoration, and other related work.

- 4A: Once the pavement has been milled, the contractor shall install the HMA binder course within 7 calendar days. If the Engineer has determined that pavement patching is required, the Contractor will have an additional 7 calendar days for a total of 14 calendar days from pavement milling to remove and replace the pavement and install the HMA binder course.
- 4B: Once the Contractor starts removals for any area of this stage, the Contractor shall restore access by completing pavement excavation, aggregate pavement installation, and installation of HMA binder course within 21 calendar days.
- 4C: Once the Contractor starts removals between Ogden Avenue (US 34) and Station 7+85, the Contractor shall restore access by completing pavement excavation, aggregate pavement installation, and installation of HMA binder course within 14 calendar days. For Station 7+85 to Maple Avenue, once the pavement has been milled, the contractor shall install the HMA binder course within 7 calendar days. If the Engineer has determined that pavement patching is required, the Contractor will have an additional 7 calendar days for a total of 14 calendar days from pavement milling to remove and replace the pavement and install the HMA binder course.

#### **Stage 5 Construction – Roadway Completion (Phase II)**

Stage 5 consists of frame and lid adjustments, installation of hot-mix asphalt surface course, pavement marking, and other related work.

In addition to the stage-specific timelines and requirements outlines above and in the MOT plan, the Contractor will be required to adhere to the following:

#### **Creekside Park (3815 Grove Avenue):**

Creekside Park is located just east of the intersection of Burlington Avenue and Grove Avenue and will be closed while the purposed storm sewer and outfall are being constructed from Salt Creek to Burlington Avenue. Once work begins and the park is no longer accessible, the Contractor will be required to complete all work and restoration around the park within 60 Calendar Days. If the work has not been completed and the park cannot be reopened, then Liquidated Damages shall be accessed based on the Schedule of Liquidated Damages for Interim Completion Dates until the park can be re-opened.

#### **Burlington Avenue from Prairie Avenue to Grove Avenue:**

Once any work has begun on this section of street including sewer and/or concrete work, the Contractor will be required to complete all work including sewer, concrete, and pavement improvements (constructing the pavement up to and including the installation of the HMA binder course) within 60 Calendar Days of starting work on this section of street. If all of the above work has not been installed within 60 Calendar Days, then Liquidated Damages shall be assessed based on the Schedule of Liquidated Damages for Interim Completion Dates until the HMA binder course has been installed.

#### **Burlington Avenue from Maple Avenue to Prairie Avenue:**

Once any work has begun on this section of street including sewer and/or concrete work, the Contractor will be required to complete all work including sewer, concrete, and pavement improvements (constructing the pavement up to and including the installation of the HMA binder course) within 75 Calendar Days of starting work on this section of street. If all of the above work has not been installed within 75 Calendar Days, then Liquidated Damages shall be assessed based on the Schedule of Liquidated Damages for Interim Completion Dates until the HMA binder course has been installed.

## DuBois Boulevard from Ogden Avenue to Burlington Avenue and Burlington Avenue from DuBois Boulevard to Maple Avenue:

Once any work has begun on this section of street including sewer and/or concrete work, the Contractor will be required to complete all work including sewer, concrete, and pavement improvements (constructing the pavement up to and including the installation of the HMA binder course) within 60 Calendar Days of starting work on this section of street. If all of the above work has not been installed within 60 Calendar Days, then Liquidated Damages shall be assessed based on the Schedule of Liquidated Damages for Interim Completion Dates until the HMA binder course has been installed.

#### **Congress Park Metra Station Plaza:**

Once any work has begun on this section of the plaza at Congress Park Metra Station, the Contractor will be required to complete all work including earth excavation, brick paver placement, retaining and seat wall installation, and restoration within 30 Calendar Days. If all of the above work has not been installed within 30 Calendar Days, then Liquidated Damages shall be assessed based on the Schedule of

Liquidated Damages for Interim Completion Dates until the plaza work has been completed.

#### **Prairie Avenue Crossing:**

Two-way, north-south traffic will need to be maintained on Prairie Avenue at all times through use of barricades, detour signage, and temporary pavement markings. The Contractor will be responsible for installing a temporary asphalt patch on all utility trenches before continuing to the next construction stage. Installation and removal of temporary patch will be paid under Pay Item X4420210 TEMPORARY PATCHING.

#### **CONTRACT COMPLETION**

The Contractor agrees to prosecute the Work in such manner and with sufficient materials, equipment, and labor and will ensure its substantial completion within the time limit specified herein, it being understood and agreed that the undersigned agrees to complete the Work by October 1, 2024. The Contractor will be allowed an additional 15 working days to complete the punch list once substantial completion has been obtained. In case of failure to complete the Work within the time named herein or within such extra time as may have been allowed by extensions, the Contractor shall be subject to contract deductions in accordance with Article 108.09 of the Standard Specifications.

#### MAINTENANCE OF ROADWAYS (D1)

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

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

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

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

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

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

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

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

#### **Pre-Stage**

STAGE / LOCATION	ТҮРЕ	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Station 6+00 (South parkway on Burlington Avenue)	Light Pole	Pole to be relocated	ComEd	1 Day Installation
Station 12+50	Conflict with Storm Sewer	Duct to be Lowered	AT&T	2 Days
Station 16+45	Conflict with Storm Sewer	Duct to be Lowered	AT&T	2 Days
Station 19+65	Conflict with Storm Sewer	Duct to be Lowered	AT&T	2 Days
Station 19+80 (Southeast corner of Burlington Avenue and Arthur Avenue)	Light Pole	Pole to be relocated	ComEd	1 Day Installation
Station 21+30	Conflict with Storm Sewer	Duct to be Lowered	AT&T	2 Days
Station 22+08	Conflict with Storm Sewer	Duct to be Lowered	AT&T	2 Days
Station 24+55	Conflict with Storm Sewer	Duct to be Lowered	AT&T	2 Days
Station 26+55	Conflict with Storm Sewer	Duct to be Lowered	AT&T	2 Days
Station 26+65 (Southeast corner of Burlington Avenue and Elm Avenue)	Light Pole	Pole to be relocated	ComEd	1 Day Installation

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Station 27+90 (South parkway on Burlington Avenue)	Handhole	Handhole to be adjusted with new frame	Verizon	1 Day Installation
Station 28+40	Conflict with Storm Sewer	Duct to be Lowered	AT&T	2 Days
Station 30+10	Conflict with Storm Sewer	Duct to be Lowered	AT&T	2 Days
Station 33+25 (Southwest corner of Burlington Avenue and Oak Avenue)	Light Pole	Pole to be relocated	ComEd	1 Day Installation
Station 33+50	Conflict with Storm Sewer	Duct to be Lowered	AT&T	2 Days
Station 36+70 (Southwest corner of Burlington Avenue and Sunnyside Avenue)	Handhole	Handhole to be adjusted with new frame	Verizon	1 Day Installation
Station 36+75 (Southwest corner of Burlington Avenue and Sunnyside Avenue)	Light Pole	Pole to be relocated	ComEd	1 Day Installation
Station 40+20 (Southwest corner of Burlington Avenue and Vernon Avenue)	Light Pole	Pole to be relocated	ComEd	1 Day Installation

#### Stage 1

No conflicts to be resolved.

#### Stage 2

No conflicts to be resolved.

#### Stage 3

No conflicts to be resolved.

#### Stage 4

No conflicts to be resolved.

#### Stage 5

No conflicts to be resolved.

<b>Pre-Stage:</b>	<u>28</u> _	_ Days Total Installation
<b>Stage 1:</b>	0	_ Days Total Installation
<b>Stage 2:</b>	<u> </u>	_ Days Total Installation

Stage 3: \_\_\_\_\_0 \_\_\_ Days Total Installation
Stage 4: \_\_\_\_\_0 \_\_\_ Days Total Installation
Stage 5: \_\_\_\_\_0 \_\_\_ Days Total Installation

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

Agency/Company Responsible to Resolve Conflict	Name of contact	Address	Phone	E-mail address
AT&T	Janet Ahern	1000 Commerce Drive, 2 <sup>nd</sup> Floor Oak Brook, IL 60523	(630)-573-6414	ja1763@att.com
Comcast	Robert Schulter	688 Industrial Drive, Elmhurst, IL 60126	(224)229-5861	robert.schulter@comcast. com
ComEd	Ericka Irby	3500 N California Ave, Chicago, IL 60618	(779)231-0633	ericka.irby@ComEd.com
Crown Castle	Kelly Klinefelter	1500 Corporate Drive, Canonsburg, PA 15317	(724)743-6085	kelly.klinefelter@crownca stle.com
Verizon	Bob Vezina	929 Martha's Way, Hiawatha, IA 52233	(847)989-3364	robert.vezina@g.verizon.c om
Nicor	Charles Parrot	1844 Ferry Rd, Naperville, IL 60563	(630)-388-2903	cparrot@southernco.com

#### UTILITIES TO BE WATCHED AND PROTECTED

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

#### **Pre-Stage:**

No facilities requiring extra consideration.

#### Stage 1

No facilities requiring extra consideration.

#### Stage 2

No facilities requiring extra consideration.

#### Stage 3

No facilities requiring extra consideration.

#### Stage 4

No facilities requiring extra consideration.

#### Stage 5

No facilities requiring extra consideration.

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

Agency/Company	Name of	Address	Phone	E-mail address
Responsible to	contact			
<b>Resolve Conflict</b>				
AT&T	Janet Ahern	1000 Commerce Drive, 2 <sup>nd</sup> Floor Oak Brook, IL 60523	(630)-573-6414	ja1763@att.com
Comcast	Robert Schulter	688 Industrial Drive, Elmhurst, IL 60126	(224)229-5861	robert.schulter@comcast. com
ComEd	Ericka Irby	3500 N California Ave, Chicago, IL 60618	(779)231-0633	ericka.irby@ComEd.com
Crown Castle	Kelly Klinefelter	1500 Corporate Drive, Canonsburg, PA 15317	(724)743-6085	kelly.klinefelter@crownca stle.com
Verizon	Bob Vezina	929 Martha's Way, Hiawatha, IA 52233	(847)989-3364	robert.vezina@g.verizon.c om
Nicor	Charles Parrot	1844 Ferry Rd, Naperville, IL 60563	(630)-388-2903	cparrot@southernco.com

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

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

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

#### **OPEN EXCAVATIONS**

Leaving of any excavation open overnight will not be allowed on this project. The Contractor will be responsible for completely backfilling or plating over of all excavations at the end of each day. If the excavations are backfilled they shall be filled with an aggregate meeting the gradation of CA-6. The material will be compacted sufficiently to prevent rutting or settlement of material under traffic loads. If plates are used they shall be of sufficient thickness to support vehicular loads and they shall extend a minimum of nine inches (9") beyond the limits of the excavation on all sides. If the plates are to be left over the weekend, the edges of the plates shall be cushioned with a bituminous mixture in areas where vehicular traffic will cross the plates.

All excavated and other materials that are to be reused shall be so piled as not to endanger the work and so that free access may be had at any time to all parts of the work, and shall be kept neatly piled so as not to inconvenience public travel or adjoining tenants. Walkways shall be kept clear and unobstructed. All excess excavated material shall be immediately removed and disposed of off the job site by the contractor.

The costs for providing the aggregate, plates and bituminous mixture will not be paid for directly but shall be considered included in the cost of the excavation work required for the various contract items.

#### SHEETING AND SHORING

Any sheeting or shoring required for the storm sewer installation or other construction elements requiring relatively deep excavations shall be included in the particular pay item and no additional compensation will be allowed for any supplemental work associated with the maintenance of trench sides or other excavated areas.

#### **CURING AND PROTECTION**

After the concrete has been finished and the water sheen has disappeared from the surface of the concrete, the surface shall be sealed with membrane curing compound of a type approved by the Engineer. The seal shall be maintained for the specified curing period. The edges of the concrete shall also be sealed immediately after the forms are removed. In addition, all concrete placed during periods of cold weather shall be protected in accordance with Article 720.13 of the Standard Specifications. This work shall be considered included in the cost of the various concrete items in the Contract.

The work shall be under the charge and care of the Contractor until final acceptance by the Engineer as coordinated with the Village. The Contractor shall assume all responsibility for any injury or damage to the work from any cause whatsoever and he shall rebuild, repair or restore the damaged work at his own

expense.

<u>Basis of Payment:</u> This item will not be paid for separately but will be included in the unit price for the various concrete items in the Contract.

#### **CURB AND GUTTER TRANSITIONS**

Transitions from the proposed curb and gutters to the depressed curb and gutters, proposed curb and gutters to existing curb and gutters, and from curb of variable heights shall be done in ten (10) foot transitions unless otherwise directed by the Engineer.

<u>Basis of Payment:</u> This item will not be paid for separately but will be included in the unit price for the various concrete items in the Contract.

#### AGGREGATE BEDDING FOR CONCRETE WORK

New sidewalk and curb & gutter shall be placed on a minimum of two inches (2") of compacted CA-6 stone bedding or Subbase Granular Material, Type B, in the proposed areas. New driveway pavement or 8" concrete pavement shall be placed on a minimum of four inches (4") of compacted CA-6 stone bedding.

Additional aggregate required to adjust the existing elevation of the subgrade to the proposed elevation will be included as part of that pay item.

<u>Basis of Payment:</u> This item will not be paid for separately but will be included in the unit price for the respective concrete items in the contract.

#### MAINTENANCE OF EXISTING DRAINAGE STRUCTURES

All loose material deposited in the flow line of gutters and drainage structures that obstructs the natural flow of water shall be removed at the close of each working day. At the conclusion of the construction operations, all drainage facilities shall be clean and free of all obstructions due to construction operations.

<u>Basis of payment</u>: This item will not be paid for separately but shall be included in the unit price for the various sewer structures in the contract.

#### **EARTH EXCAVATION**

This item includes all the excavating and grading work necessary on this Project to establish the subgrade elevations of the proposed pavements to be constructed as indicated on the Plans. The work shall be performed in accordance with Section 202 of the "Standard Specifications for Road and Bridge Construction".

For the sections of pavement to be reconstructed this item includes all the excavating and grading work necessary to establish the subgrade elevations of the proposed pavement other than that excavation required as part of the items for COMBINATION CURB AND GUTTER REMOVAL AND PAVEMENT REMOVAL.

The top of the volume to be excavated beneath any areas of concrete pavement removal on Burlington Avenue, DuBois Boulevard, and the intersecting side streets will be eighteen inches (18") below the proposed finished grade of the reconstructed pavement. The width of the volume to be excavated will be equal to the proposed pavement width.

Any excavation of the parkway which is required to give a uniform slope from the edge of sidewalk to the top of the curb shall also be paid for under this item. The payment for EARTH EXCAVATION will only be applicable where the proposed top of curb has been lowered substantially from the existing grade (three inches or greater), and a uniform parkway slope is unattainable through the basic grading operations of topsoil placement. The excavation for the proposed sodding and topsoil section will be subtracted from the measured volume to be excavated. Any excavation and grading of the parkway where the top of curb has <u>not</u> been lowered by three inches or greater shall be included in the item for TOPSOIL PLACEMENT, 3".

Also included in the work under this item are the removal and disposal of all brush, rock, construction debris, hedges, trees of sizes less than 6" in diameter, and other excess materials located within the construction area of the Project's improvements.

<u>Basis of Payment</u>: This work will be paid for at the Contract unit price per Cubic Yard for EARTH EXCAVATION.

#### **TRENCH BACKFILL**

All trench backfill used under or within two feet (2') of pavements, sidewalks, driveways, and curb and gutter shall be Crushed Stone, Gradation CA-6. Maximum compaction must be obtained by Method 1 (mechanical compaction) as described in Article 550.07 of the "Standard Specifications for Road and Bridge Construction". In certain locations such as around structures where it is difficult to obtain compaction via mechanical means, the Engineer may allow or require jetting.

The crushed stone used for trench backfill must be approved on the Project by the Engineer. The use of crushed concrete will <u>not</u> be allowed. Payment for this item will be based on actual in place measurements taken by the Engineer on the site but in no case will exceed the theoretical volume.

<u>Basis of Payment:</u> This work will be paid for at the Contract unit price per Cubic Yard for TRENCH BACKFILL

#### **TOPSOIL FURNISH AND PLACE, 4"**

This item shall include the placement of four inches (4") of topsoil on all landscaped areas disturbed by construction as shown on the Plans and directed by the Engineer.

The Contractor shall take precautions so as not to unnecessarily damage lawns. In areas that are designated to be sodded, the existing sod shall be cut and removed; the area shall then be shaped, graded and rototilled. The areas of excavation adjacent to new concrete shall be compacted to the satisfaction of the Engineer. The area to be sodded shall then have a layer of good quality, pulverized topsoil which has been approved by the Engineer prior to placement, spread and fine raked in such a manner as to result in a top dressing of the parkway having an average thickness of three inches (4") of topsoil. Any excavation and grading of the parkway which is required to give a uniform slope from the limit of sod restoration to the top of the curb shall be included in this item, wherever the top of curb is not substantially lowered. If the proposed top of curb is substantially lowered (three

inches or greater), then payment shall be made for the grading and removal of the parkway under the item EARTH EXCAVATION. Unless otherwise directed by the Engineer, the topsoil and sod shall be placed after the installation of the binder course and before the installation of the hot-mix asphalt surface course.

The Contractor shall be responsible for weed prevention and removing any weeds prior to the placement of the sod. The Contractor will be responsible for keeping all weeds under 6" in height and will be responsible for mowing weeds within 72 hours of notice from the Engineer. If proper measures are not met by the Contractor to control weeds, then the Village reserves the right to correct this issue at the expense of the Contractor. The method of weed control and weed removal must be approved by the Engineer. Before sod is placed the topsoil shall be rototilled by the Contractor and all weeds removed from topsoil. Sod installation will not be paid for unless topsoil is approved by the Engineer prior to sod placement. All weed control and weed removal shall be included in the cost of this item.

The Contractor shall be responsible for completing topsoil placement prior to installation of binder course.

The topsoil and subgrade shall be thoroughly compacted along newly installed concrete by a compaction method approved by the Engineer.

<u>Basis of Payment</u>: This item shall be at the Contract unit price per Square Yard for TOPSOIL FURNISH AND PLACE, 4".

#### **TOPSOIL FURNISH AND PLACE 12"**

This item shall include the placement of twelve inches (12") of topsoil on all landscaped areas disturbed by construction as shown on the Plans and directed by the Engineer.

The construction and payment of this item shall be the same as TOPSOIL FURNISH AND PLACE, 4" except for the designated difference in the depth of the topsoil.

<u>Basis of Payment</u>: This item shall be at the Contract unit price per Square Yard for TOPSOIL FURNISH AND PLACE, 12".

#### **INLET FILTERS**

This item shall include the furnishing, installation, and removal of a drainage structure inlet filter assembly, consisting of a frame and filter bag, to collect sediment in surface stormwater runoff at locations shown on the Plans or as directed by the Engineer be in accordance with Section 280 of the Standard Specifications and the details on the Plans.

The inlet filter shall be inspected weekly and after a 0.5 inch or larger rain event by the Engineer. The Engineer will report any issues, via verbal or written communication, that need to be addressed by the Contractor. All issues presented shall be addressed and corrected within twenty-four (24) hours of notice.

Cleaning of the filter bags shall be included in this item. The cleanings shall be performed weekly, or as needed to keep the bags from reaching 75% of their storage capacity, for the duration of the use of each drainage structure inlet filter assembly. The Engineer shall be the sole judge of the need for cleaning,

based on the rate that debris and silt is collected at each location. Also included shall be the off-site disposal of the material which is removed from the bags.

Basis of Payment: The work will be paid for at the Contract unit price per EACH for INLET FILTERS.

#### HOT-MIX ASPHALT SURFACE REMOVAL – BUTT JOINT

This item will consist of the removal of the existing hot mix asphalt surface necessary to provide the profile of the proposed pavement cross section within the butt joint areas on Burlington Avenue, DuBois Boulevard, and the intersecting side streets. The asphalt pavement areas will be milled to allow for 2" of HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50.

This item shall include the shaping and compacting of any aggregate base that is exposed during grinding operations. Sufficient milling or grinding passes shall be made over the existing pavement so that all irregularities and high spots are eliminated from the pavement's surface before it is overlaid with new material. All but joints are included under this pay item and shall be saw-cut no more than twenty-four (24) hours prior to the placement of the bituminous surface.

The equipment and construction methods for this item will conform to Article 440.03 of the Standard Specifications for Road and Bridge Construction. Hot-Mix Asphalt Surface Removal shall be measured in place and the area computed in square yards for the total increment of material removed. The area measured shall be paid for only once regardless of the number of passes needed to remove the material.

<u>Basis of Payment:</u> This work will be paid for at the Contract unit price per Square Yard of HOT-MIX ASPHALT SURFACE REMOVAL – BUTT JOINT.

#### INCIDENTAL HOT-MIX ASPHALT SURFACING

This item shall be installed in areas where hot-mix asphalt surface not part of the street pavements is to be replaced as part of the project and as directed by the Engineer. The hot-mix asphalt surface course shall be installed with a minimum thickness of three-inches (3") or to match the existing adjacent hot-mix asphalt surface if greater than three-inches (3"). The surface course shall be placed in accordance with Section 408 of the "Standard Specifications for Road and Bridge Construction".

The material shall meet the requirements of Hot-Mix Asphalt Surface Course, Mix "D", N50, as described in the IDOT Special Provisions and as shown in the paving mix chart on the plans.

The preparation of the base and the addition of any aggregate base shall be paid for under the item for HOT-MIX ASPHALT DRIVEWAY PAVEMENT REMOVAL.

<u>Basis of Payment</u>: This item shall be at the Contract unit price per Ton for INCIDENTAL HOT-MIX ASPHALT SURFACING.

#### **PROTECTIVE COAT**

This item will include the placement of protective coat on all exposed concrete surfaces at locations

shown on the Plans or as directed by the Engineer. Regardless of when the concrete is placed, a protective coat shall be applied to all concrete curb and gutter, driveways, concrete pavement, and sidewalks in accordance with the requirements of Article 420.21 of the "Standard Specifications for Road and Bridge Construction".

Two complete applications will need to be made prior to payment being made.

<u>Basis of Payment</u>: This item shall be at the Contract unit price per Square Yard of PROTECTIVE COAT.

#### **DETECTABLE WARNINGS**

This item shall include the placement of detectable warnings at locations shown on the Plans and as directed by the Engineer. This item shall be installed simultaneously with PORTLAND CEMENT CONCRETE SIDEWALK, 5".

Work shall be performed according to the Americans with Disabilities Act, IDOT Standard 424001-07, as well as Article 424 of the Standard Specifications.

The detectable warning shall be Vitrified Polymer Composite, Cast in Place, Detectable/Tactile Warning Surface Tile. The tile shall be "brick red" in coler and 24" x 60" in size or as need as directed by the Engineer.

The composite paver tile used in this project shall be as manufactured by ADA Solutions, Inc. (<a href="www.ADATILE.com">www.ADATILE.com</a>) or Armor-Tile or Tuff-Tile. The paver tiles shall be installed according to the manufacturer's installation procedures.

This item shall not be a "Surface Applied" product.

Immediately following the installation of PORTLAND CEMENT CONCRETE SIDEWALK, 5", the detectable warning shall be pressed into the concrete. The detectable warning shall be tamped with a vibrating mechanism upon installation, and the factory-installed plastic sheeting must remain in place during the entire installation process to prevent the splashing of concrete onto the finished surface of the tile. No concrete shall be removed in the area to receive the detectable warning to ensure a strong lock with the concrete. The top of the domes shall be set level to the adjacent concrete on the top and sides of the ramp. This item shall be installed in full accordance with the manufacturer's recommendations.

<u>Basis of Payment</u>: This item shall be at the Contract unit price per Square Foot of DETECTABLE WARNINGS.

#### PAVEMENT REMOVAL

This item shall include the removal of existing concrete pavement or concrete pavement overlaid with asphalt in order to allow for the construction of proposed street pavements, installation of new drainage structures and sewers, and alley returns. The work shall be performed in accordance with Section 440 of the "Standard Specifications for Road and Bridge Construction".

This item shall include removal of the pavement and any additional excavation to reach the proposed subgrade.

All pavement removal areas shall be saw-cut full depth along their perimeter prior to the removal of the pavement. The use of drop hammers will not be allowed for breaking these pavements.

<u>Basis of Payment</u>: This item shall be paid for at the Contract unit price per Square Yard for PAVEMENT REMOVAL.

#### **DRIVEWAY PAVEMENT REMOVAL**

This work shall be done in accordance with Section 440 of the Standard Specifications with the exception that it will also include the removal of concrete, brick, block, aggregate, flagstone, and bituminous sidewalks, driveway, and alleys.

The use of drop hammers will not be allowed for breaking these pavements. The driveways shall be excavated to the subgrade of the proposed driveway, which shall be included in this item. At locations that proposed driveway pavement is indicated on the plans where none currently exist, the excavation for the proposed driveway pavement shall be paid for under this pay item. The Contractor shall be required to saw cut the driveway pavement full-depth at the limits of removal.

<u>Basis of Payment</u>: This item shall be paid for at the Contract unit price per Square Yard for DRIVEWAY PAVEMENT REMOVAL.

#### COMBINATION CURB AND GUTTER REMOVAL

This item shall include the removal of the existing combination curb and gutter at locations indicated on the Plans and as directed by the Engineer. The work shall be performed in accordance with Section 440 of the "Standard Specifications for Road and Bridge Construction".

Included in this item is the removal of all types of curb encountered on the Project. This includes but is not limited to barrier curb. Also included in this item is the removal and disposal of any asphalt that has been overlaid into the gutter of any curb that is designated for removal. This item shall also include any excavation beneath or behind the curb and gutter necessary to install the proposed curb and gutter, including a minimum of two inches (2") to allow for compacted crushed stone bedding, Gradation CA-6.

Where the curb and gutter abuts a concrete pavement or concrete base, a full-depth saw-cut shall be made six inches (6") from the edge of pavement for the entire length of curb and gutter removal to allow for the neat removal of the curb and gutter and the placement of a gutter board in forming for the new curb. The removal of the six-inch (6") wedge of concrete pavement in front of the curb and gutter shall be included under this item.

All removal shall terminate at existing expansion joints or at saw-cut lines as determined by the Engineer. The existing pavements abutting the curb and gutter shall be protected while removal work is

being done to avoid unnecessary pavement restoration. Any restoration to repair damaged pavement shall be paid for at the contractor's expense.

<u>Basis of Payment</u>: This item shall be paid for at the Contract unit price per Foot of COMBINATION CURB AND GUTTER REMOVAL.

#### SIDEWALK REMOVAL

This item shall include the removal of sidewalk at locations shown on the Plans and as directed by the Engineer. The work shall be performed in accordance with Section 440 of the "Standard Specifications for Road and Bridge Construction".

The removal of concrete, brick, flagstone and hot-mix asphalt sidewalks shall all be included in this item. These sidewalks shall be excavated to the subgrade of the proposed sidewalk, including the two inch (2") crushed stone cushion, which shall be included in this item. At locations that proposed sidewalk is indicated on the Plans where none currently exist, the excavation for the proposed sidewalk shall be paid for under this pay item.

At locations where the sidewalk is required to be lowered by an amount greater than three inches (3") the material removed shall be included in the item for EARTH EXCAVATION. Grading changes less than three inches (3") shall be included in this item.

Basis of Payment: This item shall be paid for at the Contract unit price per Square Foot of SIDEWALK REMOVAL.

#### STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 18"-48"

These items shall include the installation of eighteen inch (18") to forty-eight inch (48") Reinforced Concrete Pipe (RCP) for the purposed storm sewer as indicated on the Plans or directed by the Engineer.

The pipe shall conform to ASTM designation C -76, with C-443 rubber gasket joints. Pipe installation shall be in accordance with Section 31 of the "Standard Specifications for Water and Sewer Main construction."

The pipe bedding and backfill to twelve inches (12") above the top of pipe will be included in this item.

Basis of Payment: This item shall be paid for at the Contract unit price per Foot of STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 18", Foot of STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 24", Foot of STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 30", Foot of STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 33", Foot of STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 36", Foot of STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 42", and Foot of STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 48".

#### STORM SEWERS, CLASS B, TYPE 2, 10"

This item shall include the storm sewer that connects drainage structures located in the curb and gutter to other drainage structures and to the existing combined sewer system. In those locations indicated on the Plans, polyvinyl chloride (PVC) sewer pipe of the size indicated shall be installed. The pipe shall have a minimum standard dimension ratio (SDR) of 26 and shall conform to ASTM designation D-2241 (water quality pipe). The joints shall be rubber gasket and conform to ASTM designations D-3139 and F-477. Pipe installation shall be in accordance with Section 31 of the "Standard Specifications for Water and Sewer Main Construction".

The pipe bedding and backfill to twelve inches (12") above the top of pipe will be included in this item.

Basis of Payment: This item shall be paid for at the Contract unit price per Foot of STORM SEWER, CLASS B, TYPE 2, 10".

#### **DUCTILE IRON WATER MAIN 12"**

This item shall include the installation of twelve-inch (12") Ductile Iron, Class 52, water main at the locations shown on the Plans. The work shall include excavating the trench, disposing of the excavated materials, furnishing and placing the pipe, furnishing and installing the six (6) mil thick high-density polyethylene encasement around the pipe, furnishing and placing the bedding material under and to twelve-inch (12") above the pipe, and properly compacting the materials placed into the trench after the installation of the water main. This item shall include all costs for furnishing the labor, material, and equipment necessary to install the water main at the proper line and grade in accordance with the details shown on the plans and as described in the Specifications.

Basis of Payment: This item shall be paid for at the Contract unit price per Foot of DUCTILE IRON WATER MAIN 12".

#### WATER VALVES 12"

All gate valves to be installed in this project shall be Mueller 2360 Series Resilient Wedge Gate Valve with mechanical joints.

A 1" corporation tap shall be made into the water main on each side of the valve to allow for testing, chlorinating, and sampling work to be done. The furnishing and installing of these taps shall be considered incidental to the work necessary for this item. All brass corporation taps are to be manufactured in accordance with AWWA C-800 and ASTM B-62 Specifications. The inlet side of corporation assembly is to be machined with AWWA standard threads, while the outlet is to be machined to accept a standard tube nut for attaching flared 1" diameter copper tubing. This item shall include all costs for furnishing the labor, equipment, and materials required to install the gate valve and the corporation taps in accordance with the Specifications.

Basis of Payment: This item shall be paid for at the Contract unit price per Each of WATER VALVES 12".

#### WATER SERVICE LINE 1"

This item shall include the installation of water services at locations indicated on the Plans and as directed by the Engineer. The proposed water services will be installed to properties located on the same side of the street as the water main.

A corporation tap shall be made into the water main and 1"copper water service pipe, Type K, shall be installed from the tap to a new curb stop (roundway complete with box) to be located as shown on the Plans. The proposed water service will connect with the existing water service on private property side of the new water service box. The average length of new copper pipe to be installed is estimated at being five feet (5').

The Contractor will not backfill the water service until the Village or the Engineer has inspected all connections with the service under pressure.

This price shall include all costs for furnishing the labor, equipment, and materials necessary to excavate and expose the existing water service, make the tap into the new water main, furnish and install the curb stop and box, copper pipe (Type K), and connecting fittings, make the connections at the tap, curb stop, and existing water service, install and compact the trench backfill, and to perform any other work necessary to complete the installation of the new water service in accordance with the Specifications.

Basis of Payment: This item shall be paid for at the Contract unit price per Each of WATER SERVICE LINE 1".

#### FIRE HYDRANTS TO BE REMOVED AND REPLACED

This item shall include the removal and replacement of existing fire hydrants as shown on the Plans and as directed by the Engineer. The removal and replacement of the existing fire hydrant, auxiliary valve, fire hydrant leader pipe and Tee fitting shall be included in this item. The fire hydrant shall also be moved back so that it is located 3' from the face of sidewalk or as directed by the Engineer. The work shall include excavating the trench, disposing of the excavated materials, furnishing and placing all materials necessary to replace the fire hydrant, furnishing and installing the polyethylene encasement around the pipe, installing the thrust blocking, furnishing and placing the bedding material and trench backfill, and properly compacting the materials placed into the trench after the installation of the fire hydrant.

All fire hydrants shall be Mueller Super Centurion A-423 Breakaway model. The fire hydrants to be installed under this Contract shall be of the "breakaway" design having a five and one-quarter inch (5-1/4") main valve opening, four and one-half inch (4-1/2") pumper nozzle, and two (2) two and one-half inch (2-1/2") hose nozzles. The pumper and hose threads shall be National Standard Threads. The inlet connection shall be six inches (6") in size and flanged-type. The depth of bury shall be five feet and six inches (5'-6"), the direction of opening to the left, the size of the operating nut shall be one and one-half inches (1-1/2"), the hydrant packing of the "O" ring type, and **the hydrant shall be painted a yellow color**. The auxiliary valves shall be 6", flange by mechanical-joint, Resilient Wedge Valve.

The valve box to be furnished and installed under this item shall be 8" in diameter and screw type.

Any Ductile Iron Pipe water main that are necessary to replace the fire hydrant shall be Class 52, cement-lined and tar-coated, meeting the requirements of Specifications ANSI/AWWA C151/A21.51 with "push-on" joints meeting the requirements of Specifications ANSI/AWWA C111/ A21.11. Where specified on the Plans, or in these Specifications, mechanical joints and "Lock-Type" joints shall be used in lieu of "push-on" joints.

Any pipe fittings and special castings that are necessary to replace the fire hydrant shall be ductile iron conforming to ANSI/AWWA C153/A21.53 and ANSI/AWWA C111/A21.11 specifications and shall meet the minimum requirements of Class 150 Ductile Iron Pipe. Mechanical joint type fittings shall be used. All fittings shall be manufactured in the USA within 12 months of the installation date. The manufacturer will furnish a certificate acknowledging the same to the Engineer.

All Ductile Iron Pipe, fittings, castings, and other materials that are necessary to replace the fire hydrant as described above shall be included in the cost of this item.

All mechanical joints shall be restrained with Megalug retainer glands and this cost shall also be incidental to this item.

The exposed water main shall be encased within four (4) mil thick, high-density polyethylene tubing. All fittings shall be encased in a double-layer of polyethylene tubing. The polyethylene material shall be manufactured and installed in compliance with ANSI/AWWA C105/A21.5.

The existing water system will have to be shut down for the fire hydrant to be relocated. The Village of Brookfield's Public Works Department shall be given two (2) days advance notice of any work to be done by the Contractor that will involve the Village's existing water system. The Village Water Department shall be notified and the Engineer's approval must be obtained prior to any such work being undertaken by the Contractor.

The Village Water Department will offer assistance in any necessary shutdowns of existing water mains; however, it will be the Contractor's responsibility to provide any requested labor and equipment for making these shut downs.

The Contractor shall have all necessary materials and equipment on hand at the locations of the fire hydrant installation before the shutdowns are made. The shut-down period for the fire hydrant removal and replacement shall not exceed six (6) hours.

Basis of Payment: This item shall be paid for at the Contract unit price per Each of FIRE HYDRANTS TO BE REMOVED AND REPLACED.

#### DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED

This item shall include the adjustment of water service boxes or valve boxes that require replacement parts due to existing damage or proposed grade change. The water service boxes are located within the limits of proposed curb, sidewalk, driveway pavement, hot-mix asphalt pavement, and grassed

parkways.

The replacement parts shall consist of Tyler Union 29U-Domestic Heavy Duty Cast Iron Curb, Service, and Valve Boxes and subsequent components. Sizes range from 19" to 72" (not including risers or extensions) and shall be of the Adjustable Slip and Screw type. The parts shall contain an asphaltic bituminous coating applied to a minimum thickness of 1.5 mil and shall be installed in full accordance with the manufacturer's recommendations.

The Contractor shall adjust these water service boxes or valve boxes to their final grade. This price shall include all costs for furnishing the labor, equipment, and materials necessary to excavate around the existing water service box, install the replacement part(s), and install bedding or backfill to allow for placement of the proposed curb, sidewalk, driveway pavement, hot-mix asphalt pavement or topsoil and sod.

The depth of repair shall be approved by the Engineer. It is anticipated that most water service boxes and valve boxes to be adjusted will only require replacement of the top section of the service box. If it is determined by the Engineer that additional replacement parts are required, including extensions or bottom sections connecting to the existing curb stop, the cost to perform this work shall also be included in this item.

Water service boxes and valve boxes that can be adjusted to final grade without replacement parts shall not be paid for under this item but shall be included in the Contract.

Any water service boxes or valve boxes damaged during construction shall be replaced at the Contractor's expense.

Basis of Payment: This item shall be paid for at the Contract unit price per Each of DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED.

#### CATCH BASINS, TYPE C, TYPE 1 FRAME, OPEN LID

This item consists of furnishing a Type 'C' Catch Basin and installing at the locations shown on the Plans or as directed by the Engnieer. The Contractor will be responsible for ensuring that the pipe openings are formed in the correct locations so that additional cutting of the precast structure is not necessary. A minimum of 2" and a maximum of 6" of adjustment rings will be allowed.

Any pipe, up to four feet (4') in length per each pipe, used to connect existing pipes to the proposed structure shall be included in the cost of the structure. All trench backfill will also be included in the cost of the structure.

The removal of structures where a new structure is to be installed in the same location will not be paid for separately but shall be included in the cost of the new structure. All trench backfill used to fill around the new structure will also be considered included in this item.

The new frame shall be Neenah Foundry No. R-2504 and the lid shall have a Type D grate.

<u>Basis of Payment</u>: The work will be paid for at the Contract unit price per Each for CATCH BASINS, TYPE C, TYPE 1 FRAME, OPEN LID.

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

This item consists of furnishing all work and materials, including the necessary cast iron frames and lids, necessary to construct a manhole of the size indicated, in accordance with Section 602 of the "Standard Specifications", the detail shown on the plans and conforming to the lines, grades, and dimensions shown on the construction plans.

The Contractor will be responsible for ensuring that the pipe openings are formed in the correct locations so that additional cutting of the precast structure is not necessary. A minimum of 2" and a maximum of 6" of adjustment rings will be required. Butyl rubber gasket compound shall be used to seal the various structure joints.

All trench backfill used to fill around the new structure will be included in the cost of this item. Any pipe, up to four feet (4') in length per each pipe, used to connect existing pipes to the structure to be installed shall be included in the cost of the structure to be installed.

The new frames shall be Neenah Foundry No. R-1713. All closed lids on manholes will be self-sealing with recessed pick holes and shall have the word "SANITARY" or "STORM" cast in raised letters upon the lid.

<u>Basis of Payment</u>: This work will be paid for at the Contract unit price Each for MANHOLES, TYPE A, 4'- DIAMETER, TYPE 1 FRAME, CLOSED LID.

#### **INLETS, TYPE A, TYPE 1 FRAME, OPEN LID**

An inlet shall be constructed at the locations shown on the Plans and in accordance with the details shown on the Plans. The Contractor will be responsible for ensuring that the pipe openings are formed in the correct locations so that additional cutting of the precast structure is not necessary.

Any pipe, up to four feet (4') in length per each pipe, used to connect existing pipes to the proposed structure shall be included in the cost of the structure. All trench backfill will also be included in the cost of the structure.

The removal of structures where a new structure is to be installed in the same location will not be paid for separately but shall be included in the cost of the new structure.

The new frame shall be Neenah Foundry No. R-2504 and the lid shall have a Type D grate.

Basis of Payment: This item shall be paid for at the Contract unit price per Each of INLETS, TYPE A, TYPE 1 FRAME, OPEN LID.

#### CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, OPEN LID

This item shall include the adjustment of existing catch basins with a new, open lid frame at locations shown on the plans or as directed by the Engineer. The new frames on catch basins shall be Neenah Foundry No. R-2504. All open lids will have a Type D grate. Any substitution must be approved by the Village in writing before it will be accepted.

Structures, which are located in the curb and gutter, shall not be adjusted to final grade until the curb and gutter has been placed to within six feet (6') of each side of the structure. At this time the Contractor may adjust the structure to the proper elevation to achieve drainage of the curb and gutter.

Frames located in the curb and gutter shall be pitched 1-1/2". Frames located in the pavement shall be pitched to match the cross slope of the pavement. The Contractor may use solid pieces of concrete or brick as shims to pitch the frame. The use of rocks to adjust the frames will not be permitted. The shims must also be placed in a bed of mortar at the time of the adjustment. The Contractor shall not shim the frame and then come back later to mortar the voids between the frame and the structure.

The Contractor shall take care when setting the structure so as to ensure that a nine inch (9") frame and the minimum 2" of grade rings can be placed on top of the uppermost precast section of the structure in order to reach the finished grade.

The Contractor shall not place mastic rope between concrete rings and between the rings and frame. The Contractor shall apply a one-quarter inch (1/4") layer of butyl rubber gasket sealant to the external diameter of the concrete grade adjustment rings.

<u>Basis of Payment</u>: This item will be paid for at the Contract unit price per Each of CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, OPEN LID.

#### CATCH BASINS TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, OPEN LID

This item shall include the reconstruction of existing catch basins with new frame at locations shown on the Plans or as directed by the Engineer. The reconstruction work shall <u>not</u> disturb the existing bench but shall be concentrated upon the replacement of all defective barrel, cone, and adjustment sections. The Engineer shall mark the depth to which the structure shall be reconstructed prior to the beginning of the work on the structure. For sewer structures that are reconstructed below the depth of existing/proposed pipes, the precast barrel/cone sections shall be supplied with watertight, flexible rubber connectors at each pipe opening. The pavement disturbed by the reconstruction will be replaced with concrete base course to the grade of the hot-mix asphalt binder course.

Only precast concrete barrel, cone, flat top, and adjustment ring sections shall be used to replace defective sections of the structure. It shall be the Contractor's responsibility to determine the size of the existing structure. No additional payment shall be made for the various sizes of structures encountered. Any catch basins which are reconstructed shall have all debris removed from the bench regardless of whether it resulted from the construction project. This item shall also include the adjustment of the frame and lid of the structure to be reconstructed.

All precast cone sections will have a flat surface on the bottom edge that rests on the remaining portion of the existing structure.

The new frames on catch basins and inlets shall be Neenah Foundry No. R-2504. All open lids will have a Type D grate. Any substitution must be approved by the Village in writing before it will be accepted.

Any pipe, up to four feet (4') in length per each pipe, used to connect existing pipes to the proposed structure shall be included in the cost of the structure. All trench backfill will also be included in the cost of the structure to be reconstructed.

<u>Basis of Payment</u>: This item will be paid for at the Contract unit price per Each of CATCH BASINS TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, OPEN LID.

## MANHOLES AND VALVE VAULTS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID

This item shall include the adjustment of existing manholes and valve vaults with the a new, closed lid frame at locations shown on the plans or as directed by the Engineer. The new frames on manholes and valve vaults shall be Neenah Foundry No. R-1713. All closed lids on manholes and valve vaults will be self-sealing with recessed pick holes and shall have the word "SANITARY", "STORM" or "WATER" cast in raised letters upon the lid.

All proposed and existing structures located within the pavement are to be adjusted to finish grade after the hot-mix asphalt binder course has been placed. The pavement disturbed by the adjustment will be replaced with eight inches (8") of concrete base course to the grade of the hot-mix asphalt base course. The removal and replacement of the pavement shall be included as part of this item. The pavement shall be saw-cut to full depth in a 5' x 5' square prior to removal.

The Contractor shall take care when setting the structure so as to ensure that a nine inch (9") frame and the minimum 2" of grade rings can be placed on top of the uppermost precast section of the structure in order to reach the finished grade.

The Contractor shall not place mastic rope between concrete rings and between the rings and frame. The Contractor shall apply a one-quarter inch (1/4) layer of butyl rubber gasket sealant to the external diameter of the concrete grade adjustment rings.

Frames located in sidewalk or driveway pavement shall be pitched to match the cross slope of the pavement.

<u>Basis of Payment</u>: This item will be paid for at the Contract unit price per Each of MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID or VALVE VAULTS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID.

#### FRAMES AND LIDS TO BE ADJUSTED

Structures, which are located in the curb and gutter, shall not be adjusted to final grade until the curb and gutter has been placed to within six feet (6') of each side of the structure. At this time the Contractor may adjust the structure to the proper elevation to achieve drainage of the curb and gutter.

All proposed and existing structures located within the pavement are to be adjusted to finish grade after the hot-mix asphalt binder course has been placed. The pavement disturbed by the adjustment will be replaced with eight inches (8") of concrete base course to the grade of the hot-mix asphalt base course. The removal and replacement of the pavement shall be included as part of this item. The pavement shall be saw-cut to full depth in a 5' x 5' square prior to removal.

Frames located in the curb and gutter shall be pitched 1-1/2". Frames located in the pavement shall be pitched to match the cross slope of the pavement. The Contractor may use solid pieces of concrete or brick as shims to pitch the frame. The use of rocks to adjust the frames will not be permitted. The shims must also be placed in a bed of mortar at the time of the adjustment. The Contractor shall not shim the frame and then come back later to mortar the voids between the frame and the structure.

The Contractor shall take care when setting the structure so as to ensure that a nine inch (9") frame and the minimum 2" of grade rings can be placed on top of the uppermost precast section of the structure in order to reach the finished grade.

The Contractor shall not place mastic rope between concrete rings and between the rings and frame. The Contractor shall apply a one-quarter inch (1/4) layer of butyl rubber gasket sealant to the external diameter of the concrete grade adjustment rings.

Frames located in sidewalk or driveway pavement shall be pitched to match the cross slope of the pavement.

<u>Basis of Payment</u>: This item will be paid for at the Contract unit price per Each of FRAMES AND LIDS TO BE ADJUSTED.

#### **CONCRETE CURB, TYPE B**

This work shall include constructing concrete barrier curb. The barrier curb shall be constructed in accordance with Section 606 of the Standard Specifications and the details for this item as shown on the Plans.

The barrier curb shall be placed upon a compacted crushed stone bedding, Gradation CA-6, having a minimum thickness of two inches (2"). The cost for the 2" stone cushion shall be included in this item.

Between four (4) and twenty-four (24) hours after the curb has been placed, contraction joints two inches (2") in depth, shall be saw-cut at a maximum of a 15' spacing and at certain other locations as may be designated by the Engineer. These joints shall then be sealed according to the requirements of Article 420.14(a) of the "Standard Specifications for Road and Bridge Construction". At locations where the proposed curb meets existing curb, 2 - 18" long, 3/4" diameter, epoxy coated, steel dowel bars

shall be drilled into the existing curb.

After removal of the "back of curb" form, the excavated area behind the curb designated for sodding shall be immediately backfilled with select non-organic earth backfill in preparation for the placement of the topsoil. All areas where concrete or asphalt is to be installed along the back of curb shall be backfilled with crushed stone, gradation CA-7 and properly compacted. The costs for the placement of the required backfill material shall be included in the cost of the curb and gutter.

One inch (1") thick wooden forms will be used in the forming of all radius sections of curb and gutter. Masonite and steel forms will not be allowed.

<u>Basis of Payment</u>: This item will be paid for at the Contract unit price per Foot of CONCRETE CURB, TYPE B.

## COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 AND COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (MODIFIED)

This item shall primarily include the construction of combination concrete curb and gutter type B-6.12 at locations directed by the Engineer.

For COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (MODIFIED), a six inch (6") wide concrete wedge shall be installed along the edge of pavement. The pavement shall be saw cut six inches (6") from the edge of pavement and removed to allow for framing of the purposed curb and gutter prior to removing the curb. After the curb has been placed and the forms have been removed, the void between the existing base and the new gutter shall be filled with a minimum thickness of nine inches (9") of concrete. The concrete shall be set two and one half inches (2 ½") below the proposed edge of pavement. The placement of the concrete wedge shall be included in this item.

All curb shall be placed on a cushion of 2" compacted CA-6 which shall be included in the cost of this item.

The construction of the combination concrete curb and gutter shall be in accordance with Section 606 of the Standard Specifications and the details for this item as shown on the Plans. The proposed gutter flag shall have a minimum thickness of ten inches (10"). The height of the curb head shall vary in accordance with the grades shown on the Plans or as directed by the Engineer.

New curb and gutter to be placed next to frame and lids to be adjusted, shall be framed and installed per the 'Gutter at Drainage Structure' detail shown in the plans. The labor, equipment, and material to install the curb and gutter per the detail, shall be included in this item.

At any locations where sidewalk, driveways or concrete median are adjacent to the back of curb, the area behind the curb shall be backfilled with crushed stone meeting the CA-7 gradation. The price for furnishing and installing the crushed stone shall be considered included in this item.

Between four (4) and twenty-four (24) hours after the curb has been placed, contraction joints two inches (2") in depth, shall be saw-cut at a maximum of a 15' spacing and at certain other locations as

may be indicated by the Engineer. These joints shall then be sealed according to the requirements of Article 420.14(a) of the "Standard Specifications for Road and Bridge Construction". At locations where the proposed curb and gutter meets existing curb and gutter, 2 - 18" long, ¾" diameter, epoxy coated, steel dowel bars shall be drilled into the existing curb and gutter.

It shall be the Contractor's responsibility to provide for curb depressions to be constructed where public sidewalks are to be ramped at curb crossings. The depressions shall be constructed in basic compliance with the Accessibility Guidelines as detailed in the Americans with Disabilities Act (ADA).

After removal of the "back of curb" form, the excavated area behind the curb shall be immediately backfilled with select earth backfill in preparation for the placement of the topsoil. The void behind the curb and gutter will be backfilled with crushed stone, gradation CA-7, in all areas where concrete or hotmix asphalt pavement is to be constructed. The placement of the required backfill material will be included in the placement of the curb and gutter.

One inch (1") thick wooden forms will be used in the forming of all radius sections of curb and gutter. Masonite and steel forms will not be allowed.

<u>Basis of Payment</u>: This item will be paid for at the Contract unit price per foot of COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.12 and COMBINATION CONCRETE CURB AND GUTER TYPE B-6.12 (MODIFIED).

#### **TELEVISION INSPECTION OF SEWER**

This item shall include the televised inspection of combined sewers that have been repaired as part of this project. The Contractor shall televise the entire length of combined sewer from manhole to manhole for all combined sewers that have been repaired regardless of the length or number of repairs. The camera will also stop and look up each new service connection as part of the televised inspection. The televised inspection shall take place no less than twenty (20) days after the repairs have been completed and at least 7 days prior to the installation of the hot-mix asphalt surface.

The Contractor shall furnish all labor, electronic equipment, and technicians to perform closed-circuit color television inspection of the sewers that have been repaired. Operation of the equipment is to be controlled from above ground with a skilled technician at the control panel in the television studio controlling the movements of the television camera through the sewer in either direction.

The color television camera shall be one specifically designed and constructed for the purpose of televising sewers. The color camera shall have a high-resolution lens, capable of spanning 360-degrees circumference and 270-degrees on the horizontal axis to televise all new sewer services. Focal distance shall be adjustable through a range of 1 inch to infinity. The purpose of the rotating head camera is to view all new service connections and to locate any defects.

For manholes that may be difficult to access, the Contractor shall have available a self-propelled crawler transporter on which to mount the color television camera so as to be able to inspect the sewer as required.

Camera and lighting quality shall be suitable to provide a clear, continuously in-focus picture of the entire inside periphery of the sewer pipe for all conditions encountered during the work. The camera shall be able to operate efficiently in 100% humidity conditions. The camera, television monitor and all other necessary components of the video system shall be capable of producing a minimum 350-line resolution color video picture.

The results of the sewer inspection shall be recorded on a narrated videotape and placed on a hard drive. Any out-of-focus video recordings or portions thereof, shall be cause for rejection of the video recording and will necessitate re-televising at the Contractor's expense. Televising shall be done one section at a time. Each hard drive shall also be accompanied with an index.

The combined sewers to be televised as part of this pay item were cleaned and televised within the last two years and are assumed to be in good condition. This item shall include any cleaning that is necessary to televise the sewers according to the Specifications.

<u>Basis of Payment</u>: This item will be paid for at the Contract unit price per Foot of TELEVISION INSPECTION OF SEWER.

# **GROUND STABILIZATION GEOSYNTHETIC**

This item shall consist of installing a geo-grid material on the subgrade for the proposed pavements to be reconstructed as part of this Project. The fabric shall be installed in accordance with Section 210 of the "Standard Specifications for Road and Bridge Construction", except for the Materials section article 210.02 and the following:

The geogrid shall be composed of a single layer and integrally formed with triangular apertures and high-profile ribs exhibiting significant dimensional stability through all ribs and junctions of the geogrid structure. The geogrid shall maintain its reinforcement and aggregate confinement capabilities under repeated dynamic loads while in service. The geogrid shall also be resistant to ultraviolet degradation, damage under normal construction practices and all forms of biological and chemical degradation normally encountered in road construction. Geogrid layers shall be placed as directed by the Engineer. The geogrid shall be integrally formed through punching and drawing of extruded sheets of polypropylene. The geogrid shall be oriented in three substantially equilateral directions so the resulting ribs have a high degree of molecular orientation which continues at least in part through the mass of the integral node.

The resulting geogrid structure shall have apertures that are triangular in shape, and shall have ribs with depth-to-width ratios greater than 1.0. The geogrid shall have typical characteristics shown in the table below, and shall be certified in writing by the manufacturer to meet these characteristics.

Properties	Longitudinal	Diagonal	Transverse	General
Rib Pitch (2), mm (in)	40 (1.60)	40 (1.60)	-	
Mid-rib depth (2), mm (in)	-	1.2 (0.05)	1.2 (0.05)	
Mid-rib width (2), mm (in)	-	1.0 (0.04)	1.1 (0.04)	
Nodal thickness (2), mm (in)				3.1 (0.12)
Rib shape				rectangular
Aperture shape				triangular
Junction Efficiency (3), %				93
Aperture stability (4), kg-cm/deg @				3.0
5.0 kg-cm				3.0
Radial stiffness at low strain (5),				
kN/m @ 0.5% strain (lb/ft @ 0.5%				225 (15,430)
strain)				
Resistance to chemical degradation (6)				100%
Resistance to ultra-violet light and				1000/
weathering (7)				100%

- 1. Unless indicated otherwise, values shown are minimum average roll values (MARVs) determined in accordance with ASTM D 4759-02. Brief descriptions of test procedures are given in the following notes.
- 2. Nominal dimensions.
- 3. Load transfer capability determined in accordance with GRI-GG2-87 and GRI-GG1-87 and expressed as a percentage of ultimate tensile strength.
- 4. In-plane torsional rigidity measured by applying a moment to the central junction of a 225mm x 225mm specimen restrained at its perimeter in accordance with U.S. Army Corps of Engineers Methodology for measurement of Torsional Rigidity, (Kinney, T.C. Aperture stability Modulus ref 3,3.1.2000).
- 5. Radial stiffness is determined from minimum tensile stiffness measured in any in-plane direction including but not limited to a minimum 30 degree offset from any continuous rib of the geogrid from testing in accordance with ASTM D6637-01.
- 6. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
- 7. Resistance to loss of load capacity or structural integrity when subjected to 500 hours of ultraviolet light and aggressive weathering in accordance with ASTM D4355-05.

A minimum loose aggregate thickness of 6 inches is required prior to operation of tracked vehicles over the geogrid. Turning of tracked vehicles should be kept to a minimum to prevent tracks from displacing the aggregate base material and damaging the geogrid. When underlying subgrade is trafficable with minimal rutting, rubber-tired equipment may pass directly over the geogrid reinforcement at slow speeds (less than 5 mph). Sudden braking and sharp turning movements shall be avoided.

# A. Inspection and Repair

- (1) The Engineer will randomly inspect geogrid before, during and after (using test pits) installation.
- (2) Any damaged or defective geogrid (i.e. frayed coating, separated junctions, separated layers, tears, etc.) will be repaired by removal of affected area and patching using new material with a minimum 3 foot overlap beyond the limits of the affected area.
- (3) Any roll of geogrid damaged before, during and after installation shall be replaced by the Contractor at no additional cost to the Owner.

This work will be measured and paid for by the square yard, completed in place. No allowance will be made for overlap, splices or material cut off or wasted. Payment for GROUND STABILIZATION GEOSYNTHETIC will include furnishing the material, labor, and equipment required to furnish, place and anchor the geogrid, and any hand work necessary to establish grades, make geogrid splices, and repairs to protective coatings. The fabric shall be overlapped one-foot at all seams. The item will be measured with a width no greater than edge of payement to edge of payement.

<u>Basis of Payment</u> This item shall be at the Contract unit price per Square Yard for GROUND STABILIZATION GEOSYNTHETIC.

### REMOVE AND REINSTALL BRICK PAVER

This item shall include the removal, storage, installation, and cleaning of existing brick pavers at locations shown on the Plans or as directed by the Engineer.

The Contractor shall be responsible for carefully removing and storing the existing brick pavers so as not to cause any damage to the pavers. The existing brick pavers shall be installed in their original pattern after the installation of adjacent curb and gutter, sidewalk, 3" concrete base, or 8" concrete base.

A filter fabric shall be installed on the Portland Cement Concrete Base Course prior to the placement of the sand cushion which shall extend up along the back of concrete curb or band to the elevation of the top of the brick sidewalk. The filter fabric shall be non-woven. Sand shall be spread over the filter fabric with a 1" thickness and leveled to required slope and grade. The bed shall not be compacted until pavers are installed. Pavers with chips, cracks or other aesthetic defects shall not be used. Pavers shall be set true to line and grade and be tightly butted. Joints between pavers shall not exceed 1/8". The pavers shall be compacted by a mechanical vibratory compactor on the surface until pavers are uniformly level, true to grade, and immobilized. Where required, pavers shall be cut with a masonry or concrete saw. Edges shall be plumb and straight. Scoring and breaking will not be acceptable.

A rigid edge strip shall be installed in all areas where pavers are to be installed against a surface other than concrete if applicable.

Included in this item, the Contractor shall clean all existing brick pavers after installation by pressure washing or other cleaning method as determined by the Engineer. After cleaning has been completed and approved by the Engineer, the joints between pavers shall be filled by sweeping sharp sand into the

joints. When joints are filled, paver surfaces shall be swept clean of sand. Cleaning of all existing brick will be included under this item.

The contractor is responsible for protection and storage of the existing brick pavers which are removed during the construction process. Any remaining brick pavers after replacement will be delivered to the Village.

<u>Basis of Payment</u> This item shall be at the Contract unit price per Square Foot of REMOVE AND REINSTALL BRICK PAVER.

# STORM SEWER, CLASS B, TYPE 2, 8"

This item shall include the storm sewer that connects drainage structures located in the curb and gutter to other drainage structures and to the existing combined sewer system. In those locations indicated on the Plans, polyvinyl chloride (PVC) sewer pipe of the size indicated shall be installed. The pipe shall have a minimum standard dimension ratio (SDR) of 26 and shall conform to ASTM designation D-2241 (water quality pipe). The joints shall be rubber gasket and conform to ASTM designations D-3139 and F-477. Pipe installation shall be in accordance with Section 31 of the "Standard Specifications for Water and Sewer Main Construction".

The pipe bedding and backfill to twelve inches (12") above the top of pipe will be included in this item.

<u>Basis of Payment</u> This item shall be at the Contract unit price per Foot of STORM SEWER, CLASS B, TYPE 2, 8".

# <u>CONNECTION TO EXISTING DRAINAGE STRUCTURE AND CONNECTION TO EXISTING MANHOLE</u>

This item shall include core-drilling existing structures and the installation of watertight flexible rubber connectors. This item shall be used where proposed sewer is to be installed and connected to an existing structure.

All pipe connections to existing structures shall be made by core-drilling the wall of the existing structure and inserting an expandable, flexible rubber connector into the wall of the existing structure. The connector shall conform to ASTM C-443 & C-923 and include a stainless-steel band.

The existing structure shall be core drilled with a mechanical powered rotary core drill. The hole shall be watertight with the connector. The use of mortar, brick, or rock shall not be permitted to fill in voids.

If it is not possible to core drill a hole into the existing structure, then the connection shall be made by pouring a concrete collar around the pipe connection to the structure in accordance with MWRD requirements.

<u>Basis of Payment</u>: The work will be paid for at the Contract unit price per Each of CONNECTION TO EXISTING DRAINAGE STRUCTURE OR CONNECTION TO EXISTING MANHOLE.

# **EXPLORATION TRENCH, SPECIAL**

The uncertainties of the actual locations of existing underground utilities may result in the need for exploratory excavations to be made to locate these utilities followed by the backfilling of these excavations. Whenever, in the opinion of the Engineer, it is necessary to explore and excavate in advance of the structure installation or pipe laying operation to determine the best line and grade for the construction of the proposed pipeline or to determine the elevation and location of existing utilities, the Contractor shall make explorations and excavations for such purposes. Any unauthorized excavation will not be paid for and will be acceptably backfilled at the Contractor's expense.

All excavations located in, or within two feet (2') of paved areas shall be backfilled with trench backfill materials and the surplus excavated materials disposed of by the Contractor.

This item will be used to pay for any and all exploratory excavations. Extra billings on a time and material basis will not be considered or accepted for utility work.

This item shall include all costs for furnishing the labor and equipment for any exploratory excavation requested by the Engineer and for the required backfilling of said excavation as described in these specifications.

<u>Basis of Payment</u> This item shall be at the Contract unit price per Foot of EXPLORATORY TRENCH, SPECIAL.

# TEMPORARY ACCESS (PRIVATE ENTRANCE)

The contractor shall construct and maintain aggregate ramps for temporary access to private entrances from Burlington Avenue or DuBois Boulevard according to Article 402.07 and as directed by the Engineer.

The aggregate ramps shall be constructed to the dimensions and grades as follows, except as modified by the plans or as directed by the Engineer. The minimum width shall be 12 feet. The minimum compacted thickness shall be 6". The maximum grade shall be eight percent, except as required to match the existing grade.

Maintaining the temporary access shall include relocating and/or re-grading the aggregate ramps for any operation that may disturb or remove the temporary access. The same type and gradation of material used to construct the temporary access shall be used to maintain it. When use of the temporary access is discontinued, the aggregate shall be removed and utilized in the permanent construction or disposed of according to Article 202.03."

Aggregate for temporary access will be measured for payment once for all construction stages. All aggregate needed to construct the second or subsequent stages will be included in a single payment for all entrances.

<u>Basis of Payment</u>: The work will be paid for at the Contract unit price per Each of TEMPORARY ACCESS (PRIVATE ENTRANCE).

# TEMPORARY ACCESS (COMMERICAL ENTRANCE)

The contractor shall construct and maintain aggregate access entrance for temporary access to Burlington Avenue or DuBois Boulevard according to Article 402.07 and as directed by the Engineer.

The aggregate entrances shall be constructed to the dimensions and grades as follows, except as modified by the plans or as directed by the Engineer. The minimum width shall be 12 feet. The minimum compacted thickness shall be 6". The maximum grade shall be eight percent, except as required to match the existing grade.

Maintaining the temporary access entrances shall include relocating and/or re-grading the aggregate for any operation that may disturb or remove the temporary access. The same type and gradation of material used to construct the temporary access road shall be used to maintain it. When use of the temporary access is discontinued, the aggregate shall be removed and utilized in the permanent construction or disposed of according to Article 202.03."

Aggregate for temporary access will be measured for payment once for all construction stages. All aggregate needed to construct the second or subsequent stages will be included in a single payment for all side streets.

<u>Basis of Payment</u>: The work will be paid for at the Contract unit price per Each of TEMPORARY ACCESS (COMMERCIAL ENTRANCE).

#### **DETECTABLE WARNINGS (SPECIAL)**

This item shall include the placement of radial detectable warnings at locations shown on the plans and as directed by the Engineer. This item shall be installed simultaneously with PORTLAND CEMENT CONCRETE SIDEWALK, 5".

Work shall be performed according to the Americans with Disabilities Act, IDOT Standard 424001-07, as well as Article 424 of the Standard Specifications.

The composite paver tile used in this project shall be as manufactured by ADA Solutions, Inc. (<a href="www.ADATILE.com">www.ADATILE.com</a>) or Armor-Tile or Tuff-Tile. The paver tiles shall be installed according to the manufacturer's installation procedures, and shall be "Brick Red" in color. This item shall not be a "Surface Applied" product.

Immediately following the installation of PORTLAND CEMENT CONCRETE SIDEWALK, 5", the detectable warning shall be pressed into the concrete. The detectable warning shall be tamped with a vibrating mechanism upon installation, and the factory-installed plastic sheeting must remain in place during the entire installation process to prevent the splashing of concrete onto the finished surface of the tile. No concrete shall be removed in the area to receive the detectable warning to ensure a strong lock

with the concrete. The top of the domes shall be set level to the adjacent concrete on the top and sides of the ramp. This item shall be installed in full accordance with the manufacturer's recommendations.

<u>Basis of Payment</u>: The work will be paid for at the Contract unit price per Square Foot of DETECTABLE WARNINGS (SPECIAL).

#### HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH

This item consists of the removal of the existing hot-mix asphalt surface necessary to provide the profile of the proposed pavement cross section.

The anticipated typical removal depth is to be 2 \(^3\)4 inches below the gutter flag. However, the removal depth may vary according to the existing conditions encountered and may therefore include full width removal of 3 inches or more if such conditions require.

In order to achieve the proposed road profile, the anticipated mill is to be between zero (0) and six (6) inches. Milling is to occur in passes which will profile the roadway to the new proposed crown and crown elevations. Milling to achieve to the proposed roadway profile and elevations will be included in the cost of this item. This item shall include the removal of any concrete or stone base course that is necessary to achieve the required section and the shaping and compacting of any aggregate base that is exposed during grinding operations.

Sufficient milling or grinding passes shall be made over the existing pavement so that all irregularities and high spots are eliminated from the pavement's surface before it is overlaid with new material.

The equipment and construction methods for this item will conform to Article 440.03 of the Standard Specifications for Road and Bridge Construction. Hot-Mix Asphalt Surface Removal will be measured in place and the area computed in square yards for the total increment of material removed. The area measured will be paid for only once regardless of the number of passes needed to remove the material.

<u>Basis of Payment</u>: This work will be paid for at the Contract unit price per Square Yard of HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH.

# **TEMPORARY PATCHING**

This item shall include the installation and removal of any temporary hot-mix asphalt surface patches of utility trenches shown on the plans or as directed by the Engineer.

The contractor shall remove any existing asphalt surface or aggregate to allow for the placement of a minimum of two inches (2") of new hot-mix asphalt placement. The hot-mix asphalt surface course shall be installed with a minimum thickness of two inches (2") and match the existing adjacent hot-mix asphalt surface in accordance with Section 408 of the "Standard Specifications for Road and Bridge Construction".

The material shall meet the requirements of Hot-Mix Asphalt Surface Course, Mix "D", N50, as described in the IDOT Special Provisions and as shown in the paving mix chart on the plans.

For areas to be resurfaced on the plans, this item shall also include removal of the temporary asphalt patch once the contractor begins Class B patching of the pavement.

<u>Bais of Payment</u>: This work will be paid for at the Contract unit price per Square Yard of TEMPORARY PATCHING.

# **DUCTILE IRON WATER MAIN FITTINGS**

Unless listed under other Contract items, all bends, crosses, tees, sleeves of all types, reducers, plugs or caps, and other fittings required to assemble and secure the proposed water mains along the route shown on the Plans shall be included under this item. All fittings shall be ductile iron type and be manufactured in the USA. The manufacturer shall furnish a certificate acknowledging the same to the Engineer.

The costs for furnishing and installing the standard joint accessories (gland, gasket, and bolts) for these fittings shall be included in the Contract unit price for this item and shall not be paid for separately. The payment under this item shall be based upon the casting and accessories' weight for cast iron fittings.

The Contractor shall maintain a list of fittings installed and shall provide an invoiced listing of the body casting and accessories weights of these fittings to be used for determining the payment for this item. All concrete blocking to be furnished and installed shall be considered incidental work under this item.

All bolts on mechanical joints and flange joints shall have corrosion protection caps. The bolts shall have sufficient lengths to accommodate the installation of the corrosion protection caps.

Certain mechanical-joint fittings at critical locations may be designated by the Engineer to have wedgetype thrust restraint glands. The furnishing and installing of these types of thrust restraint glands shall be as specified and paid for under separate Contract items.

<u>Basis of Payment</u>: The work will be paid for at the Contract unit price per Pound of DUCTILE IRON WATER MAIN FITTINGS.

# **WATER SERVICE LINE 1" (BORED)**

This item shall include the installation of water services to be bored at locations indicated on the Plans and as directed by the Engineer. The proposed water services will be installed to properties located on the opposite side of the street as the water main.

A corporation tap shall be made into the water main and 1" copper water service pipe, Type K, shall be installed from the tap to a new curb stop (roundway complete with box) to be located as shown on the Plans. The water service box shall be located two feet (2') from the edge of the sidewalk. The proposed water service will connect with the existing water service on private property side of the new water service box.

The water services shall be installed using a directional boring method. The contractor will not be allowed to set up his equipment on private property nor cause any damage to private property. It is

recommended that the Contractor utilize a directional augering machine that can sit in a pit excavated adjacent to the water main trench. The method for directional augering the long water services must be approved by the Engineer and the Village prior to the beginning of this work.

The Contractor will not backfill the connections at the corporation stop and the roundway until the Village or the Engineer has inspected all connections with the service under pressure.

This price shall include all costs for furnishing the labor, equipment, and materials necessary to make the tap into the new water main, furnish and install the curb stop and box, copper pipe (Type K), and connecting fittings, make the connections at the tap, curb stop, and existing water service, install and compact the trench backfill, and to perform any other work necessary to complete the installation of the new water service in accordance with the Specifications.

<u>Basis of Payment</u>: The work will be paid for at the Contract unit price per Each of WATER SERVICE LLINE 1" (BORED).

# CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID, SPECIAL

A four-foot (4') diameter catch basin shall be constructed at the locations shown on the Plans and in accordance with the details shown on the Plans. The Contractor will be responsible for ensuring that the pipe openings are formed in the correct locations so that additional cutting of the precast structure is not necessary.

Any pipe, up to four feet (4') in length per each pipe, used to connect existing pipes to the proposed structure shall be included in the cost of the structure. All trench backfill will also be included in the cost of the structure.

The new frames on catch basins and inlets shall be Neenah Foundry No. R-2504. All open lids will have a Type D grate. Any substitution must be approved by the Village in writing before it will be accepted.

The removal of structures where a new structure is to be installed in the same location will not be paid for separately but shall be included in the cost of the new structure.

Payment for this item shall be at the Contract unit price per Each of CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID, SPECIAL.

#### MANHOLES, 5' AND 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID, SPECIAL

This item consists of furnishing all work and materials, including the necessary cast iron frames and lids, necessary to construct a manhole of the size indicated, in accordance with Section 602 of the "Standard Specifications", the detail shown on the plans and conforming to the lines, grades, and dimensions shown on the construction plans.

The Contractor will be responsible for ensuring that the pipe openings are formed in the correct locations so that additional cutting of the precast structure is not necessary. A minimum of 2" and a maximum of 6" of adjustment rings will be required. Butyl rubber gasket compound shall be used to seal the various structure joints.

All trench backfill used to fill around the new structure will be included in the cost of this item. Any pipe, up to four feet (4') in length per each pipe, used to connect existing pipes to the structure to be installed shall be included in the cost of the structure to be installed.

The new frames shall be Neenah Foundry No. R-1713. All closed lids on manholes will be self-sealing with recessed pick holes and shall have the word "SANITARY" or "STORM" cast in raised letters upon the lid.

<u>Basis of Payment</u>: This work will be paid for at the Contract unit price Each of MANHOLES, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID, SPECIAL and MANHOLES, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID, SPECIAL.

# REMOVE AND RE-ERECT EXISTING SIGN

Existing village street name signs and other miscellaneous informational signs shall be removed by the contractor and stored in a secure location designated by the village during the course of construction. The contractor shall assume liability for lost or stolen signs and posts and shall replace these items at their own expense. The engineer will determine what signs shall be removed. The existing sign posts shall also be removed (and stored along with the signs). Prior to removal, the Contractor shall document the location of each sign and post to serve as a guide during their replacement. If the current location cannot be reused for the sign posts the Contractor will be required to pour a 12" diameter concrete foundation to a depth of 42".

The existing street name signs shall be replaced as close to the original location as possible – unless otherwise directed by the engineer. This new material will be included in the cost for this contract item. The manner of sign attachment must be acceptable to the Engineer.

<u>Basis of Payment</u>: Payment for this item shall be at the Contract unit price per Each of REMOVE AND RE-ERECT EXISTING SIGN.

### **SANITARY SEWER, PVC, 18"**

This item shall include the replacement of sections of 18" diameter combined sewer. In those locations indicated on the Plans, polyvinyl chloride (PVC) sewer pipe of the size indicated shall be installed. The pipe shall have a minimum standard dimension ratio (SDR) of 26 and shall conform to ASTM designation F-679. The joints shall be rubber gasket and conform to ASTM designations D-3212 and F-477. Pipe installation shall be in accordance with Section 31 of the "Standard Specifications for Water and Sewer Main Construction".

The pipe bedding and backfill to twelve inches (12") above the top of pipe will be included in this item.

<u>Basis Of Payment</u>: This work shall be paid for at the contract unit price per Foot of SANITARY SEWER, PVC, 18".

# **SANITARY SEWER SERVICE 6"**

This item shall include any sections of sewer service pipe past the bend fitting of the connection that may require replacement. The Contractor shall be required to carefully remove the existing sewer service pipe until a structurally sound piece of pipe is exposed. The Engineer will determine the length of existing sewer service pipe to be replaced.

For 10" x 6" and 12" x 6" PVC Sewer Service Connections the pipe shall have a minimum standard dimension ratio (SDR) of 26 and shall conform to ASTM designation D-2241 (water quality pipe). The joints shall be rubber gasket and conform to ASTM designations D-3139 and F-477. Pipe installation shall be in accordance with Section 31 of the "Standard Specifications for Water and Sewer Main Construction in Illinois".

<u>Basis Of Payment</u>: This work shall be paid for at the contract unit price per Foot of SANITARY SEWER SERVICE 6".

#### **BRICK PAVER SIDEWALK**

This item shall include furnishing and installation of new brick pavers to be placed as shown on the Plans or directed by the Engineer. This work shall be in accordance with Section 1041 of the Standard Specifications for Clay Paving Bricks and the details shown on the plan. The brick pavers shall be Holland- style clay brick pavers set in a herring bone pattern.

The pavers are to match as closely as possible to the existing pavers to be reset under the item REMOVE AND REINSTALL BRICK PAVERS. The contractor shall submit shop drawings for review and the Village shall select the desired color prior to ordering.

The clay brick pavers will be 4" x 8", 2-1/4" thick, Holland-style clay brick pavers, Full Range model, as manufactured by Pinehall Brick Pavers, and are distributed locally by Aspen Valley Landscape Supply located in Lockport, Illinois (Telephone No. (708) 301-0703).

This item shall include the placement of a three-inch (3") concrete base below the brick section. The work shall be performed in accordance with Section 353 of the "Standard Specifications for Road and Bridge Construction". The surface of the concrete base shall be three and one quarter inches (3 ½") beneath the finished paver grade to allow sufficient room for the brick pavers to be placed. The concrete base course shall be placed upon a cushion of compacted crushed stone, Gradation CA-6, having a minimum thickness of four inches (4"). The cost for the 4" stone cushion shall be included in this item.

A filter fabric shall be installed on the Portland Cement Concrete Base Course prior to the placement of the sand cushion which shall extend up along the back of curb to the elevation of the top of the brick sidewalk. The filter fabric shall be non-woven. Sand shall be spread over the filter fabric with a 1"

thickness and leveled to required slope and grade. The bed shall not be compacted until pavers are installed. Pavers with chips, cracks or other aesthetic defects shall not be used. Pavers shall be set true to line and grade and be tightly butted. Joints between pavers shall not exceed 1/8". The pavers shall be compacted by a mechanical vibratory compactor on the surface until pavers are uniformly level, true to grade, and immobilized. Where required, pavers shall be cut with a masonry or concrete saw. Edges shall be plumb and straight. Scoring and breaking will not be acceptable.

A rigid edge strip manufactured by Dimex Pro Edging shall be installed in all areas where pavers are to be installed against a surface other than concrete if applicable.

After cleaning of all existing brick pavers has been completed, the Contractor shall fill the joints between the brick pavers by sweeping sharp sand into them. When joints are filled, paver surfaces shall be swept clean of sand.

<u>Basis of Payment:</u> This item shall be at the Contract unit price per Square Foot for BRICK PAVER SIDEWALK.

# **CDS UNIT**

This item shall include the furnishing and installation of the CDS® by Contech Engineered Solutions LLC, complete and operable as shown and as specified herein, in accordance with the requirements of the plans and contract documents.

The Contractor shall furnish all labor, equipment and materials necessary to install the storm water treatment device(s) (SWTD) and appurtenances specified in the Drawings and these specifications.

Housing unit of stormwater treatment device shall be constructed of pre-cast or cast-in-place concrete, no exceptions. Precast concrete components shall conform to applicable sections of ASTM C 478, ASTM C 857 and ASTM C 858 and the following:

- Concrete shall achieve a minimum 28-day compressive strength of 4,000 pounds per square-inch (psi);
- Unless otherwise noted, the precast concrete sections shall be designed to withstand lateral earth and AASHTO H-20 traffic loads;
- Cement shall be Type III Portland Cement conforming to ASTM C 150;
- Aggregates shall conform to ASTM C 33;
- Reinforcing steel shall be deformed billet-steel bars, welded steel wire or deformed welded steel wire conforming to ASTM A 615, A 185, or A 497.
- Joints shall be sealed with preformed joint sealing compound conforming to ASTM C 990.
- Shipping of components shall not be initiated until a minimum compressive Strength of 4,000 psi is attained or five (5) calendar days after fabrication has expired, whichever occurs first.

Internal Components and appurtenances shall conform to the following:

- Screen and support structure shall be manufactured of Type 316 and 316L stainless steel conforming to ASTM F 1267-01;
- Hardware shall be manufactured of Type 316 stainless steel conforming to ASTM A 320;
- Fiberglass components shall conform to applicable sections of ASTM D-4097
- Access system(s) conform to the following:
- Manhole castings shall be designed to withstand AASHTO H-20 loadings and manufactured of cast-iron conforming to ASTM A 48 Class 30.

The SWTD shall be sized to either achieve an 80 percent average annual reduction in the total suspended solid load with a particle size distribution having a mean particle size (d50) of 110 microns unless otherwise stated. The SWTD shall be capable of capturing and retaining 100 percent of pollutants greater than or equal to 2.4 millimeters (mm) regardless of the pollutant's specific gravity (i.e.: floatable and neutrally buoyant materials) for flows up to the device's rated-treatment capacity. The SWTD shall be designed with a sump chamber for the storage of captured sediments and other negatively buoyant pollutants in between maintenance cycles.

The SWTD shall convey the flow from the peak storm event of the drainage network, in accordance with required hydraulic upstream conditions as defined by the Engineer.

The SWTD shall be installed in accordance with the manufacturer's recommendations and related sections of the contract documents. The manufacturer shall provide the contractor installation instructions and offer on-site guidance during the important stages of the installation as identified by the manufacturer at no additional expense. A minimum of 72 hours notice shall be provided to the manufacturer prior to their performance of the services included under this subsection.

Basis of Payment: This work shall be paid for at the contract unit price per Each of CDS UNIT.

# **SANITARY MANHOLE, 4'-DIAMETER**

A four-foot (4') diameter manhole shall be constructed at the locations shown on the Plans and in accordance with the details shown on the Plans. The Contractor will be responsible for ensuring that the pipe openings are formed in the correct locations so that additional cutting of the precast structure is not necessary.

All trench backfill used to fill around the new structure will be included in the cost of this item. Any pipe, up to four feet (4') in length per each pipe, used to connect existing pipes to the structure to be installed shall be included in the cost of the structure to be installed.

The removal of structures where a new structure is to be installed in the same location will not be paid for separately but shall be included in the cost of the new structure.

The new frames shall be Neenah Foundry No. R-1713. All closed lids on manholes will be self-sealing with recessed pick holes and shall have the word "SANITARY" or "STORM" cast in raised letters upon the lid.

<u>Basis Of Payment</u>: This work shall be paid for at the contract unit price per Each of SANITARY MANHOLE, 4'-DIAMETER.

# **PVC COMBINED SEWER PIPE REPLACEMENT, 10"**

This item shall include the replacement of 10" diameter combined sewer sections. In those locations indicated on the Plans, polyvinyl chloride (PVC) sewer pipe of the size indicated shall be installed. The pipe shall have a minimum standard dimension ratio (SDR) of 26 and shall conform to ASTM designation D-2241 (water quality pipe). The joints shall be rubber gasket and conform to ASTM designations D-3139 and F-477. Pipe installation shall be in accordance with Section 31 of the "Standard Specifications for Water and Sewer Main Construction".

The pipe bedding and backfill to twelve inches (12") above the top of pipe will be included in this item.

<u>Basis Of Payment</u>: This work shall be paid for at the contract unit price per Foot of PVC COMBINED SEWER PIPE REPLACEMENT, 10".

# **PVC COMBINED SEWER PIPE REPLACEMENT, 12"**

This item shall include the replacement of 12" diameter combined sewer sections. The construction and payment for this item shall be the same as PVC COMBINED SEWER PIPE REPLACEMENT, 10" except for the designated difference in the size of the pipe.

<u>Basis Of Payment</u>: This work shall be paid for at the contract unit price per Foot of PVC COMBINED SEWER PIPE REPLACEMENT, 12".

# 10" X 6" AND 12" X 6" PVC SEWER SERVICE CONNECTIONS

This item shall include the furnishing and installation of 10" x 6" or 12" x 6" sewer service connections to be replaced. The Contractor will be required to connect the existing sewer services to the proposed sewer during the replacement of the existing sewer. The Contractor will replace the tee fitting, riser section of the service, and the bend fitting used to level the existing service as part of this item. Any sewer service pipe to be replaced past the bend fitting of the connection shall not be included under this item but shall be paid for under the item for SANITARY SEWER SERVICE 6".

The fittings and riser pipe shall have a minimum standard dimension ratio (SDR) of 26 and shall conform to ASTM designation D-2241 (water quality pipe). The joints shall be rubber gasket and conform to ASTM designations D-3139 and F-477. Pipe installation shall be in accordance with Section 31 of the "Standard Specifications for Water and Sewer Main Construction".

<u>Basis Of Payment</u>: This work shall be paid for at the contract unit price per Each of 10"X6" PVC SEWER SERVICE CONNECTIONS AND 12"X6" PVC SEWER SERVICE CONNECTIONS (SPECIAL).

# 8" X 4" CATCH BASIN TRAP AND RESTRICTOR

This item shall include the installation of catch basin traps and restrictors on proposed catch basins or as directed by the Engineer. The new trap and restrictor shall be an 8" x 4" tee with an eight-inch (8") plug.

<u>Basis Of Payment</u>: This work shall be paid for at the contract unit price per Each of 8" X 4" CATCH BASIN TRAP AND RESTRICTOR.

# **CONCRETE RIBBON**

This work shall include constructing concrete ribbon curb. The ribbon curb shall be constructed in accordance with Section 606 of the Standard Specifications and the details for this item as shown on the Plans.

The ribbon curb shall be placed upon a compacted crushed stone bedding, Gradation CA-6, having a minimum thickness of two inches (2"). The cost for the 2" stone cushion shall be included in this item.

The concrete ribbon curb will have a width of six inches (6") and a depth of eleven and one half inches  $(11 \frac{1}{2})$ ".

Between four (4) and twenty-four (24) hours after the curb has been placed, contraction joints two inches (2") in depth, shall be saw-cut at a maximum of a 15' spacing and at certain other locations as may be designated by the Engineer. These joints shall then be sealed according to the requirements of Article 420.14(a) of the "Standard Specifications for Road and Bridge Construction". At locations where the proposed curb meets existing curb, 2 - 18" long, 3/4" diameter, epoxy coated, steel dowel bars shall be drilled into the existing curb.

After removal of the "back of curb" form, the excavated area behind the curb designated for sodding shall be immediately backfilled with select non-organic earth backfill in preparation for the placement of the topsoil. All areas where concrete or asphalt is to be installed along the back of curb shall be backfilled with crushed stone, gradation CA-7 and properly compacted. The costs for the placement of the required backfill material shall be included in the cost of the curb.

One inch (1") thick wooden forms will be used in the forming of all radius sections of curb and gutter. Masonite and steel forms will not be allowed.

<u>Basis of Payment</u>: This item will be paid for at the Contract unit price per Foot of CONCRETE RIBBON.

# 18" X 6" SEWER SERVICE CONNECTIONS

This item shall include the 18" x 6" sewer service connections to be replaced. The Contractor will be required to connect the existing sewer services to the proposed sewer during the replacement of the existing sewer. The Contractor will replace the tee fitting, riser section of the service and the bend fitting used to level the existing service as part of this item. Any sewer service pipe to be replaced past the bend fitting of the connection shall not be included under this item but shall be paid for under the item for 6" DIAMETER, PVC SANITARY SEWER SERVICE PIPE.

The fittings and riser pipe shall have a minimum standard dimension ratio (SDR) of 26 and shall conform to ASTM designation F-679. The joints shall be rubber gasket and conform to ASTM designations D-3212 and F-477. Pipe installation shall be in accordance with Section 31 of the "Standard Specifications for Water and Sewer Main Construction".

<u>Basis Of Payment</u>: This work shall be paid for at the contract unit price per Each of 18" X 6" SEWER SERVICE CONNECTIONS.

# PORTLAND CEMENT CONCRETE BAND FOR PAVER BRICKS

This item will include the placement of a new concrete band along the outside of the brick paver indicated on the Plans or as directed by the Engineer. The construction of the concrete band shall be in accordance with the details for this item as shown on the Plans as well as in accordance with Section 606 of the "Standard Specifications for Road and Bridge Construction".

The concrete band will have a width of twelve inches (12") and a depth of eleven and one half inches (11  $\frac{1}{2}$ "). There shall be a space between each band to allow for the brick paver cross walk of seventy two and one half inches (72  $\frac{1}{2}$ ").

The band shall be placed upon a compacted crushed stone bedding, Gradation CA-6, having a minimum thickness of four inches (4"). The cost for the 4" stone cushion shall be included in this item.

A Class PP concrete mix shall be used for this item.

Between four (4) and twenty-four (24) hours after the curb has been placed, contraction joints two inches (2") in depth, shall be saw-cut at a maximum of a 15' spacing and at certain other locations as may be indicated by the Engineer. These joints shall then be sealed according to the requirements of Article 420.14(a) of the "Standard Specifications for Road and Bridge Construction". At locations where the proposed concrete band meets an existing concrete surface, 2 - 18" long, 3/4" diameter, epoxy coated, steel dowel bars shall be drilled into the band.

<u>Basis Of Payment</u>: This work shall be paid for at the contract unit price per Foot of PORTLAND CEMENT CONCRETE BAND FOR PAVER BRICKS.

# **SEATWALL 20" HT.**

This work shall consist of furnishing, transporting, and placing segmental concrete block seatwall as specified herein, as shown on the plans, and as directed by the Engineer.

The block seatwall shall be constructed using Unilock® Estate Wall blocks in Sandstone color and shall be installed per manufacturer's recommendations.

This item shall include the placement of a three-inch (3") concrete base below the seatwall section. The work shall be performed in accordance with Section 353 of the "Standard Specifications for Road and Bridge Construction". The concrete base course shall be placed upon a cushion of compacted crushed stone, Gradation CA-6, having a minimum thickness of four inches (4"). Granular backfill shall be placed behind the seatwall for support with a filter fabric installed between the granular backfill and the topsoil backfill within the seatwall area. The filter fabric shall be non-woven. Within the granular backfill section a four inch (4") perforated PVC pipe lined with fabric shall be installed along the length of the seatwall with PVC pipe outlets at locations marked on the plans. The cost of this work shall be included in this item.

Basis of Payment: This item shall be at the Contract unit price per Foot for SEATWALL 20" HT.

#### **RESTRAINED JOINT 12"**

At locations specified by the Engineer, water main fittings shall be restrained by the use of Retainer Glands. These retainer glands will only be paid for at locations where they have been specified by the Engineer.

Basis of Payment: This item shall be at the Contract unit price per Each for RESTRAINED JOINT 12".

#### **RETAINING WALL (SPECIAL)**

This item shall include the installation of any reinforced concrete retaining wall at locations indicated on the Plans or directed by the Engineer. The work shall be performed in accordance with Section 552 of the "Standard Specifications for Road and Bridge Construction".

The retaining wall shall be placed upon a compacted crushed stone bedding, Gradation CA-6, having a minimum thickness of four inches (4"). The cost for the 4" stone cushion shall be included in this item.

The retaining wall shall be connected to the existing retaining wall using dowel bars and a Volclay bentonite water stop. Connection to existing retaining wall and reinforcement shall be constructed according to the plans and specifications and the cost shall be included under this item.

<u>Basis of Payment</u>: Payment for this item shall be at the Contract unit price per Square Foot of RETAINING WALL (SPECIAL).

# **HOT-MIX ASPHALT DRIVEWAY PAVEMENT REMOVAL**

This item shall include the removal of any hot-mix asphalt surface not part of the street pavements that are to be replaced as part of the project and as directed by the Engineer. The work shall be performed in accordance with Section 440 of the "Standard Specifications for Road and Bridge Construction". The Contractor shall be required to saw cut the hot-mix asphalt full-depth at the limits of removal.

For pavements that include the hot-mix asphalt surface over aggregate base the entire hot-mix asphalt surface and any existing aggregate base shall be removed to allow for the placement of a minimum of three inches (3") of new hot-mix asphalt placed.

For pavements that include the hot-mix asphalt surface over concrete base the entire hot-mix asphalt surface shall be removed to the concrete base. The Contractor shall apply a bituminous tack coat (SS-1) on the existing concrete base prior to the installation of the new hot-mix asphalt.

The area to be improved shall be graded and compacted to the satisfaction of the

The new hot-mix asphalt surface shall be paid for under the item for INCIDENTAL HOT-MIX ASPHALT RESUFACING.

<u>Basis of Payment</u>: Payment for this item shall be at the Contract unit price per Square Yard of HOT-MIX ASPHALT DRIVEWAY PAVEMENT REMOVAL.

#### DRAINAGE STRUCTURE TO BE REMOVED

This item shall include the removal of drainage structures and manholes at locations shown on the Plans or as directed by the Engineer. It shall also be the responsibility of the contractor to seal all pipes at both ends that connect to other structures with brick and mortar. The void left by the removal of the structure will be filled with trench backfill and compacted.

The removal of structures where a new structure is to be installed in the same location will not be paid for separately but shall be included in the cost of the new structure.

<u>Basis of Payment</u>: Payment for this item shall be at the Contract unit price per Each of DRAINAGE STRUCTURE TO BE REMOVED.

#### **DUST CONTROL WATERING**

This work shall consist of the exclusive control of dust resulting from construction operations. Dust shall be controlled by the uniform application of sprinkled water and shall be applied only when directed by the engineer, in a manner meeting his approval.

All equipment used for this work shall meet the Engineer's approval. The contractor will be responsible for obtaining a hydrant meter from the Village of Brookfield's Water Department. All water used shall be properly documented by ticket or other approved means. The Village of Brookfield shall designate

locations where the Contractor may obtain water. This work will be measured in units of gallons of water applied. One unit will be equivalent to 1,000 gallons of water applied.

<u>Basis of Payment</u>: This item shall be paid for at the Contract unit price per Unit of DUST CONTROL WATERING.

#### 10" X 6" CATCH BASIN TRAP AND RESTRICTOR

This item shall include the installation of catch basin traps and restrictors on proposed catch basins or as directed by the Engineer. The new trap and restrictor shall be a 10" x 6" tee with a ten-inch (10") plug.

<u>Basis of Payment:</u> This item shall be at the Contract unit price per Each for 10" X 6" CATCH BASIN TRAP AND RESTRICTOR.

#### **CHECK VALVE 48"**

This item shall include the furnishing and installation of the forty-eight inch (48") CheckMate® UltraFlex® Inline Check Valve by Tideflex, complete and operable as shown and as specified herein, in accordance with the requirements of the Plans and contract documents.

Check valves are to be all rubber and the flow operated check type with slip-in cuff connection. The entire valve shall be ply reinforced throughout the body, saddle and bill, which is cured and vulcanized into a one-piece unibody construction. A separate valve body or pipe used as the housing is not acceptable.

When line pressure exceeds the backpressure, the line pressure forces the bill and saddle of the valve open, allowing flow to pass. When the backpressure exceeds the line pressure, or in the absence of any upstream or downstream pressure, the bill and saddle of the valve is forced closed, preventing backflow.

The valve shall be manufactured with no metal, mechanical hinges or fasteners, which would be used to secure any component of the valve to a valve housing. The port area of the saddle shall contour into a circumferential sealing area concentric with the pipe which shall allow passage of flow in one direction while preventing reverse flow. The entire valve shall fit within the pipe inside diameter. The saddle area of the valve must be flat, not conical, and integral with the rubber body above centerline in order to not produce any areas or voids that can collect or trap debris. Once installed, the valve shall not protrude beyond the face of the structure or end of the pipe.

The outside diameter of the upstream and downstream sections of the valve must be circumferentially in contact with the inside diameter of the pipe.

Slip-in style check valves will be furnished with a set of stainless steel expansion clamps. The clamps, which will secure the valve in place, shall be installed in the upstream or downstream cuff of the valve, depending on installation orientation, and shall expand outwards by means of a turnbuckle. Each band shall be pre-drilled allowing for the valve to be pinned and secured into position in accordance with the manufacturer's installation instructions.

Company name, plant location, valve size patent number, and serial number shall be bonded to the check valve. All valves shall be manufactured in the U.S.A.

Basis of Payment: This item shall be at the Contract unit price per Each for CHECK VALVE 48".

# STORM SEWERS, DUCTILE IRON, TYPE 28"

This DIP sewer will be installed as storm sewer laterals between the new catch basins and the main storm sewer pipe as shown on the plans. The DIP pipe shall be Class 52, cement-lined and tar-coated, meeting the requirements of Specifications ANSI/AWWA 21.51/C151, A21.52 and Federal Specification WW-P-421d with "push-on" joints meeting the requirements of specifications ANSI/AWWA A21.11/C111. Pipe installation shall be in accordance with Section 31 of the "Standard Specifications for Water and Sewer Main Construction".

The sewer shall be laid on a minimum of four inch (4") thick bedding material of gradation CA-11. Additional depth of bedding may be necessary to provide a supporting foundation if unsuitable ground conditions are encountered during excavation of the sewer trench. The sewer shall be encased in the CA-11 gradation material to a depth of 12" above the crown of the pipe. The cost for furnishing and placing the crushed stone bedding and encasement shall be included in the unit price per lineal foot for this item. Excavation, bedding, and pipe encasement will be included in the unit cost of the pay item. Trench backfill will be paid under TRENCH BACKFILL.

Basis of Payment: This work will be paid for at the Contract unit price per Foot for STORM SEWERS, DUCTILE IRON, TYPE 2 8"

#### REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

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

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

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

#### **Boring 11, Dubois Boulevard:**

Station 1+55 to Station 1+96 (CL Street), 0 to 18 feet LT, 0 to 18 feet RT. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Potential contaminants of concern sampling parameters: VOCs, SVOCs, and Metals.

#### **Boring 10, Dubois Boulevard:**

Station 4+97 to Station 5+16 (CL Street), 0 to 18 feet LT, 0 to 18 feet RT. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Potential contaminants of concern sampling parameters: VOCs, SVOCs, and Metals.

# **Boring 6, Burlington Avenue:**

Station 25+17 to Station 25+33 (CL Street), 0 to 15 feet LT, 0 to 15 feet RT. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Potential contaminants of concern sampling parameters: VOCs, SVOCs, and Metals.

#### **Boring 4, Burlington Avenue:**

Station 38+85 to Station 39+56 (CL Street), 0 to 15 feet LT, 0 to 15 feet RT. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Potential contaminants of concern sampling parameters: VOCs, SVOCs, and Metals.

#### **Boring 3, Burlington Avenue:**

Station 43+14 to Station 43+24 (CL Street), 0 to 15 feet LT, 0 to 15 feet RT. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Potential contaminants of concern sampling parameters: VOCs, SVOCs, and Metals.

#### Work Zones

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

#### None

# PUBLIC CONVENIENCE AND SAFETY (D1)

Effective: May 1, 2012 Revised: July 15, 2012

Add the following to the end of the fourth paragraph of Article 107.09:

"If the holiday is on a Saturday or Sunday, and is legally observed on a Friday or Monday, the length of Holiday Period for Monday or Friday shall apply."

Add the following sentence after the Holiday Period table in the fourth paragraph of Article 107.09:

"The Length of Holiday Period for Thanksgiving shall be from 5:00 AM the Wednesday prior to 11:59 PM the Sunday After"

Delete the fifth paragraph of Article 107.09 of the Standard Specifications:

"On weekends, excluding holidays, roadways with Average Daily Traffic of 25,000 or greater, all lanes shall be open to traffic from 3:00 P.M. Friday to midnight Sunday except where structure construction or major rehabilitation makes it impractical."

# RECLAIMED ASPHALT PAVEMENT FOR NON-POROUS EMBANKMENT AND BACKFILL (D1)

Effective: April 1, 2001 Revised: January 1, 2007

Add the following sentence to Article 1004.05 (a) of the Standard Specifications:

"Reclaimed Asphalt Pavement (RAP) may be used as aggregate in Non-porous Granular Embankment and Backfill. The RAP material shall be reclaimed asphalt pavement material resulting from the cold milling or crushing of an existing hot-mix bituminous concrete pavement structure, including shoulders. RAP containing contaminants such as earth, brick, concrete, sheet asphalt, sand, or other materials identified by the Department will be unacceptable until the contaminants are thoroughly removed.

Add the following sentence to Article 1004.05 (c)(2) of the Standard Specifications:

"One hundred percent of the RAP when used shall pass the 3 inch (75 mm) sieve. The RAP shall be well graded from coarse to fine. RAP that is gap-graded or single-sized will not be accepted."

# AGGREGATE SURFACE COURSE FOR TEMPORARY ACCESS (D1)

Effective: April 1, 2001 Revised: January 2, 2007

Revise Article 402.10 of the Standard Specifications to read:

**"402.10 For Temporary Access.** The contractor shall construct and maintain aggregate surface course for temporary access to private entrances, commercial entrances and roads according to Article 402.07 and as directed by the Engineer.

The aggregate surface course shall be constructed to the dimensions and grades specified below, except as modified by the plans or as directed by the Engineer.

- (a) Private Entrance. The minimum width shall be 12 ft (3.6 m). The minimum compacted thickness shall be 6 in. (150 mm). The maximum grade shall be eight percent, except as required to match the existing grade.
- (b) Commercial Entrance. The minimum width shall be 24 ft (7.2 m). The minimum compacted thickness shall be 9 in. (230 mm). The maximum grade shall be six percent, except as required to match the existing grade.
- (c) Road. The minimum width shall be 24 ft (7.2 m). The minimum compacted thickness shall be 9 in. (230 mm). The grade and elevation shall be the same as the removed pavement, except as required to meet the grade of any new pavement constructed.

Maintaining the temporary access shall include relocating and/or regrading the aggregate surface coarse for any operation that may disturb or remove the temporary access. The same type and gradation of material used to construct the temporary access shall be used to maintain it.

When use of the temporary access is discontinued, the aggregate shall be removed and utilized in the permanent construction or disposed of according to Article 202.03."

Add the following to Article 402.12 of the Standard Specifications:

"Aggregate surface course for temporary access will be measured for payment as each for every private entrance, commercial entrance or road constructed for the purpose of temporary access. If a residential drive, commercial entrance, or road is to be constructed under multiple stages, the aggregate needed to construct the second or subsequent stages will not be measured for payment but shall be included in the cost per each of the type specified."

Revise the second paragraph of Article 402.13 of the Standard Specifications to read:

"Aggregate surface course for temporary access will be paid for at the contract unit price per each for TEMPORARY ACCESS (PRIVATE ENTRANCE), TEMPORARY ACCESS (COMMERCIAL ENTRANCE) or TEMPORARY ACCESS (ROAD).

Partial payment of the each amount bid for temporary access, of the type specified, will be paid according to the following schedule:

(a) Upon construction of the temporary access, sixty percent of the contract unit price per

each, of the type constructed, will be paid.

(b) Subject to the approval of the Engineer for the adequate maintenance and removal of the temporary access, the remaining forty percent of the pay item will be paid upon the permanent removal of the temporary access."

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

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

Revise Article 1004.03(c) to read:

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

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

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

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

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

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

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

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

"Item Article/Section

(g)Performance Graded Asphalt Binder (Note 6)

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(h)Fibers (Note 2)

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

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

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

	"MIXTURE COMPOSITION (% PASSING) 1/											
Sieve Size	IL-19		SN	MA 2.5	SMA		II	 mm		.5FG		4.75 m
	min	max	min	max	min	max	min	max	min	max	min	max
1 1/2 in												
(37.5 mm)												
1 in. (25 mm)		100										
3/4 in. (19 mm)	90	100		100								
1/2 in. (12.5 mm)	75	89	80	100		100		100		100		100
3/8 in. (9.5 mm)				65	90	100	90	100	90	100		100
#4 (4.75 mm)	40	60	20	30	36	50	34	69	60	75 <sup>6/</sup>	90	100
#8 (2.36 mm)	20	42	16	24 4/	16	324/	34 5/	52 2/	45	606/	70	90
#16 (1.18 mm)	15	30					10	32	25	40	50	65
#30 (600 μm)			12	16	12	18			15	30		
#50 (300 μm)	6	15					4	15	8	15	15	30
#100 (150 μm)	4	9					3	10	6	10	10	18
#200 (75 μm)	3.0	6.0	7.0	9.0 <sup>3/</sup>	7.5	9.5 <sup>3/</sup>	4.0	6.0	4.0	6.5	7.0	9.0 3/
#635 (20 µm)			<u> </u>	3.0	≤3	3.0						
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		1.0		1.0		1.0

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

- 5/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted below 34 percent.
- 6/ When the mixture is used as a binder, the maximum shall be increased by 0.5 percent passing."

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

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

	Voids in the Mineral Aggregate (VMA), % Minimum for Ndesign					
Mix Design	30	50	70	80	90	
IL-19.0		13.5	13.5		13.5	
IL-9.5		15.0	15.0			
IL-9.5FG		15.0	15.0			
IL-4.75 <sup>1/</sup>		18.5				
SMA- 12.5 <sup>1/2/5/</sup>				17.0 <sup>3/</sup> /16.0 <sup>4/</sup>		
SMA-9.5 <sup>1/2/5/</sup>				17.0 <sup>3/</sup> /16.0 <sup>4/</sup>		
IL-19.0L	13.5					
IL-9.5L	15.0					

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

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

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

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

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

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

	Breakdown/Intermediate Roller (one of the following)	Final Roller (one or more of the following)	Density Requirement
IL-9.5, IL-9.5FG, IL-19.0 <sup>1/</sup>	V <sub>D</sub> , P, T <sub>B</sub> , 3W, O <sub>T</sub> , O <sub>B</sub>	$V_S, T_B, T_F, O_T$	As specified in Section 1030
IL-4.75 and SMA	$T_{B}$ , $3W$ , $O_{T}$	T <sub>F</sub> , 3W	As specified in Section 1030
Mixtures on Bridge Decks <sup>2/</sup>	$T_{\mathrm{B}}$	$T_{\mathrm{F}}$	As specified in Articles 582.05 and 582.06.

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

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

"The plan quantities of SMA mixtures shall be adjusted using the actual approved binder and surface Mix Design's  $G_{mb}$ ."

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

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

construction during the current construction year has demonstrated the constructability of the mix using Department test results."

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

"When a test strip is constructed, the Contractor shall collect and split the mixture according to the document "Hot-Mix Asphalt Test Strip Procedures". The Engineer, or a representative, shall deliver split sample to the District Laboratory for verification testing. The Contractor shall complete mixture tests stated in Article 1030.09(a). Mixture sampled shall include enough material for the Department to conduct mixture tests detailed in Article 1030.09(a) and in the document "Hot-Mix Asphalt Mixture Design Verification Procedure" Section 3.3. The mixture test results shall meet the requirements of Articles 1030.05(b) and 1030.05(d), except Hamburg wheel tests will only be conducted on High ESAL mixtures during production."

# ADJUSTMENTS AND RECONSTRUCTIONS

Effective: March 15, 2011

Revise the first paragraph of Article 602.04 to read:

**"602.04 Concrete.** Cast-in-place concrete for structures shall be constructed of Class SI concrete according to the applicable portions of Section 503. Cast-in-place concrete for pavement patching around adjustments and reconstructions shall be constructed of Class PP-1 concrete, unless otherwise noted in the plans, according to the applicable portions of Section 1020."

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

"Castings shall be set to the finished pavement elevation so that no subsequent adjustment will be necessary, and the space around the casting shall be filled with Class PP-1 concrete, unless otherwise noted in the plans, to the elevation of the surface of the base course or binder course. HMA surface or binder course material shall not be allowed. The pavement may be opened to traffic according to Article 701.17(e)(3)b."

Revise Article 603.05 to read:

"603.05 Replacement of Existing Flexible Pavement. After the castings have been adjusted, the surrounding space shall be filled with Class PP-1 concrete, unless otherwise noted in the plans, to the elevation of the surface of the base course or binder course. HMA surface or binder course material shall not be allowed. The pavement may be opened to traffic according to Article 701.17(e)(3)b."

Revise Article 603.06 to read:

"603.06 Replacement of Existing Rigid Pavement. After the castings have been adjusted, the pavement and HMA that was removed, shall be replaced with Class PP-1 concrete, unless otherwise noted in the plans, not less than 9 in. (225 mm) thick. The pavement may be opened to traffic according to Article 701.17(e)(3)b.

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

Revise the first sentence of Article 603.07 to read:

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

# DRAINAGE AND INLET PROTECTION UNDER TRAFFIC (D-1)

Effective: April 1, 2011 Revised: April 2, 2011

Add the following to Article 603.02 of the Standard Specifications:

- (j) Temporary Rubber Ramps (Note 2)
  - Note 1. The HMA shall have maximum aggregate size of 3/8 in. (95 mm).
  - Note 2. The rubber material shall be according to the following.

Property	Test Method	Requirement
Durometer Hardness, Shore A	ASTM D 2240	75 ±15
Tensile Strength, psi (kPa)	ASTM D 412	300 (2000) min
Elongation, percent	ASTM D 412	90 min
Specific Gravity	ASTM D 792	1.0 - 1.3
Brittleness, °F (°C)	ASTM D 746	-40 (-40)"

Revise Article 603.07 of the Standard Specifications to read:

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

When castings are under traffic before the final surfacing operation has been started, properly sized temporary ramps shall be placed around the drainage and/or utility castings according to the following methods.

- (a) Temporary Asphalt Ramps. Temporary hot-mix asphalt ramps shall be placed around the casting, flush with its surface and decreasing to a featheredge in a distance of 2 ft (600 mm) around the entire surface of the casting.
- (b) Temporary Rubber Ramps. Temporary rubber ramps shall only be used on roadways with

permanent posted speeds of 40 mph or less and when the height of the casting to be protected meets the proper sizing requirements for the rubber ramps as shown below.

Dimension	Requirement
Inside Opening	Outside dimensions of casting + 1 in. (25 mm)
Thickness at inside	Height of casting $\pm 1/4$ in. (6 mm)
edge	-
Thickness at	1/4 in. (6 mm) max.
outside edge	
Width, measured	8 1/2 in. (215 mm) min
from inside opening	
to outside edge	

Placement shall be according to the manufacturer's specifications.

Temporary ramps for castings shall remain in place until surfacing operations are undertaken within the immediate area of the structure. Prior to placing the surface course, the temporary ramp shall be removed. Excess material shall be disposed of according to Article 202.03."

# TRAFFIC CONTROL AND PROTECTION (ARTERIALS) (D1)

Effective: February 1, 1996 Revised: March 1, 2011

Specific traffic control plan details and Special Provisions have been prepared for this contract. This work shall include all labor, materials, transportation, handling and incidental work necessary to furnish, install, maintain and remove all traffic control devices required as indicated in the plans and as approved by the Engineer.

When traffic is to be directed over a detour route, the Contractor shall furnish, erect, maintain and remove all applicable traffic control devices along the detour route according to the details shown in the plans.

<u>Method of Measurement</u>: All traffic control (except "Traffic Control and Protection (Expressways)" and temporary pavement markings) indicated on the traffic control plan details and specified in the Special Provisions will be measured for payment on a lump sum basis.

<u>Basis of Payment</u>: All traffic control and protection will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION (SPECIAL).

Temporary pavement markings will be paid for separately unless shown on a Standard.

# TRAFFIC CONTROL PLAN (D1)

Effective: September 30, 1985 Revised: January 1, 2007

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

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

The Contractor shall contact the District One Bureau of Traffic at least 72 hours in advance of beginning work.

# STANDARDS:

701006-05, 701011-04, 701301-04, 701311-03, 701501-06, 701701-10, 701801-06, and 701901-08

# DETAILS:(included in Plans)

Maintenance of Traffic

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

(TC-13) District One Typical Pavement Markings

(TC-21) Detour Signing for Closing State Highways

(TC-22) Arterial Road Information Sign

(TC-26) Driveway Entrance Signing

(TC-28) Railroad Crossing Repair Detour Signing

#### **SPECIAL PROVISIONS:**

Maintenance of Roadways (D1)
Public Convenience and Safety (D1)
Temporary Information Signing
Vehicle and Equipment Warning Lights (BDE)
Work Zone Traffic Control Devices (BDE)

# **FRICTION AGGREGATE (D1)**

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

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

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

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

Use	Mixture	Aggregates Allowed
Class A	Seal or Cover	Allowed Alone or in Combination <sup>5/</sup> :
		Gravel
		Crushed Gravel
		Carbonate Crushed Stone
		Crystalline Crushed Stone
		Crushed Sandstone
		Crushed Slag (ACBF)
		Crushed Steel Slag
		Crushed Concrete
HMA	Stabilized Subbase	Allowed Alone or in Combination <sup>5/</sup> :
Low ESAL	or Shoulders	Gravel
		Crushed Gravel
		Carbonate Crushed Stone
		Crystalline Crushed Stone
		Crushed Sandstone
		Crushed Slag (ACBF)
		Crushed Steel Slag <sup>1/</sup>
		Crushed Concrete
HMA	Binder	Allowed Alone or in Combination <sup>5/6/</sup> :
High ESAL	IL-19.0	Crushed Gravel
Low ESAL	or IL-19.0L	Carbonate Crushed Stone <sup>2/</sup>
	CMA D' 1	Crystalline Crushed Stone
	SMA Binder	Crushed Sandstone
		Crushed Slag (ACBF)
		Crushed Concrete <sup>3/</sup>

Use	Mixture	Aggregates Allow	ved
HMA High ESAL Low ESAL	C Surface and Binder IL-9.5 IL-9.5FG or IL-9.5L	Allowed Alone or in Combination <sup>5/</sup> :  Crushed Gravel Carbonate Crushed Stone <sup>2/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>4/</sup>	
HMA High ESAL	D Surface and Binder IL-9.5 or IL-9.5FG	Crushed Gravel	rin Combination 5/:  Ind Stone (other than led Stone lee CBF)  g <sup>4/</sup>
HMA High ESAL	E Surface IL-9.5 SMA Ndesign 80 Surface	Allowed Alone or Crushed Gravel Crystalline Crushed Sandston Crushed Slag (AC Crushed Steel Slate No Limestone.  Other Combination Up to	ed Stone ne CBF)

Use	Mixture	Aggregates Allowed		
		50% Dolomite <sup>2/</sup>	Any Mixture E aggregate	
		75% Dolomite <sup>2/</sup>	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone	
		75% Crushed Gravel <sup>2/</sup>	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag	
HMA	F Surface	Allowed Alone or in Combination <sup>5/6/</sup> :		
High ESAL	IL-9.5 SMA Ndesign 80 Surface	Crystalline Crush Crushed Sandstor Crushed Slag (AC Crushed Steel Sla No Limestone.	ne CBF)	
		Other Combinations Allowed:		
		Up to	With	
		50% Crushed Gravel <sup>2/</sup> or Dolomite <sup>2/</sup>	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone	

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

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

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

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

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

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

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

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

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

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

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

"Mixture sampled during first day of production shall include approximately 60 lb (27 kg) of additional material for the Department to conduct Hamburg wheel testing and approximately 80

lb (36 kg) of additional material for the Department to conduct I-FIT testing. Within two working days after sampling, the Contractor shall deliver prepared samples to the District laboratory for verification testing. The required number and size of prepared samples submitted for the Hamburg wheel and I-FIT testing shall be according to the "High ESAL - Required Samples for Verification Testing" table in Article 1030.05(d)(3) above."

### SUPPLEMENTAL WATERING

This work will include watering sod, trees, shrubs, vines, and perennials at the rates specified and as directed by the Engineer.

<u>Schedule:</u> Watering will only begin after the successful completion of all period of establishment requirements. Water trees, shrubs, and vines every 7 days throughout the growing season (April 1 to November 30). Water perennials, plugs, and sod a minimum of twice a week. The Engineer may direct the Contractor to adjust the watering rate and frequency depending upon weather conditions.

Watering must be completed in a timely manner. When the Engineer directs the Contractor to do supplemental watering, the Contractor must begin the watering operation within 24 hours of notice. The Contractor shall give an approximate time window of when they will begin at the work location to the Engineer. The Engineer shall be present during the watering operation. A minimum of 10 units of water per day must be applied until the work is complete.

Should the Contractor fail to complete the work on a timely basis or within such extended times as may have been allowed by the Department, the Contractor shall be liable to the Department liquidated damages as outlined in the "Failure to Complete Plant Care and Establishment Work on Time" special provision.

In fixing the damages as set out herein, the desire is to establish a mode of calculation for the work since the Department's actual loss, in the event of delay, cannot be predetermined, would be difficult of ascertainment, and a matter of argument and unprofitable litigation. This said mode is an equitable rule for measurement of the Department's actual loss and fairly takes into account the loss of the trees if the watering is delayed. The Department shall not be required to provide any actual loss in order to recover these liquidated damages provided herein, as said damages are very difficult to ascertain. Furthermore, no provision of this clause shall be construed as a penalty, as such is not the intention of the parties.

A calendar day is every day shown on the calendar and starts at 12:00 midnight and ends at the following 12:00 midnight, twenty-four hours later.

<u>Source of Water</u>: The Contractor shall notify the Engineer of the source of water used and provide written certification that the water does not contain chemicals harmful to plant growth.

<u>Rate of Application</u>: The normal rates of application for watering are as follows. The Engineer will adjust these rates as needed depending upon weather conditions.

35 gallons per tree25 gallons per large shrub

15 gallons per small shrub

- 4 gallons per vine
- 3 gallons per perennial plant (Gallon)
- 2 gallons per perennial plant (Quart)
- 2 gallons per perennial plant (Plug)
- 27 gallons per square yard for Sodded Areas

Method of Application: A spray nozzle that does not damage small plants must be used when watering all vegetation. Water shall be applied at the base of the plant to keep as much water as possible off plant leaves. An open hose may be used to water trees, shrubs, and seedlings if mulch and soil are not displaced by watering. The water shall be applied to individual plants in such a manner that the plant hole shall be saturated without allowing the water to overflow beyond the earthen saucer. Watering of plants in beds shall be applied in such a manner that all plant holes are uniformly saturated without allowing the water flow beyond the periphery of the bed. Water shall slowly infiltrate into soil and completely soak the root zone. The Contractor must supply metering equipment as needed to assure the specified application rate of water.

<u>Method of Measurement</u>: Supplemental watering will be measured in units of 1000 gallons of water applied as directed.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price per unit of SUPPLEMENTAL WATERING, measured as specified. Payment will include the cost of all water, equipment and labor needed to complete the work specified herein and to the satisfaction of the Engineer.

### FAILURE TO COMPLETE PLANT CARE AND ESTABLISHMENT WORK ON TIME

Should the Contractor fail to complete the plant care and/or supplemental watering work as per the standard specifications or within 36 hours notification from the Engineer, or within such extended times as may have been allowed by the Department, the Contractor shall be liable to the Department in the amount of:

- \$50.00 per tree/per day
- \$40.00 per large shrub/per day
- \$35.00 per small shrub/per day
- \$20.00 per vine/per day
- \$20.00 per perennial/per day
- \$20.00 per sq yd sod/per day

not as penalty but as liquidated damages, for each calendar day or a portion thereof of overrun in the contract time or such extended time as may have been allowed.

In fixing the damages as set out herein, the desire is to establish a mode of calculation for the work since the Department's actual loss, in the event of delay, cannot be predetermined, would be difficult of ascertainment, and a matter of argument and unprofitable litigation. This said mode is an equitable rule for measurement of the Department's actual loss and fairly takes into account the loss of the tree(s) if the watering or plant care is delayed. The Department shall not be required to provide any actual loss in

order to recover these liquidated damages provided herein, as said damages are very difficult to ascertain. Furthermore, no provision of this clause shall be construed as a penalty, as such is not the intention of the parties.

A calendar day is every day shown on the calendar and starts at 12:00 midnight and ends at the following 12:00 midnight, twenty-four hours later.

### **TEMPORARY INFORMATION SIGNING**

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

### Description.

This work shall consist of furnishing, installing, maintaining, relocating for various states of construction and eventually removing temporary informational signs. Included in this item may be ground mount signs, skid mount signs, truss mount signs, bridge mount signs, and overlay sign panels which cover portions of existing signs.

### Materials.

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

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

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

### GENERAL CONSTRUCTION REQUIREMENTS

### Installation.

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

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

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

shall be repaired or signs replaced, as determined by the Engineer, at the Contractor's expense.

### Method of Measurement.

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

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

<u>Basis Of Payment</u>: This work shall be paid for at the contract unit price per Square Foot for TEMPORARY INFORMATION SIGNING.

### SIGN SHOP DRAWING SUBMITTAL

Effective: January 22, 2013 Revised: July 1, 2015

720.02TS

Add the following paragraph to Article 720.03 of the Standard Specifications:

Shop drawings will be required, according to Article 105.04, for all Arterials/Expressways signs except standard highway signs covered in the MUTCD. Shop drawings shall be submitted to the Engineer for review and approval prior to fabrication. The shop drawings shall include dimensions, letter sizing, font type, colors and materials.

## <u>DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING, & PATCHING OPERATIONS)</u>

Effective: January 1, 1985 Revised: January 5, 2016

886.02TS

The following Traffic Signal Special Provisions and the "District 1 Standard Traffic Signal Design Details" supplement the requirements of the State of Illinois "Standard Specifications for Road and Bridge Construction" Sections 810, 886, 1079and 1088.

The intent of this Special Provision is to prescribe the materials and construction methods commonly used to replace traffic signal detector loops and replace magnetic signal detectors with detector loops during roadway resurfacing, grinding and patching operations. Loop detector replacement will not require the transfer of traffic signal maintenance from the District Electrical Maintenance Contractor to this contract's electrical contractor. Replacement of magnetic detector will require wiring revisions inside the control cabinet and therefore the transfer of maintenance will be required. All material furnished shall be new. The locations and the details of all installations shall be as indicated on the Plans or as directed by the Engineer.

The work to be provided under this contract consists of furnishing and installing all traffic signal work as specified on the Plans and as specified herein in a manner acceptable and approved by the Engineer.

### Notification of Intent to Work.

Contracts such as pavement grinding or patching which result in the destruction of traffic signal detection require a notification of intent to work and an inspection. A minimum of seven (7) working

days prior to the detection removal, the Contractor shall notify the:

- Traffic Signal Maintenance and Operations Engineer at (847)705-4424
- IDOT Electrical Maintenance Contractor at (773) 287-7600

at which time arrangements will be made to adjust the traffic controller timing to compensate for the absence of detection.

Failure to provide proper notification may require the District's Electrical Maintenance Contractor to be called to investigate complaints of inadequate traffic signal timing. All costs associated with these expenses will be paid for by the Contractor at no additional expense to the Department according to Section 109 of the "Standard Specifications."

### Acceptance of Material.

The Contractor shall provide:

- 1. All material approval requests shall be submitted a minimum of seven (7) days prior to the delivery of equipment to the job site, or within 30 consecutive calendar days after the contract is awarded, or within 15 consecutive calendar days after the preconstruction meeting, whichever is first.
- 2. Four (4) copies of a letter listing the vendor's name and model numbers of the proposed equipment shall be supplied. The letter will be reviewed by the Traffic Design Engineer to determine whether the equipment to be used is approved. The letters will be stamped as approved or not approved accordingly and returned to the Contractor.
- 3. One (1) copy of material catalog cuts.
- 4. The contract number, permit number or intersection location must be on each sheet of the letter and material catalog cuts as required in items 2 and 3.

### Inspection of Construction.

When the road is open to traffic, except as otherwise provided in Section 801 and 850 of the Standard Specifications, the Contractor must request a turn-on and inspection of the completed detector loop installation at each separate location. This request must be made to the Traffic Signal Maintenance and Operations Engineer at (847)705-4424 a minimum of seven (7) working days prior to the time of the requested inspection.

Acceptance of the traffic signal equipment by the Department shall be based upon inspection results at the traffic signal "turn on." If approved, traffic signal acceptance shall be verbal at the "turn on" inspection followed by written correspondence from the Engineer. If this work is not completed in time, the Department reserves the right to have the work completed by others at the Contractor's expense.

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

### Restoration of Work Area.

Restoration of the traffic signal work area due to the detector loop installation and/or replacement shall be included in the cost of this item. All roadway surfaces such as shoulders, medians, sidewalks, pavement shall be replaced as shown in the plans or in kind. All damage to mowed lawns shall be replaced with an approved sod, and all damage to unmowed fields shall be seeded.

### Removal, Disposal and Salvage of Existing Traffic Signal Equipment.

The removal, disposal, and salvage of existing traffic signal equipment shall be included in the cost of this item. All material and equipment removed shall become the property of the Contractor and

disposed of by the Contractor outside the State's right-of-way. No additional compensation shall be provided to the Contractor for removal, disposal or salvage expense for the work in this contract.

### DETECTOR LOOP REPLACEMENT.

This work shall consist of replacing existing detector loops which are destroyed during grinding, resurfacing, or patching operations.

If damage to the detector loop is unavoidable, replacement of the existing detection system will be necessary. This work shall be completed by an approved Electrical Contractor as directed by the Engineer.

Replacement of the loops shall be accomplished in the following manner: The Engineer shall mark the location of the replacement loops. The Traffic Signal Maintenance and Operations Engineer shall be called to approve loop locations prior to the cutting of the pavement. The Contractor may reuse the existing coilable non-metallic conduit (CNC) located between the existing handhole and the pavement if it hasn't been damaged. CNC meeting the requirements of NEC Article 353 shall be used for detector loop raceways to the handholes. All burrs shall be removed from the edges of the existing conduit which could cause damage to the new detector loop during installation. If the existing conduit is damaged beyond repair, if it cannot be located, or if additional conduits are required for each proposed loop; the Contractor shall be required to drill through the existing pavement into the appropriate handhole, and install 1" (25 mm) CNC. This work and the required materials shall not be paid for separately but shall be included in the pay item Detector Loop Replacement. Once suitable CNC raceways is established, the loop may be cut, installed, sealed and spliced to the twisted-shielded lead-in cable in the handhole. All loops installed in new asphalt pavement shall be installed in the binder course and not in the surface course. The edge of pavement or the curb shall be cut with a 1/4" (6.3 mm) deep x 4" (100 mm) saw-cut to mark location of each loop lead-in.

A minimum of seven (7) working days prior to the Contractor cutting loops, the Contractor shall have the proposed loop locations marked and contact the Traffic Signal Maintenance and Operations Engineer (847)705-4424 to inspect and approve the layout.

Loop detectors shall be installed according to the requirements of the "District 1 Standard Traffic Signal Design Details." Saw-cuts from the loop to the edge of pavement shall be made perpendicular to the edge of pavement when possible in order to minimize the length of the saw-cut unless directed otherwise by the Engineer or as shown on the plan.

The detector loop cable insulation shall be labeled with the cable specifications.

Each loop detector lead-in wire shall be labeled in the handhole using a water proof tag, from an approved vendor, secured to each wire with nylon ties. The lead-in wire, including all necessary connections for proper operation, from the edge of pavement to the handhole, shall be included in the detector loop pay item.

Loop sealant shall be a two-component thixotropic chemically cured polyurethane. The sealant shall be installed 1/8" (3 mm) below the pavement surface. If installed above the surface the excess shall be removed immediately.

Round loop(s) 6 ft (1.8 m) diameter may be substituted for 6 ft (1.8 m) by 6 ft (1.8 m) square loop(s) and shall be paid for as 24 feet (7.2 m) of detector loop.

Resistance to ground shall be a minimum of 100 mega-ohms under any conditions of weather or moisture. Inductance shall be more than 50 and less than 700 microhenries. Quality readings shall be more than 5.

Heat shrink splices shall be used according to the "District 1 Standard Traffic Signal Design Details."

Detector loop replacement shall be measured along the sawed slot in the pavement containing the loop cable up to the edge of pavement, rather than the actual length of the wire in the slot. Drilling handholes, sawing the pavement, furnishing and installing CNC to the appropriate handhole, cable splicing to provide a fully operable detector loop, testing and all trench and backfill shall be included in this item.

### Basis of Payment.

Detector Loop Replacement shall be paid for at the contract unit price per foot (meter) of DETECTOR LOOP REPLACEMENT.

### MAGNETIC DETECTOR REMOVAL AND DETECTOR LOOP INSTALLATION.

This work shall consist of the removal of existing magnetic detectors, magnetic detector lead-in cable and magnetic detection amplifiers and related control equipment wiring, installation of detector lead-in cable, detector loops, detector amplifiers and related equipment wiring. The detector loop, cable, and amplifier shall be installed according to the applicable portions of the "Standard Specifications" and the applicable portions of the Special Provision for "Detector Loop Replacement." All drilling of handholes, furnishing and installing CNC, cable splicing, trench and backfill, removal of equipment, and removing cable from conduit shall be included in this item.

### Basis of Payment.

Magnetic Detector Removal and Detector Loop Installation shall be paid for at the contract unit price per foot (meter) for DETECTOR LOOP, TYPE I, per each for INDUCTIVE LOOP DETECTOR, and foot (meter) for ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR.

### **AVAILABLE REPORTS**

☐ No project specific reports were prepared.
When applicable, the following checked reports and record information is available for Bidders' reference upon request:
☐ Record structural plans
☐ Preliminary Site Investigation (PSI)
☑ Local R.O.W. Preliminary Site Investigation (PSI)
☐ Preliminary Environmental Site Assessment (PESA)
☑ Local R.O.W. Preliminary Environmental Site Assessment (PESA)
⊠ Soils/Geotechnical Report
⊠ Boring Logs
□ Pavement Cores
□ Location Drainage Study (LDS)
☐ Hydraulic Report
☐ Noise Analysis
☑ Other: NELAC certifications, analytical summary tables, laboratory reports
Those seeking these reports should request access from:
Dan O'Malley, P.E.  domalley@ehancock.com  Hancock Engineering Co.  9933 Roosevelt Road  Westchester, Il 60154  708-865-0300

### <u>IDOT TRAINING PROGRAM GRADUATE ON-THE-JOB TRAINING SPECIAL</u> PROVISION

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

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

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

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

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

Finally, the Contractor must maintain all records it creates as a result of participation in the Program on the Contract and furnish periodic written reports to the IDOT District EEO Officer

that document its contractual performance under and compliance with this Special Provision. Finally, through participation in the Program and reimbursement of wages, the Contractor is not relieved of, and IDOT has not waived, the requirements of any federal or state labor or employment law applicable to TPG workers, including compliance with the Illinois Prevailing Wage Act.

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

BASIS OF PAYMENT: This work will be paid for at the contract unit price of \$15.00 per hour for each utilized certified TPG Program trainee (TRAINEES TRAINING PROGRAM GRADUATE). The estimated total number of hours, unit price, and total price must be included in the schedule of prices for the Contract submitted by Contractor prior to beginning work. The initial number of TPG trainees for which the incentive is available for this contract is \_\_1\_.

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

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

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

is in compliance with this Special Provision, and therefore, entitled to the Training Program Graduate reimbursement of \$15.00 per hour.

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

# State of Illinois Department of Transportation Bureau of Local Roads and Streets

### SPECIAL PROVISION FOR INSURANCE

Effective: February 1, 2007 Revised: August 1, 2007

All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

The Contractor shall name the following entities as additional insured under the Contractor's

general liability insurance policy in accordance with Article 107.27:  Village of Brookfield, 8820 Brookfield Avenue, Brookfield, Illinois 60513	
The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.	

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

LOCAL QUALITY ASSURANCE/ QUALITY MANAGEMENT QC/QA Effective: January 1, 2022

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

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

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

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

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

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

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

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

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

If core testing is the density verification method, the Engineer will witness the Contractor coring, and secure and take possession of all density samples at the

density verification locations. The Engineer will test the cores collected by the Contractor for density according to Illinois Modified AASHTO T 166 or AASHTO T 275.

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

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

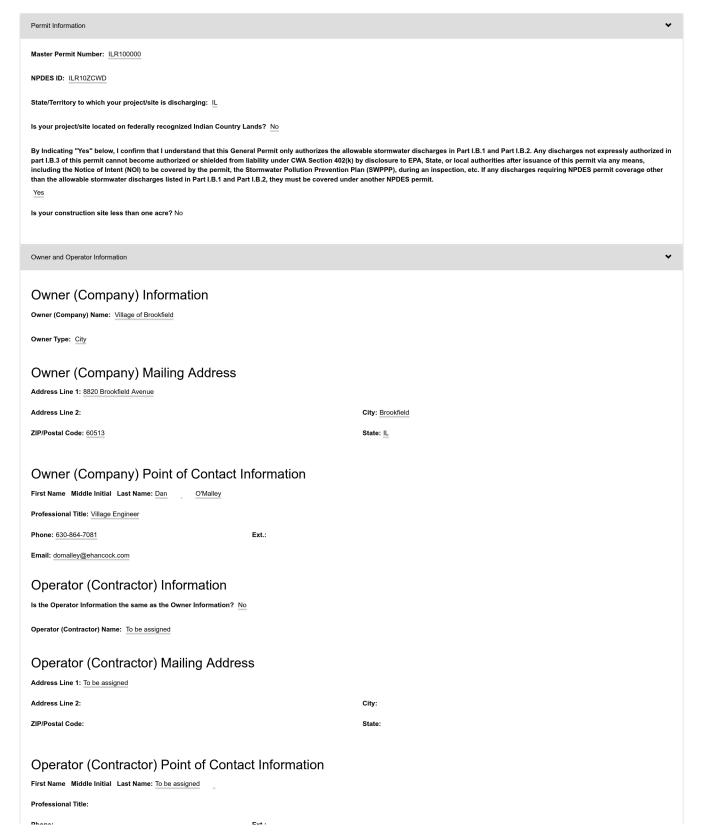
Revise the seventh paragraph and all subsequent paragraphs in Section D. of the document "Hot-Mix Asphalt QC/QA Initial Daily Plant and Random Samples" to read:

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



Bureau of Water • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

# Division of Water Pollution Control Notice of Intent (NOI) for General Permit to Discharge Storm Water Associated with Construction Site Activities



r none. **NOI Preparer Information** ☐ This NOI is being prepared by someone other than the certifier. Project/Site Information Project/Site Name: Burlington Avenue Improvements Project/Site Location Address Line 1: Burlington Avenue (Dubois Blvd - Grove Ave) Address Line 2: Dubois Boulevard (Ogden Ave - Burlington Ave) City: Brookfield ZIP/Postal Code: 60513 State: IL County or Similar Division: Cook Latitude/Longitude for the Project Latitude/Longitude Format: Decimal Degrees Latitude/Longitude: 41.819974°N 87.851407°W Other Project Information Approximate Construction Start Date: 04/01/2024 Approximate Construction End Date: 10/31/2024 Total Size of Construction Site in Acres: 7.24 Type of Construction: Transportation SIC Code: Type a detailed description of the Project: The Burlington Avenue Improvements Project is a roadway and utility project that includes the following impro vements: repairs to deteriorated sections of combined sewer, new storm sewer installation and outfall, repair and replacement of drainage structures, replacement of curbs, sidewalks, driveway aprons, and alley returns, pavement widening, pavement patching and reconstruction, installation of HMA binder and surface, pavement mar king, restoration of disturbed parkways, and other related work. SWPPP Information Has the SWPPP been prepared in advance of filing this NOI as required? Yes **SWPPP Contact Information** First Name Middle Initial Last Name: Daniel O'Malley Organization: Professional Title: Village Engineer Phone: 630-864-7081 Email: domalley@ehancock.com **Project Inspector** Is the Project Inspector Information the same as the SWPPP Contact Information? Yes Use the space below to upload a copy of your SWPPP. Uploaded Date Size **▲** Burlington Avenue Improvements- SWPPP (Signed).pdf (attachment/1669503) 05/05/2023 3.80 MB Receiving Water Information

Does your storm water discharge directly to: Storm Sewer

Owner of Storm Sewer System: Village of Brookfield

Name of closest receiving waterbody to which you discharge: Salt Creek

Historic Preservation Office:

Use the space below to upload a copy of your Historic Preservation Office approval letter.

Name	Uploaded Date	Size
	05/05/2023	171.78 KB

IDNR Impact Assessment Section:

Use the space below to upload a copy of your EcoCAT approval letter.

Name	Uploaded Date	Size
Legacian Land Land Land Land Land Land Land La	05/05/2023	699.27 KB

### Certification Information

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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Signing an electronic document on behalf of another person is subject to criminal, civil, administrative, or other lawful action

Certified By: Daniel J. O'Malley

Certifier Title: Project Manager

Certifier Email: domalley@ehancock.com

Certified On: 05/05/2023 4:16 PM ET



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



Route	Marked Route	Section Number	
Village of Brookfield	FAU 2072/4020	Burlington Avenue Improvements	
Project Number	County	Contract Number	
ZLI3(141)	Cook	61J89	
	ne provisions of the National Pollutant Dischard nvironmental Protection Agency (IEPA) for stor		
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.			
Signature		Date	
Danil Or	Selling	7/13/23	
Print Name	Title	Agency	
Daniel O'Malley	Village Englineer	Edwin Hancock Engineering Co.	
Note: Guidance on preparing each section of BDE 2342 can be found in Chapter 41 of the IDOT Bureau of Design and Environment (BDE) Manual. Chapter 41 and this form also reference the IDOT Drainage Manual which should be readily available.  I. Site Description:  A. Provide a description of the project location; include latitude and longitude, section, town, and range:  Latitude (deg, min, sec): 41.819974  Longitude (deg, min, sec): 85.851407  Section: 27, 11  Township: 39N, 39N  Range: 12, 12E  Village of Brookfield			
Dubois Boulevard (Ogden Avenue - Burlington Avenue) Burlington Avenue (Dubois Boulevard - Grove Avenue)			
B. Provide a description of the construction activity which is the subject of this plan. Include the number of construction stages, drainage improvements, in-stream work, installation, maintenance, removal of erosion measures, and permanent stabilization:  The Burlington Avenue Improvements Project is a roadway and utility project that includes the following improvements: repairs to deteriorated sections of combined sewer, new storm sewer installation and outfall, repair and replacement of drainage structures, replacement of curbs, sidewalks, driveway aprons, and alley returns, pavement widening, pavement patching and reconstruction, installation of HMA binder and surface, pavement marking, restoration of disturbed parkways, and other related work.  C. Provide the estimated duration of this project:  5 months			
D. The total area of the construction site is estimated to be 7.42 acres.  The total area of the site estimated to be disturbed by excavation, grading or other activities is 3.34 acres.			

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

0.60

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

The site is primarily "built up" and consists of impervious materials. The soil types have not been classified as erosive type. There is a slope at Salt Creek where the storm sewer outfall will be installed.

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

0.05

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

N/A

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

The soil disturbing activities include excavation of existing pavement and exposure of a clay or aggregate subgrade. Disturbance will also occur in existing sodded parkways and topsoils beneath. The site is generally very flat site (less than 2% slopes). The slope at Salt Creek where the outfall will be installed runs approximately 1:2 for 20'.

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

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

Village of Brookfield

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

Village of Brookfield

M. The following is a list of receiving water(s) and the ultimate receiving water(s) for this site. In addition, include receiving waters that are listed as Biologically Significant Streams by the Illinois Department of Natural Resources (IDNR). The location of the receiving waters can be found on the erosion and sediment control plans:

Salt Creek

N. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes (i.e., 1:3 or steeper), highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc. Include any commitments or requirements to protect adjacent wetlands.

For any storm water discharges from construction activities within 50-feet of Waters of the U.S. (except for activities for water-dependent structures authorized by a Section 404 permit, describe: a) How a 50-foot undisturbed natural buffer will be provided between the construction activity and the Waters of the U.S. or b) How additional erosion and sediment controls will be provided within that area.

Slope and discharge stabilization and a temporary turbidity wall will be used while installing the Salt Creek outfall. A USACE Nationwide permit is being obtained for this work and all work will conform to the terms of this permit.

O. Per the Phase I document, the following sensitive environmental resources are associated with this project and may have the potential to be impacted by the proposed development. Further guidance on these resources is available in Section 41-4 of the BDE Manual.

N/A
303(d) Listed receiving waters for suspended solids, turbidity, or siltation.  The name(s) of the listed water body, and identification of all pollutants causing impairment:
Salt Creek; cadmium, chloride, nitrogen, total phosphorous, total suspended solids, mercury, polychlorinated biphenyls
Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event:
Existing and proposed catch basins will be utilized to collect sediment and prevent it from entering the combined sewer system. A CDS oil/grit separater manhole will be installed upstream of the outfall to remove sediment. Slope and discharge stabilization shall be installed on the Salt Creek slope and around the outfall.
Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body:
100' east of the Burlington Avenue and Grove Avenue intersection in Brookfield
Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body:
N/A
☐ Applicable Federal, Tribal, State, or Local Programs
N/A
⊠ Floodplain
There is a floodplain adjacent to the Salt Creek outfall area.
☐ Historic Preservation
IDOT's Cultural Resources made a "No Historic Properties Affected" finding for the project site.
Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or siltation TMDL (fill out this section if checked above)
The name(s) of the listed water body:
Salt Creek
Provide a description of the erosion and sediment control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL:
Existing and proposed catch basins will be utilized to collect sediment and prevent it from entering the combined sewer system. A CDS oil/grit separater manhole will be installed upstream of the outfall to remove sediment. Slope and discharge stabilization shall be installed on the Salt Creek slope and around the outfall.
If a specific numeric waste load allocation has been established that would apply to the project's discharges, provide a description of the necessary steps to meet that allocation:
N/A
The Illinois Natural Heritage Database contains no record of threatened or endangered species.
Other
M Wetland
Wetland  A wetland delination was obtained in Phase I
A wetland delineation was obtained in Phase I.
P. The following pollutants of concern will be associated with this construction project:  Antifreeze / Coolants  Solid Waste Debris

I.C above and for all use areas, borrow sites, and waste sites. For implementation as indicated. The Contractor shall provide to the R indicated. The Contractor, and subcontractors, will notify the Residence.	Solvents  Waste water from cleaning construction equipments Other (Specify) Other (Specify) Other (Specify) Other (Specify) Other (Specify) Other (Specify) In Other (Specify) Other (Specify) In Other (Sp		
	e coordinated, installed and maintained to:		
<ol> <li>A. Erosion and Sediment Controls: At a minimum, controls must be coordinated, installed and maintained to:</li> <li>Minimize the amount of soil exposed during construction activity;</li> <li>Minimize the disturbance of steep slopes;</li> <li>Maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible;</li> <li>Minimize soil compaction and, unless infeasible, preserve topsoil.</li> </ol>			
B. <b>Stabilization Practices:</b> Provided below is a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II.B.1 and II.B.2, stabilization measures shall be initiated <b>immediately</b> where construction activities have temporarily or permanently ceased, but in no case more than <b>one (1) day</b> after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of fourteen (14) or more calendar days.			
<ol> <li>Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.</li> </ol>			
<ol><li>On areas where construction activity has temporarily ceased and will resume after fourteen (14) days, a temporary stabilization method can be used.</li></ol>			
The following stabilization practices will be used for this project	et:		
<ul> <li>□ Erosion Control Blanket / Mulching</li> <li>□ Geotextiles</li> <li>⋈ Permanent Seeding</li> <li>□ Preservation of Mature Seeding</li> <li>⋈ Protection of Trees</li> <li>⋈ Sodding</li> <li>⋈ Temporary Erosion Control Seeding</li> </ul>	Temporary Turf (Seeding, Class 7) Temporary Mulching Vegetated Buffer Strips Other (Specify) Other (Specify) Other (Specify) Other (Specify) Other (Specify)		
Describe how the stabilization practices listed above will be utilized or	during construction:		
Tree protection will be provided at all trees within the project ROW, thereby maintaining the root system and eliminating disturbance to soils which are adjacent to the trunk. After the concrete work is completed, the parkways will be restored and sod will be placed and soon as possible. Temporary erosion control seeding will be used on the slope at the Salt Creek outfall.			
Describe how the stabilization practices listed above will be utilized after construction activities have been completed:  Permanent seeding will be used on the slope at the Salt Creek outfall to provide for additional stabilization.			

divert flows from exposed soils, store flows or otherwise I Such practices may include but are not limited to: perime	imit runoff and the discharge of pollutants from exposed areas of the site. ter erosion barrier, earth dikes, drainage swales, sediment traps, ditch checks, rm drain inlet protection, rock outlet protection, reinforced soil retaining
	t basins. The installation of these devices may be subject to Section 404 of the
Aggregate Ditch	Stabilized Construction Exits
Concrete Revetment Mats	Stabilized Trench Flow
Dust Suppression	☐ Slope Mattress
Dewatering Filtering	☐ Slope Walls
Gabions	☐ Temporary Ditch Check
☐ In-Stream or Wetland Work	☐ Temporary Pipe Slope Drain
Level Spreaders	☐ Temporary Sediment Basin
Paved Ditch	☐ Temporary Stream Crossing
Permanent Check Dams	☐ Turf Reinforcement Mats
Perimeter Erosion Barrier	Other (Specify)
Permanent Sediment Basin	Other (Specify)
Retaining Walls	Other (Specify)
Riprap	Other (Specify)
Rock Outlet Protection	Other (Specify)
Sediment Trap	Other (Specify)
	Other (Specify)
Describe how the structural practices listed above will be ut	
	structure to prevent material from entering the combined sewer erts with replaceable reinforced filter bags, to trap sediment and y, or after 0.5" rain, and cleaned when 75% full.
Stockpiles including stone, topsoil, or debris will	be placed off of the curbline and away from drainage strucutres
	es of the stockpiles will not exceed 2:1 to prevent erosion. The
topsoil stockpiles are to be removed within the w	orking day or tarped when inclement weather is forecasted.
Perimeter erosion barriers will be used at the Sal	It Creek outfall to avoid any erosion from the slope to the creek.
Describe how the structural practices listed above will be ut	ilized after construction activities have been completed:
Riprap will be installed around the base of the ou	ıtfall.
D. Treatment Chemicals	
Will polymer flocculants or treatment chemicals be utilized or	on this project: Yes 🛛 No
If yes above, identify where and how polymer flocculants or	treatment chemicals will be utilized on this project.
N/A	
	nagement Controls: Provided below is a description of measures that will be e and pollutants in storm water discharges that will occur after construction

operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

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

The practices selected for implementation were determined based on the technical guidance in Chapter 41 (Construction Site Storm

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

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

Description of permanent storm water management controls:

Existing and proposed catch basins will be utilized to collect sediment and prevent it from entering the combined sewer system. A CDS oil/grit separater manhole will be install upstream of the outfall to remove sediment.

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

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

Installation of inlet filters and designated concrete washout areas.

- G. Contractor Required Submittals: Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342A.
- 1. The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:
  - Approximate duration of the project, including each stage of the project
  - Rainy season, dry season, and winter shutdown dates
  - Temporary stabilization measures to be employed by contract phases
  - Mobilization time-frame
  - Mass clearing and grubbing/roadside clearing dates
  - Deployment of Erosion Control Practices
  - Deployment of Sediment Control Practices (including stabilized cons
  - Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
  - Paving, saw-cutting, and any other pavement related operations
  - Major planned stockpiling operation
    - Time frame for other significant long-term operations or activities that may plan non-storm water discharges as dewatering, grinding, etc
    - Permanent stabilization activities for each area of the project
- 2. During the pre-construction meeting, the Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:
  - Temporary Ditch Checks Identify what type and the source of Temporary Ditch Checks that will be installed as part of the project. The installation details will then be included with the SWPPP.
  - Vehicle Entrances and Exits Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
  - Material Delivery, Storage and Use Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
  - Stockpile Management Identify the location of both on-site and off-site stockpiles. Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
    - Waste Disposal Discuss methods of waste disposal that will be used for this project.
  - Spill Prevention and Control Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.)
  - Concrete Residuals and Washout Wastes Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
    - Litter Management Discuss how litter will be maintained for this project (education of employees, number of

dumpsters, frequency of dumpster pick-up, etc.).

- Vehicle and Equipment Fueling Identify equipment fueling locations for this project and what BMPs will be used to ensure containment and spill prevention.
- Vehicle and Equipment Cleaning and Maintenance Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
- Dewatering Activities Identify the controls which will be used during dewatering operations to ensure sediments will not leave the construction site.
- Polymer Flocculants and Treatment Chemicals Identify the use and dosage of treatment chemicals and provide the Resident Engineer with Material Safety Data Sheets. Describe procedures on how the chemicals will be used and identify who will be responsible for the use and application of these chemicals. The selected individual must be trained on the established procedures.
  - Additional measures indicated in the plan.

### III. Maintenance:

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

N/A

### IV. Inspections:

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

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

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

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

### V. Failure to Comply:

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



### Office of Water Resources • 2050 West Stearns Road • Bartlett, Illinois 60103

June 22, 2023

Daniel O'Malley Edwin Hancock Engineering Co. 9933 Roosevelt Road Westchester, IL 60154

Dear Mr. O'Malley:

### Outfall Structure - Salt Creek - Cook County

This concerns your inquiry for an Illinois Department of Natural Resources, Office of Water Resources (IDNR/OWR) permit for the above-referenced project. The project site is located in the Southwest Quarter of Section 35 of Township 39 North, Range 12 East of the 3<sup>rd</sup> Principal Meridian in Cook County.

According to Panel 739 of the Cook County Flood Insurance Rate Map the a portion of the site of the proposed work is located in the designated floodway of the Salt Creek. An Illinois Department of Natural Resources, Office of Water Resources permit is required. However, be advised that the work can be automatically authorized by our Regional Permit No. 3 (RP3). Provided the proposed work is planned and constructed in accordance with the applicable Terms and Conditions of RP3 it is considered automatically authorized. A copy of RP3 can be found on our website at

https://dnr.illinois.gov/content/dam/soi/en/web/dnr/waterresources/documents/resmanregionalpermit3.pdf.

This determination does not exempt the project from meeting the requirements of any other local, state or federal agency.

If you have any questions, please contact me at 847/608-3116.

Sincerely,

Willian T. Boyd, P.E.

William Y Boys

Chief, Northeastern Illinois Regulatory Programs Section

WTB/SN:

### ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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

Division of Public Water Supplies

Telephone 217/782-1724

### PUBLIC WATER SUPPLY CONSTRUCTION PERMIT

SUBJECT: BROOKFIELD (IL0310330)

Permit Issued to: Village of Brookfield 8820 Brookfield Avenue Brookfield, IL 60513

PERMIT NUMBER: 1220-FY2023

DATE ISSUED: July 18, 2023

PERMIT TYPE: Water Main Extension

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

FIRM: Edwin Hancock Engineering Company

NUMBER OF PLAN SHEETS: 12

TITLE OF PLANS: "Burlington Avenue Improvements"

APPLICATION RECEIVED DATE: May 4, 2023

### PROPOSED IMPROVEMENTS:

\*\*\*Install approximately 40 feet of 12-inch water main.\*\*\*

### ADDITIONAL CONDITIONS:

- 1. All water mains shall be satisfactorily disinfected prior to use pursuant to Ill. Adm. Code, Title 35, Subtitle F, Section 602.310. Two consecutive sets of samples collected at least 24 hours apart must show the absence of coliform bacteria. The samples must be collected from every 1,200 feet of new water main along each branch and from the end of the line. An operating permit must be obtained before the project is placed in service.
- 2. When the owner or operator of a community water supply replaces a water main, the community water supply shall identify all lead service lines connected to the water main and shall comply with the requirements of Section 17.12 of the Act, 415 ILCS 5/17.12 for lead service line replacement. Galvanized service line must also be replaced if the galvanized service line is or was connected downstream to the lead piping. A statement must be submitted with the Application for Operating Permit indicating either that no full or partial lead service lines were identified or that Section 17.12 of the Act was complied with for this project.
- 3. When replacing water mains with lead service lines or partial lead service lines connected to them, the owner or operator of the community water supply shall provide the owner or operator of each potentially affected building that is serviced by the affected lead service lines or partial lead service lines, as well as

Village of Brookfield - Brookfield, IL0310330 Burlington Avenue Improvements 1220-FY2023 Page 2

the occupants of those buildings, with an individual written notice. The lead informational notice shall be provided at least 14 days prior to permitted water main work. The notification provided by the community water supply must satisfy the requirements of Section 17.12(jj) of the Act, 415 ILCS 5/17.12(jj). A copy of the notice used must be submitted to the Agency with the Application for Operating Permit.

4. The permit approval is for the Application, Schedule B, and 12 plan sheets received on May 4, 2023.

DCC:JAS

cc: Edwin Hancock Engineering Company
Elgin Regional Office
Cook County Health Department
IDPH/DEH – Plumbing and Water Quality Program

David C. Cook, P.E.

Manager, Permit Section

Division of Public Water Supplies

### STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

The Illinois Environmental Protection Agency Act (Illinois Compiled Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

These standard conditions shall apply to all permits which the Agency issues for construction or development projects which require permits under the Division of Water Pollution Control, Air Pollution Control, Public Water Supplies and Land Pollution Control. Special conditions may also be imposed by the separate divisions in addition to these standard conditions.

- 1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year after this date of issuance unless construction or development on this project has started on or prior to that date.
- 2. The construction or development of facilities covered by this permit shall be done in compliance with applicable provisions of Federal laws and regulations, the Illinois Environmental Protection Act, and Rules and Regulations adopted the Illinois Pollution Control Board.
- 3. There shall be no deviations from the approved plans and specifications unless a written request for modification of the project, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.
- 4. The permittee shall allow any agent duly authorized by the Agency upon the presentation of credentials:
  - a. to enter at reasonable times the permittee's premises where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit.
  - b. to have access to and copy at reasonable times any records required be kept under the terms and conditions of this permit.
  - c. to inspect at reasonable times, including during any hours or operation of equipment constructed or operated under this permit, such equipment or monitoring methodology or equipment required to be kept, used, operated, calibrated and maintained under this permit.
  - d. to obtain and remove at reasonable times samples of any discharge or emission of pollutants.
  - e. to enter at reasonable times and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.
- 5. The issuance of this permit:
  - a. shall not be considered as in any manner affecting the title of the permits upon which the permitted facilities are to be located;
  - b. does not release the permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities;
  - c. does not release the permittee from compliance with the other applicable statues and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations;
  - d. does not take into consideration or attest to the structural stability of any units or parts of the project;
  - e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability directly or indirectly for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.
- 6. These standard conditions shall prevail unless modified by special conditions.
- 7. The Agency may file a complaint with Board of modification, suspension or revocation of a permit:
  - a. upon discovery that the permit application misrepresentation or false statements or that all relevant facts were not disclosed; or
  - b. upon finding that any standard or special conditions have been violated; or
  - c. upon any violation of the Environmental Protection Act or any Rules or Regulation effective thereunder as a result of the construction or development authorized by this permit.
- 8. Division of Public Water Supply Construction Permits expire one year from date of issuance or renewal, unless construction has started. If construction commences within one year from date of issuance or renewal, the permit expires five years from the date of permit issuance or renewal. A request for extension shall be filed prior to the permit expiration date.

### Lead Informational Notice

### IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Dear Water Customer:	Today's Date:	
This wasting in a sustain formation	about your water cervice and may affect your rights. We encourage you to have	

This notice contains important information about your water service and may affect your rights. We encourage you to have this notice translated in full into a language you understand and before you make any decisions that may be required under this notice.

Diese Mitteilung beinhaltet wichtige Informationen über Ihre Wasserversorgung und könnte Ihre Rechte beeinflussen. Wir bitten Sie, dass Sie diese Mitteilung vollständig in eine Sprache übersetzen lassen, die Sie verstehen, bevor Sie eventuelle Entscheidungen treffen, welche im Zusammenhang mit dieser Benachrichtigung erforderlich sind.

Ang abisong ito ay naglalaman ng mahalagang impormasyon tungkol sa iyong serbisyo sa tubig at maaaring makaapekto sa iyong mga karapatan. Hinihikayat namin kayo na isalin nang buo ang abisong ito sa wikang naiintindihan ninyo at bago kayo gumawa ng anumang mga desisyon na maaaring kailanganin sa abisong ito.

આ સૂચનામાં તમારી પાણીની સેવા વિશે મહત્વપૂર્ણ માહિતી શામેલ છે અને તમારા અધિકારોને અસર કરી શકે છે. અમે તમને પ્રોત્સાહિત કરીએ છીએ કે તમે આ સૂચના હેઠળ જરૂરી હોય તેવા કોઈપણ નિર્ણયો લો તે પહેલાં તમે આ સૂચનાને તમે સમજો છો તે ભાષામાં સંપૂર્ણ ભાષાંતર કરો.

Niniejsze zawiadomienie zawiera ważne informacje na temat Państwa przyłącza wodociągowego i może mieć wpływ na Państwa prawa. Przed podjęciem jakichkolwiek decyzji, które mogą być wymagane na mocy niniejszego zawiadomienia, zachęcamy Państwa do przetłumaczenia całości niniejszego zawiadomienia na język, który będzie dla Państwa zrozumiały.

إحتوي هذا الإشعار على معلومات مهمة حول خدمة المياه لديك، وقد يؤثر على حقوقك. قبل اتخاذ أي قر ار ات قد تكون مطلوبة بموجب هذا الإشعار فإننا نشجعك على ترجمته بالكامل إلى لغة تفهمها.

اس نوٹس میں آپ کی پانی کی سروسز سے متعلق اہم ترین معلومات موجود ہیں اور یہ آپ کے حقوق کو متاثر کر سکتا ہے۔ ہم آپ کو ترغیب دیں گے کہ آپ اس نوٹس کا مکمل طور پر اس زبان میں ترجمہ کروائیں جو آپ سمجھتے ہو∪ اور ممکن ہے کہ آپ کے کوئی فیصلہ لینے سے قبل اس نوٹس کے تحت یہ درکار بھی ہو۔

Este aviso contiene información importante sobre su servicio de agua y puede afectar sus derechos. Lo animamos a que traduzca este aviso a un idioma que comprenda antes de tomar cualquier decisión que pueda ser necesaria en virtud del mismo.

이 통지서에는 귀하의 권리에 영향을 미칠 수 있는 수도 서비스에 관한 중요한 정보가 제시되어 있습니다. 이 통지서에서 요구하는 결정을 내리기 전에 이 통지서를 귀하가 이해할 수 있는 언어로 번역하시기 바랍니다.

本通知包含有关您的供水服务的重要信息,可能会影响到您的权利。在您做出本通知所要求的任何决定之前,我们鼓励您将本通知完整地翻译成您可理解的语言。

### Lead Informational Notice

### IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Our water system will soon begin a water line maintenance and/or construction project that may affect the lead concentrations in your drinking water. Lead, a metal found in natural deposits, is harmful to human health, especially young children, and pregnant women. It can cause damage to the brain and kidneys and can interfere with the production of red blood cells that can carry oxygen to all parts of your body. The most common exposure to lead is swallowing or breathing in lead paint chips and dust. However, lead in drinking water can also be a source of lead exposure. In the past, lead was used in some water service lines and household plumbing materials. Lead in water usually occurs through corrosion of plumbing products containing lead; however, disruption (construction or maintenance) of lead service lines may also temporarily increase lead levels in the water supply. This disruption may be sometimes caused by water main maintenance/replacement.

The purpose of this notice is for informational purposes only. While it's not known for certain whether this construction project will adversely affect the lead (if present) plumbing in and outside your home, below describes some information about the project and some preventative measures you can take to help reduce the amount of lead in drinking water.

Project Start Date:	Project expected to be completed by:
Project location and description:	

What you can do to reduce lead exposure in drinking water during this construction project:

- Run your water to flush out lead. If the plumbing in your home is accessible; you may be able to inspect your own plumbing to determine whether you have a lead service line or lead solder. Otherwise, you will most likely have to hire a plumber.
  - If you do not have a lead service line, running the water for 1-2 minutes at the kitchen tap should clear the lead from your household plumbing to the kitchen tap. Once you have done this, fill a container with water and store it in the refrigerator for drinking, cooking, and preparing baby formula throughout the day.
  - If you do have a lead service line, flushing times can vary based on the length of your lead service line and the plumbing configuration in your home. The length of lead service lines varies considerably. Flushing for at least 3 5 minutes is recommended.
- Use cold water for drinking, cooking, and preparing baby formula. Do not cook with or drink water
  from the hot water tap; lead dissolves more easily into hot water. Do not use water from the hot water
  tap to make baby formula.
- Look for alternative sources or treatment of water. You may want to consider purchasing bottled water or a water filter that is certified to remove "total lead".
- Clean and remove any debris from faucet aerators on a regular basis.
- Do not boil water to remove lead. Boiling water will not reduce lead.
- Purchase lead-free faucets and plumbing components.
- Remove the entire lead service line.
- Test your water for lead. Call us at: \_\_\_\_\_\_\_ to find out how to get your water tested for lead. While we do not do the testing, we can provide a list of laboratories certified to do the testing. Laboratories will send you the bottles for sample collection. Please note that we are not affiliated with any laboratory, and they will charge you a fee.
  - If test results indicate a lead level above 15 ug/L, bottled water should be used by pregnant women, breast-feeding women, young children, and formula-fed infants.

WATER	SHED	MA	NA	GEMENT	PERMIT

Watershed Management Permit No.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

111 EAST ERIE, CHICAGO, ILLINOIS, 60611

www.mwrd.org

INSTRUCTIONS FOR COMPLETING PERMIT FORM: Submit two original signed copies of this permit application (nine pages) and any required WMO schedules listed below; do not leave any blank spaces; use "X" for checking applicable information. Also submit two copies of location map and plans. Address all correspondence to the Local Sewer Systems Section; for any inquiries or assistance, telephone (312) 751-3255.

Municipality (Tov	Reast of LaGrange Road, South of Cermak Road, West of Harle viship, if unincorporated)  Brookfield  N. D. 12, 13, 14, 14, 12, 12, 12, 13, 14, 14, 14, 14, 14, 14, 14, 14, 14, 14		
	, Township 34, 34 N, Range 12, 12 Ns for project, use additional sheets if more than two):	E	
		Separate Sewer Area	
l Project Informa	tion (Required in all cases)	WMO Schedule A	(Page 5 of 9)
l Sewer Summary	(Required in all cases)	WMO Schedule B	(Page 6 of 9)
l Sewer Connecti	ons (Required in all cases)	WMO Schedule C	(Page 7 of 9)
Detention & Sto	ormwater Management Facilities (WMO)	WMO Schedule D	(3 Pages)
Detention & Sto	ormwater Management Facilities (Legacy)	WMO Schedule D <sub>Legacy</sub>	(4 Pages)
l Lift Station and	or Force Main	WMO Schedule E	(2 Pages)
l Characteristics	of Waste Discharge	WMO Schedule F	(2 Pages)
l Treatment or Pr	etreatment Facilities	WMO Schedule G	(2 Pages)
Hazard Areas (I	loodplain / Floodway /Riparian Areas)	WMO Schedule H	(2 Pages)
Affidavit Relati	ve to Compliance with Article 7	WMO Schedule J	(1 Page)
Affidavit of Dis	closure of Property Interest	WMO Schedule K	(2 Pages)
Notice of Requi	rements for Storm Water Detention	WMO Schedule L	(2 Pages)
Current Survey	of Property Interests (Attachment for Schedule K or L)	Exhibit A	
Outfall, Direct (	Connection, District Owned or Leased Property	WMO Schedule O	(1 Page)
Soil Erosion and	d Sediment Control	WMO Schedule P	(2 Pages)
Recording and I	Maintenance	WMO Schedule R	(2 Pages)
Recording Exhi	bit (Attachment for Schedule K or L)	Exhibit R	
Wetlands and W	etland Buffer Areas	WMO Schedule W	(2 Pages)
fer to Table 1 of § 201	of Article 2 of Watershed Management Ordinance for applicable Perm	itting Authority.	
	UMENTS: Indicate title, number of pages and of		
3chedule B Summar	y (1 page), Wetland and Riparian Statement (163 pages), releva	ant plan sheets (55 pages)	
NOTE: ATTA	CH FEE PAYMENT VOUCHER AND PAY	MENT IF APPLICAB	LE
DISTRICT US			
Application rec	eived:WMO Permit is	ssued:W	RP:

## GENERAL CONDITIONS OF THE PERMIT

- Definitions. The definitions of Appendix A of the Watershed Management Ordinance are incorporated into this Watershed Management Permit by reference. Additionally, the following words and phrases shall be defined as follows:
  - a) Building and Occupancy Permit. Building and Occupancy Permit issued by the Municipality.
  - b) Design Engineer. A Professional Engineer who prepares plans and specifications for the project, and signs the Watershed Management Permit Application.
  - c) Inspection Engineer. A Professional Engineer who inspects the development to ensure compliance with the design plans, specifications, a Watershed Management Permit, and the Watershed Management Ordinance.
  - d) Permit. Watershed Management Permit.
  - e) General Conditions. General Conditions contained in a Watershed Management Permit.
  - f) Special Conditions. Special conditions of this Watershed Management Permit.
- 2. Adequacy of Design. The schedules, plans, specifications and all other data and documents submitted for this Permit are made a part hereof. The Permit shall not relieve the Design Engineer of the sole responsibility for the adequacy of the design. The issuance of this Permit shall not be construed as approval of the concept or construction details of the proposed facilities and shall not absolve the Permittee, Co-Permittee or Design Engineer of their respective responsibilities.
- 3. Joint Construction and Operation Permits. Unless otherwise stated by the Special Conditions, the issuance of this Permit shall be a joint construction and operation permit, provided that the Permittee or Co-Permittee has complied with all General and Special Conditions.
- 4. Allowable Discharges. Discharges into the Sanitary Sewer system constructed under this Permit shall consist of sanitary Sewage only. Unless otherwise stated by the Special Conditions, there shall be no discharge of industrial wastes under this Permit. Stormwater shall not be permitted to enter the Sanitary Sewer system. Without limiting the general prohibition of the previous sentence, roof and footing drains shall not be connected to the Sanitary Sewer system.
- 5. Construction Inspection. All erosion and sediment control facilities, Stormwater Facilities, Detention Facilities, and Qualified Sewer Construction shall be inspected and approved by an Inspection Engineer acting on behalf of the Permittee or the Owner of the project, or by a duly authorized and competent representative of the Inspection Engineer. No sewer trenches shall be backfilled except as authorized by the Inspection

Engineer after having inspected and approved the sewer installation.

- 6. Maintenance. Stormwater Facilities, Detention Facilities, Qualified Sewer Construction, Sanitary Sewer lines, systems or facilities constructed hereunder or serving the facilities constructed hereunder shall be properly maintained and operated at all times in accordance with all applicable requirements. It is understood that the responsibility for maintenance shall run as a joint and several obligation against the Permittee, the Co-Permittee, the property served, the Owner and the operator of the facilities, and said responsibility shall not be discharged nor in any way affected by change of ownership of said property, unless the District has authorized assignment of the permit.
- Indemnification. The Permittee shall be solely responsible for and shall defend, indemnify and hold harmless the Metropolitan Water Reclamation District of ("District", "MWRD", or Greater Chicago "MWRDGC") and its Commissioners, officers, employees, servants, and agents from liabilities of every kind, including losses, damages and reasonable costs, payments and expenses (such as, but not limited to, court costs and reasonable attorneys' fees and disbursements), claims, demands, actions, suits, proceedings, judgments or settlements, any or all of which are asserted by any individual, private entity, or public entity against the District and its Commissioners, officers, employees, servants, or agents and arise out of or are in any way related to the issuance of this Permit. Without limiting the generality of the preceding sentence, the provisions of this paragraph shall extend to indemnify and hold harmless the District and its Commissioners, officers, employees, servants, and agents from any claims or damages arising out of or in connection with the termination or revocation of this Permit.

The Permittee shall be solely responsible for and shall defend, indemnify and hold harmless an Authorized Municipality and its elected officials, officers, employees, servants, and agents from liabilities of every kind, including losses, damages and reasonable costs, payments and expenses (such as, but not limited to, court costs and reasonable attorneys' fees and disbursements), claims, demands, actions, suits, proceedings, judgments or settlements, any or all of which are asserted by any individual, private entity, or public entity against the Authorized Municipality and its elected officials, officers, employees, servants, or agents and arise out of or are in any way related to the issuance of this Permit. limiting the generality of the preceding sentence, the provisions of this paragraph shall extend to indemnify and hold harmless the Authorized Municipality and its elected officials, officers, employees, servants, and agents from any claims or damages arising out of or in connection with the termination or revocation of this Permit.

8. Sewer Construction by District. Permittee understands and acknowledges that the District has the right and power to construct and extend sewer service facilities and render such services within the area to be served by the project for which this Permit is issued, and that by the District constructing and extending such sewer service facilities and rendering such services, the facilities constructed by the Permittee under this Permit may decrease in value, become useless or of no value whatsoever, the Permittee may also sustain a loss of business, income and profits.

Therefore, by accepting this Permit and acting thereon, the Permittee, for itself, its successors and assigns, does remise, release and forever discharge the District and its Commissioners, officers, employees, servants, and agents of any and all claims whatsoever which Permittee may now have or hereafter acquire and which Permittee's successors and assigns hereafter can, shall, or may have against the District and its Commissioners, officers, employees, servants, and agents for all losses and damages, either direct or indirect, claimed to have been incurred by reason of the construction or extension at any time hereafter by the District of sewer service facilities in the service area contemplated by this Permit, the rendering of such services, which District facilities and services decrease the value of the facilities constructed by the Permittee under this Permit, make same useless or of no value whatsoever, including but not limited to, any and all damages arising under 70 ILCS 2605/19; the taking of private property for public use without due compensation; the interference with the contracts of Permittee; the interference with Permittee's use and enjoyment of its land; and the decrease in value of Permittee's land.

- 9. Third Parties. Regarding Qualified Sewer Construction, this Permit does not grant the right or authority to the Permittee: (a) to construct or encroach upon any lands of the District or of any other parties, (b) to construct outside of the territorial boundaries of the District except as allowed under an extraterritorial service agreement, (c) to construct or encroach upon the territorial boundaries of any units of local government within the District, (d) to connect to or discharge into or be served by (directly or indirectly) any sewer or sewer system owned or operated by third parties.
- 10. Costs. It is expressly stipulated and clearly understood that the Stormwater Facilities, Detention Facilities, Qualified Sewer Construction, or facilities for which the Permit is issued shall be constructed, operated and maintained at no cost to the District.
- 11. Other Sewer Construction. The District reserves the right, privilege and authority to permit others to reconstruct, change, alter and replace all sewers and appurtenances thereto at the point of connection of any sewerage system to a District interceptor and/or in public

right-of-ways of District easements, and to introduce additional Sewage flow through this connection into the intercepting sewer of said District.

- 12. Change of Use. This Permit shall be incorporated in the Building and Occupancy Permit for the Building or Buildings served under this Permit. The Owner or occupant of any Building served under this Permit shall not cause, or permit, a change of use of the Building to a use other than that indicated in this Permit without first having obtained a written permission from the Executive Director of the District.
- 13. Interceptors Overloading. The District hereby serves notice that its interceptors may flow full and may surcharge, and flooding of the proposed system may occur. The Permittee agrees that the proposed systems shall be constructed, operated and maintained at the sole risk of the Permittee.
- 14. Transferability. This Permit may not be assigned or transferred without the written consent of the Executive Director of the District or Enforcement Officer of an Authorized Municipality. However, a Sole Permittee may be required to assign or transfer the Permit when divesting itself of ownership to a third-party and should notify the District prior to such divestment so that the District may determine whether assignment to the new owner is necessary.
- 15. **Termination.** The District has the right to enforce or revoke a Permit issued by either the District or an Authorized Municipality as outlined in Article 12 of the Watershed Management Ordinance.
  - It is understood and agreed that in the event the Permittee shall default on or fail to perform and carryout any of the covenants, conditions or provisions of this Permit and such default or violation shall continue for sixty (60) days after receipt of notice thereof in writing given by the Executive Director of the District, then it shall be lawful for the District at or after the expiration of said sixty (60) days to declare said Permit terminated. The Permittee agrees that immediately upon receipt of written notice of such termination it will stop all operations, discontinue any discharges and disconnect the sewerage system or facilities constructed under this Permit. If the Permittee fails to do so, the District shall have the right to disconnect said system. The Permittee hereby agrees to pay for any costs incurred by the District for said disconnection.
- 16. Rights and Remedies. The various rights and remedies of the District contained in this Permit shall be construed as cumulative, and no one of them shall be construed as exclusive of any one or more of the others or exclusive of any other rights or remedies allowed by applicable rules, regulations, ordinances and laws. An election by the District to enforce any one or more of its rights or

- remedies shall not be construed as a waiver of the rights of the District to pursue any other rights or remedies provided under the terms and provisions of this Permit or under any applicable rules, regulations, ordinances or laws.
- 17. Expiration. This Permit shall expire if construction has not started within one (1) year from the date of issue. Construction under an expired Permit is deemed construction without a Permit. All construction under this Permit shall be completed within two (2) years after start of construction. If conditions so warrant, an extension may be granted. For publicly financed projects (e.g. special assessments) the one (1) year period indicated will be considered from the date of final court action.
- 18. Revocation. In issuing this Permit, the District or Authorized Municipality has relied upon the statements and representations made by the Permittee or his agent. Any incorrect statements or representations shall be cause for revocation of this Permit, and all the rights of the Permittee hereunder shall immediately become null and void.
- 19. Advance Notice. The Permittee shall give the District or Authorized Municipality advance notice of at least two working days prior to the following: mobilization and installation of Erosion and Sediment Control Practices; commencement of construction; excavation for Qualified Sewer Construction; Major Stormwater Systems and Detention Facilities under this Permit; and completion of construction. When advance notice is given, the Permittee shall provide the Permit number, municipality and location.
- 20. Compliance with Plans and Specifications. All construction shall be in accordance with the plans and specifications submitted for this Permit and made a part hereof. No changes in, or deviation from the plans and specifications which affect capacity, maintenance, requirements, service design area or Permit requirements shall be permitted unless revised plans have been submitted to, and approved by the District or Authorized Municipality. The Permit together with a set of the plans and specifications (revised plans and specifications, if any) shall be kept on the jobsite at all times during construction and until final inspection and approval by the District or Authorized Municipality.
- 21. Testing and Approval. All construction under this Permit shall be subject to inspection, testing and approval by the District. All testing shall be made, or caused to be made, by the Permittee at no cost to the District and in the presence of the District representative. Upon satisfactory completion of construction, the Permittee and the owner shall submit, or cause to be submitted, a completion certificate and request for approval on the form prescribed by the District. No sewer

- or other facilities shall be put in service until all the conditions of the Permit have been satisfactorily met.
- 22. Record Drawings. Before final inspection and approval by the District or an Authorized Municipality, the Permittee shall furnish, or cause to be furnished to the District or an Authorized Municipality, a set of Record drawings and Schedule R for the site stormwater plan, Detention Facilities, Stormwater Facilities, and Qualified Sewer Construction, or a statement that the project was constructed in accordance with the original plans and specifications.
- 23. Compliance with Rules and Regulations. The Permittee hereby expressly assumes all responsibilities for meeting the requirements of all applicable rules, regulations, ordinances and laws of Local, State and Federal authorities. Issuance of this Permit shall not constitute a waiver of any applicable requirements.
- 24. Severability. The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit, is held invalid, the remaining provisions of this Permit shall continue in full force and effect.
- 25. **Property Rights.** This Permit does not convey any property rights of any sort, or any exclusive privilege.
- 26. Conflict with Other Conditions. In the case of conflict between these General Conditions and any other condition(s) in this permit, the more stringent condition(s) shall govern.

	WMO SCHEDULE A Watershed Management Permit No.
Ph	ROJECT INFORMATION
1.	NAME OF PROJECT Burlington Avenue Improvements  (as shown on the plans)
2.	APPURTENANCES (check all applicable items)
	Siphon Drop Manholes Public Lift Station Outfalls (Submit Sch. E) Outfalls (Submit Sch. E)
	Stream Crossing Direct Connections to District - Describe
3.	RECEIVING SANITARY/COMBINED SEWER SYSTEM
	A. System that project will connect to is:  ✓ Existing Proposed /Under Construction District Permit #
	List owners of all sewers from project to District interceptor Village of Brookfield
4.	RECEIVING STORM SEWER SYSTEM TRIBUTARY TO WATERWAY
	A. System that project will connect to is:  ☐ Existing ☐ Proposed /Under Construction → District Permit #
	List owners of all sewers from project to waterway New storm sewer proposed for this project under this permit application
5.	EXISTING LIFT STATION
	✓ No ☐ Yes → Receiving system includes existing lift station
	If yes, indicate location
6.	FLOOD PROTECTION AREAS  Does any part of the project area involve the following? (check all applicable items)
	Floodplain/Floodway/Riparian (Schedule H)  Wetlands/Buffers/Riparian (Schedule W)
7.	SIZE OF PROJECT
	Total contiguous ownership interest N/A-ROW acres Development Area N/A-ROW acres D. After development N/A-ROW acres
8.	STORMWATER MANAGEMENT
	<ul> <li>A. Is project in the service area of a District permitted detention facility?</li> <li>✓ No  Yes → District Permit No</li> </ul>
	B. Is stormwater management provided under this permit?  ✓ No
	C. Type of stormwater management
	☐ Runoff Control ☐ Volume Control ☐ Detention Storage

PROJECT NAME:	Burlington A	Avenue Impr	ovements				
CENTED CHAMAA	DV. 1. 1. 1.		s shown on the plan			1. 1 1	
SEWER SUMMA sewer areas and Storm					ary sewers in	combined and	separate
Sanitary (San), Combi					), or Storm pa	rt of Volume C	Control (SVC)
Tributary Type	Choose an Choose one	Choose an Choose one	Choose an Choose one	Choose an Choose one	Choose one	Choose an Choose one	Choose One
Pipe Size (in.)	See	attached	sheet				
Total Length (ft.)							
Min. slope used (%)	×						
Pipe Material *							
Total Manholes							
Total Cleanouts							
Catch Basin/Inlets							
* Pipe material and jo				ee Technical Guid		for acceptable s	pecifications.
*Pipe material and jo wer construction in f nitary Manholes in fl	loodplain: [	No	Yes —	→ FPE 616	.80 ft.		pecifications.
*Pipe material and jo wer construction in f nitary Manholes in fl Note: All structures shall	loodplain: [loodplain	No	Yes —	→ FPE 616	.80 ft.		pecifications.
*Pipe material and jo wer construction in f nitary Manholes in fl Note: All structures shall	loodplain: [loodplainhave lids locate	No  ed above the FF  ck all that ap	Yes —PE or be constru	→ FPE 616	.80 ft.	covers/lids.	
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*Pipe material and jo wer construction in f nitary Manholes in fl Note: All structures shall NATURE OF PRO ief description	loodplain: [loodplain have lids locate DJECT (Che step roadway/utility pronced]	No  ed above the FI  ck all that applied to improve comb	PE or be construed by the poly bined sewer, repair/rep	FPE 616	ght, bolt downers, and install news	covers/lids.  torm sewer/outfall fror ture developr	n Elm Ave - Salt Cr
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*Pipe material and jower construction in finitary Manholes in floote: All structures shall  NATURE OF PRO ief description  Publicly finant  Sewer system  Off-site trunk	loodplain: [ loodplain have lids locate DJECT (Che TP roadway/utility pro nced n serving a su c sewer to serving	No  ed above the FF ck all that applied to improve comb abdivision eve subdivisi	PE or be construed by the series of the sewer, repair/reputs Series on Series S	FPE 616  cted with waterti  clace drainage structure  ewer extension  corm sewers in	ght, bolt down es, and install new s to serve fu combined s ions to serve	ture developr sewer area e buildings (S	n Elm Ave - Salt Cr ment
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*Pipe material and jower construction in finitary Manholes in floote: All structures shall  NATURE OF PRO ief description  Publicly finant  Sewer system  Off-site trunk	loodplain: [ loodplain have lids locate DJECT (Che TP roadway/utility pro nced n serving a su c sewer to ser ct also has fe IONS bject designed	No  ed above the FF ck all that applied to improve comb the subdivision eve subdivision ederal fundir d to service f	Yes  PE or be construed by PE or be construed poply)  bined sewer, repair/rep  So  on  So  ng and is app	FPE 616  cted with waterti  clace drainage structure  ewer extension  corm sewers in  ervice connect  proved for MW  tions (not inclinate)	ght, bolt down es, and install news n to serve fu combined s ions to serve	ture developr sewer area e buildings (S	n Elm Ave - Salt Cr ment Sch. C)

WMO SCHEDULE		nit No.	
SEWER CONNECT (FILL OUT ALL SECTIONS			
1. BUILDING CONNECTION	N DATA		
A. RESIDENTIAL BUILD	INGS		
Single Family	Total dwelling units * Number of sewer connections *	Project also has PE**	
Multi Family	Total dwelling units * Number of sewer connections *	PE**	
B. COMMERCIAL& RECR		PE**	
** Population Equiv  2. BUILDING USE - (Check a	er connections e exiting a building is a connection valent (Submit calculations for each connected that apply)	PE**PE and total from all connections)	
A. COMMERCIAL & REC Describe use of buildings, in	REATIONAL cluding principal product(s) or act	tivities	
Food preparation or processing	(install grease separator)	Laundromat (install lint basin)	
Swimming pool (provide pool p	plans)	Auto service (install triple basin)	
Manufacturing (describe) Auto wash (install mud basin)			
Other			
B. INDUSTRIAL BUILDING Describe use of buildings, inc		tivities	
Sewer connection Industrial waste	ons will receive domestic sewage is produced	only	

**NOTE:** If industrial waste is produced, submit  $\underline{WMO\ Schedule\ F}\ \&\ \underline{WMO\ Schedule\ G}$  and plumbing plans along with flow diagram for pretreatment system.

CERTIFICATE BY DESIGN ENGINEER: I hereby certify that the project described herein has been designed in accordance with the requirements set forth in this application and all applicable ordinances, rules, regulations, local, state and federal laws, and design eriteria of the issuing authority, that the storm drainage and samitary sewer system designed for this project are proper and adequate; that where the design involves one or more connections to an existing local sewer system, the capacity of samitary seme and the system is found to be adequate to transport the stormwater and/or wastewater that will be added through the proposed sewer without violating any provisions of the Illinois Environmental Protection Act or the rules and regulations thereunder.  Comments, if any:  Engineering Firm: Edwin Hancock Engineering Telephone: (704) 865 - 0300  Address: 9933 W Roosevelt Road City: Westchester Zip: 60154  Signature: Date: Mail Address: domailey@ehancock.com  Onlie I. OMALEY Email Address: domailey@ehancock.com  Date: 6/12/2023  (Name and Title)  Date: 6/12/2023  Charles of Project and this application, have been examined by me and are found to be in compliance with all applicable requirements by additionable of the project discharges has been examined and the system is found to be adequated to transport the existing local severy and the project discharges has been examined and the system is found to be adequated to transport the existing local severy and the project discharges has been examined and the system is found to be adequated to transport the existing local severy and the project discharges has been examined and the system is found to be adequated to transport the existing local severy and the system is found to be adequated to transport the existing local severy and the project discharges has been examined and the system is found to be adequated to transport the existing local severy and the project discharges has been examined and the system is found to be adequated to transport the existing local se	ENGIN	EEKING CI	RITTIC	AIIUN			
accordance with the requirements set forth in this application and all applicable ordinances, rules, regulations, local, state and federal laws, and design criteria of the issuing authority; that the storm drainage and sanitary sewer system designed to the issuing authority; that the storm drainage and sanitary sewer system designed to the storm drainage and sanitary sewer system, the capacity of said system has been examined and the system is found to be adequate to transport the sformwater and/or waterwater will be added through the proposed sewer without violating any provisions of the Illinois Environmental Protection Act or the rules and regulations thereunder.  Comments, if any:  Engineering Firm: Edwin Hancock Engineering		Wate	ershed Manag	gement Permi	t No.		
Address: 9933 W Roosevelt Road  City: Westchester  Zip: 60154  Date: 6/12/2023  Chame and Title)  Date: 6/12/2023  Chame and Title)  Date: 6/12/2023	accordance with laws, and design proper and adeq system has been through the prop thereunder.	the requirements set for a criteria of the issuing uate; that where the desi examined and the syste cosed sewer without viola	th in this application authority; that the gn involves one come is found to be	ion and all applicate storm drainage or more connection adequate to transp	able ordinances, rule and sanitary sewer ans to an existing loc port the stormwater	es, regulation system desi cal sewer sys and/or waste	as, local, state and federal gned for this project are stem, the capacity of said ewater that will be added
Name and Title)    Comparison of the project area is within the municipal corporate limits.   YES   No	Engineering	g Firm: Edwin Hanco	ock Engineering		Telephone	: (700) 8	365 - 0300
Name and Title)    Comparison of the project area is within the municipal corporate limits.   YES   No	KUE TO COLOR						
Name and Title	Address:	9933 W Roosevelt Roa	d	City:	Westchester	Zip: _	60154
DANIEL J. OMALEY    Committee   Committee	10 E95 0W//	Signature:	Due	O'M du	4	Date:	6/12/2023
DANIEL J. OMALLEY GRADIFIED AND MUNICIPAL OR SYSTEM ENGINEER: The application and the drawings, together with other data bein compilated with this application, have been examined by me and are found to be in compliance with all applicable very an application of drainage is satisfactory and proper in accordance with local requirements. The existing local sewer been project discharges has been examined and the system is found to be adequate to transport the stormwater and/or with the project discharges has been examined and the system is found to be adequate to transport the stormwater and/or the fills and regulations thereunder.  I hereby certify that the project area is within the municipal corporate limits. YES NO  NOTIFIED TO BEEL OF THE PROPERTY OF THE	STATE OF STA	2		,			
Address:    Comparison of the data before the project discharges has been examined by me and are found to be in compliance with all application, have been examined by me and are found to be in compliance with all applicable to the project discharges has been examined and the system is found to be adequate to transport the existing local sewer seems of the project discharges has been examined and the system is found to be adequate to transport the stormwater and/or be adequated to transport the stormwater and/or one of the relies and regulations thereunder.    The project discharges has been examined and the system is found to be adequate to transport the stormwater and/or the project discharges have been examined and the system is found to be adequate to transport the stormwater and/or the project with the project area is within the municipal corporate limits.   YES   NO	- WELL O'MALLEY	mail Address:	domailey@	enancock.cor	n		
Address: Daniel O'Malley, P.E.  Address: Daniel O'Malley, P.E.  City: Westchester  Date: 6/12/2023    City: Westchester   Date: 6/12/2023   City: Westchester   Date: 6/12/2023   City: Westchester   Date: 6/12/2023   City: Westchester   Date: 6/12/2023   City: Westchester   Date: 6/12/2023   City: Westchester   Date: 6/12/2023   City: Westchester   Date: 6/12/2023   City: Westchester   Date: 6/12/2023   City: Westchester   Date: 6/12/2023   City: Westchester   Date: 6/12/2023   City: Westchester   Date: 6/12/2023   City: Westchester   Date: 6/12/2023   City: Westchester   Date: 6/12/2023   City: Westchester   Date: 6/12/2023   City: Westchester   Date: 6/12/2023   City: Westchester   Date: 6/12/2023   City: Westchester   Date: 6/12/2023	other data being requirements.	ABBY MUNICIP showitted with this app he manner of drainage the project discharges he will be added through the	olication, have be is satisfactory and as been examined the proposed sewer	en examined by r d proper in accord d and the system i	ne and are found to dance with local req s found to be adequa	be in compl quirements. ate to transpo	liance with all applicable The existing local sewer ort the stormwater and/or
Address: John LLEY John LLEY (Name and Title)  Email Address: domalley@ehancock.com  Email Address: domalley	Suchelia.		\		rporate limits.	YES 🗖	NO
Date: 6/12/2023    Complete   Date:	A RESERVE OF THE STREET				Telep	hone: <u>(</u> 70	8)865-0300
(Name and Title)  Email Address: domalley@ehancock.com  CERPTFICATE BY INSPECTION ENGINEER: I hereby certify that construction of the project will be in substantial compliance with the data and the plans submitted with this application; that approval will be obtained from the issuing authority prior to making any changes that would affect capacity, maintenance, design requirements, service area or the Permit requirements; that a set of RECORD drawings, signed and sealed by the undersigned Engineer will be furnished to the District or an Authorized Municipality before testing and approval by the District or Authorized Municipality of the completed work.  Engineering Firm: Edwin Hancock Engineering  Telephone: (708)865-0300  CERPTFICATE BY INSPECTION ENGINEER: I hereby certify that construction of the project will be in substantial compliance with the data and the plans submitted with this application; that approval will be obtained from the issuing authority prior to making any changes that would affect capacity, maintenance, design requirements, service area or the Permit requirements; that a set of RECORD drawings, signed and sealed by the undersigned Engineer will be furnished to the District or an Authorized Municipality of the completed work.  Engineering Firm: Edwin Hancock Engineering  Telephone: (708)865-0300  CERPTFICATE BY INSPECTION ENGINEER: I hereby certify that construction of the project will be in substantial complete with this application; that approval will be obtained from the issuing authority prior to making any changes that would affect capacity, maintenance, design requirements, service area or the Permit requirements; that a set of RECORD drawings, signed and sealed by the undersigned Engineer will be furnished to the District or an Authorized Municipality of the complete work.  Engineering Firm: Edwin Hancock Engineering (708)865-0300	Address: 🔌	333 W Roosevelt Road	d	City:	Westchester		Zip 60154
Email Address: domalley@ehancock.com  CERPTRICATE BY INSPECTION ENGINEER: I hereby certify that construction of the project will be in substantial compliance with the data and the plans submitted with this application; that approval will be obtained from the issuing authority prior to making any changes that would affect capacity, maintenance, design requirements, service area or the Permit requirements; that a set of RECORD drawings, signed and sealed by the undersigned Engineer will be furnished to the District or an Authorized Municipality before testing and approval by the District or Authorized Municipality of the completed work.  Engineering Firm: Edwin Hancock Engineering  Telephone: (708)865-0300  City: Westchester  Zip 60154  Date: 6/12/2023		Signature:	Drul	onu	щ	Date:	6/12/2023
CERPTTICATE BY INSPECTION ENGINEER: I hereby certify that construction of the project will be in substantial compliance with the data and the plans submitted with this application; that approval will be obtained from the issuing authority prior to making any changes that would affect capacity, maintenance, design requirements, service area or the Permit requirements; that a set of RECORD drawings, signed and sealed by the undersigned Engineer will be furnished to the District or an Authorized Municipality before testing and approval by the District or Authorized Municipality of the completed work.  Engineering Firm: Edwin Hancock Engineering Telephone: (708)865-0300  City: Westchester Zip 60154  Date: 6/12/2023  (Name and Title)	41.121.2			()	T		
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OARTHE P.E. OARTHUR DATE: OART	compliance with prior to making that a set of RE	n the data and the plans any changes that would CORD drawings, signed	submitted with t affect capacity, n and sealed by th	this application; to maintenance, designed Er	hat approval will be gn requirements, ser gineer will be furni	e obtained fr vice area or shed to the	om the issuing authority the Permit requirements; District or an Authorized
DANIESERO'MALLEY (Name and Title)  Date: 6/12/2023	Engineering	g Firm: Edwin Ha	ıncock Engine	ering	Telep	hone: (7	708)865-0300
Name and Title)	WOZEBSION	9933 W Roosevel	t	City:	Westchester		<b>Zip</b> 60154
Name and Title)		Z	$\mathcal{I}$	0			
	CARDEN - 1 (A) 1 (A) 1 (A)	ுறignature:	Carl.	UMCU		Date:	6/12/2023
The state of the s		Signature:	Chul	(Name and Title)		Date:	6/12/2023

SPECIAL CONDITIONS Water	shed Management Permit No.
This Permit is issued subject to the General Condi	tions and the attached Special Conditions.
If Permit is granted:	
Please return two (2) copies of the Permit to th Please mail one (1) copy to Permittee and one (	
Name: Daniel O'Malley	
Address: 9933 Roosevelt Road, Wes Email: domallev@ehancock.com	tchester, IL 60154
requirements of this Permit application, and agree to requirements of the District. It is understood that co constitute acceptance by the applicants of any Special an Authorized Municipality. It is further understood	read and thoroughly understand the conditions and conform to the Permit conditions and other applicable enstruction hereunder, after the Permit is granted, shall Conditions that may be placed hereon by the District or that this application shall not constitute a Permit until it Engineering of the District or Enforcement Officer of an
PERMITTEE	CO-PERMITTEE
The project area is within municipal corporate limits.  Yes No Not Applicable	(Co-Permittee is Property Owner)  Title to property is held in a land trust: Yes No If yes, Co-Permittee shall be beneficiary with Power of Direction
Municipality Village of Brookfield	Owner
Address 8820 Brookfield Avenue	Address
City Brookfield Zip 60513	City Zip
Signature Rolling	Signature
Name Rocco Barbanente (Print)	Name (Print)
Title Superintendent of Public Works	Title
Date 6/8/2023 Phone 708-485-2540	Date Phone
Email rbarbanente@brookfieldil.gov	Email
REVIEW AND APPROVAL BY THE DIS	TRICT OR AUTHORIZED MUNICIPALITY
Reviewed by:	Date
(Local Sewer Systems) or (Profes	ssional Engineer)
Approved for Issue	
Approved by:	Date

(For the Director of Engineering) or (Enforcement Officer)

## U.S. Army Corps of Engineers (USACE)

## NATIONWIDE PERMIT PRE-CONSTRUCTION NOTIFICATION (PCN)

33 CFR 330. The proponent agency is CECW-CO-R.

Form Approved -OMB No. 0710-0003 Expires: 02-28-2022

DATA REQUIRED BY THE PRIVACY ACT OF 1974

Authority

Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Regulatory Program of the Corps of Engineers (Corps); Final Rule 33 CFR 320-332.

Principal Purpose Information provided on this form will be used in evaluating the nationwide permit pre-construction notification.

Routine Uses

This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and

may be made available as part of the agency coordination process.

Disclosure

Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can

a permit be issued.

The public reporting burden for this collection of information, 0710-0003, is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

## PLEASE DO NOT RETURN YOUR RESPONSE TO THE ABOVE EMAIL.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the district engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

	/ITEMS 4 TUBU 4 TO DE				
	(ITEMS 1 THRU 4 TO BE	FILLED BY THI	E CORPS)		
1. APPLICATION NO.	2. FIELD OFFICE CODE		3. DATE RECEIVED	4. DATE APPLICA	TION COMPLETE
	(ITEMS BELOW TO BE	FILLED BY APP	LICANT)		
5. APPLICANT'S NAME		8. AUTHORIZE	ED AGENT'S NAME A	ND TITLE (agent is no	ot required)
First - Carl Middle -	Last - Muell	First - Lailah	Middle	-R Last - R	eich
Company - Village of Brookfield		Company - Hu	ff & Huff, Inc. (a su	ubsidiary of GZA)	
Company Title -		E-mail Address	-lailah.reich@gza.c	com	
E-mail Address - cmuell@brookfieldil.gov					
6. APPLICANT'S ADDRESS		9. AGENT'S ADDRESS			
Address- 8820 Brookfield Avenue		Address- 915 Harger Road, Suite 330			
City - Brookfield State - IL Zip - 60513 Country - USA		City - Oak Bro	ook State - II	Zip - 60523	Country - USA
7. APPLICANT'S PHONE NOs. with AREA COD	E	10. AGENT'S P	HONE NOs. with ARE	A CODE	
a. Residence b. Business c. Fax 630-965-1612	d. Mobile	a. Residence	b. Business 630-684-4415	c. Fax 630-928-0709	d. Mobile 773-968-4390
	STATEMENT OF	AUTHORIZATIO	N		
11. Thereby authorize, Lailah Reich to act in my behalf as my agent in the processing of this nationwide permit pre-construction notification			ruction notification		
and to furnish, upon request, supplemental information in support of this nationwide permit pre-construction notification.					
Cat Mar ()			5/31/2023		
SIGNATURE OF APPLICANT DATE					
NAN	IE, LOCATION, AND DESCRIP	TION OF PROJE	CT OR ACTIVITY		
<ol> <li>PROJECT NAME or TITLE (see instructions)</li> <li>Burlington Avenue Improvement and Outfe</li> </ol>	Il Project The Village of D	ookfield is a		n governo	2008279779

outfall east of Burlington Avenue into Salt Creek. The purpose of the project is to improve a deteriorated section of Burlington Avenue through reconstruction of a failed subbase, resurface a section of Burlington Avenue that was recently reconstructed, and improve drainage across Burlington Avenue as this roadway experiences ponding during heavy rain events and therefore a new storm sewer is being proposed to be installed from Elm Avenue to Prairie Avenue, which will include a new outlet into the west bank of Salt Creek.

**ENG FORM 6082, OCT 2019** 

PREVIOUS EDITIONS ARE OBSOLETE.

Page 1 of

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY						
13, NAME OF \	WATERBODY, IF KN	OWN (if applicable)		14. PROPOSED ACTIVITY STREET ADDRESS	(if applicable)	
Salt Creck				Burlington Avenue		
15. LOCATION OF PROPOSED ACTIVITY (see instructions)  Latitude °N Longitude °W  41.821925° -87.841056°		City: Village of Brookfield	State: IL	Zip:		
16. OTHER LO	CATION DESCRIPTI	ONS, IF KNOWN (	see instructions)	1		
State Tax Parce	el ID			Municipality		
Available upo	n request.			Brookfield		
Section		То	wnship	Range		
3, 34, and 35		38	39N and 39N	12 East		
17. DIRECTION	IS TO THE SITE					

The project limits extend west along Burlington Avenue from Salt Creek to DuBois Boulevard and extends south along DuBois Boulevard from Burlington Avenue to Ogden Avenue. See Figure 1 in Appendix A, which depicts the project limits.

## 18. IDENTIFY THE SPECIFIC NATIONWIDE PERMIT(S) YOU PROPOSE TO USE

Nationwide Permit #7 (Outfall Structures and Associated Intake Structures).

## 19. DESCRIPTION OF PROPOSED NATIONWIDE PERMIT ACTIVITY (see instructions)

The proposed project will result in a total of 0.0003 acre of permanent impacts and 0.0036 acre of temporary impacts to Salt Creek (Site W1). Impacts to Salt Creek will occur as a result of the placement of riprap beneath the new outfall and for temporary construction activities. Indirect impacts to Salt Creek are not anticipated. Wetlands are not located within the project vicinity.

## 20. DESCRIPTION OF PROPOSED MITIGATION MEASURES (see instructions)

Because permanent impacts to the streambed associated with Salt Creek are less than 0.03 acre and less than 300 linear feet, mitigation is not anticipated to be required as part of Section 404 permitting.

## 21, PURPOSE OF NATIONWIDE PERMIT ACTIVITY (Describe the reason or purpose of the project, see instructions)

The purpose of the project is to improve a deteriorated section of Burlington Avenue through reconstruction of a failed subbase, resurface a section of Burlington Avenue that was recently reconstructed, and improve drainage across Burlington Avenue as this roadway experiences ponding during heavy rain events and therefore a new storm sewer is being proposed to be installed from Elm Avenue to Prairie Avenue, which will include a new outlet into the west bank of Salt Creek. As part of the project, riprap will be placed below the proposed outlet into Salt Creek to provide dissipation, slow water velocities, and prevent erosion and scour within Salt Creek.

22. QUANTITY OF WETLANDS, STREAMS, OR OTHER TYPES OF WATERS DIRECTLY AFFECTED BY PROPOSED NATIONWIDE PERMIT ACTIVITY (see instructions)

Acres

Linear Feet

Cubic Yards Dredged or Discharged

0.0003

Approximately 6 feet

Available upon request

Each PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site.

23. List any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, (see instructions) None.

25. Is any portion of the nationwide permit activity already complete? Yes No If Yes, describe the completed work:
26. List the name(s) of any species listed as endangered or threatened under the Endangered Species Act that might be affected by the proposed NWP activity or utilize the designated critical habitat that might be affected by the proposed NWP activity. (see instructions)
27. List any historic properties that have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic
property or properties. (see instructions) The Illinois State Preservation Office (SHPO) completed a Section 106 and 107 review for the proposed project. Cultural approval was received on October 20, 2020, which is attached with this submittal package.
28. For a proposed NWP activity that will occur in a component of the Natlonal Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, identify the Wild and Scenic River or the "study river":  Wild and scenic rivers and designated 'study rivers' are not located within or adjacent to the project limits.
29. If the proposed NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, have you submitted a written request for section 408 permission from the Corps district having jurisdiction over that project?  Yes No  If "yes", please provide the date your request was submitted to the Corps district:
30. If the terms of the NWP(s) you want to use require additional information to be included in the PCN, please include that information in this space or provide it on an additional sheet of paper marked Block 30. (see instructions) Please see attached for additional information for the PCN.
31. Pre-construction notification is hereby made for one or more nationwide permit(s) to authorize the work described in this notification. I certify that the information in this pre-construction notification is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.    Complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.    Complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.    Complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.    Complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.    Complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.    Complete and accurate accurate and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.
The pre-construction notification must be signed by the person who desires to undertake the proposed activity (applicant) and, if the statement in Block 11 has been filled out and signed, the authorized agent.
18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

## Instructions for Preparing a

#### Department of the Army

#### Nationwide Permit (NWP) Pre - Construction Notification (PCN)

Blocks 1 through 4. To be completed by the Corps of Engineers.

**Block 5. Applicant's Name.** Enter the name and the e - mail address of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the name of the organization and responsible officer and title. If more than one party is associated with the preconstruction notification, please attach a sheet of paper with the necessary information marked Block 5.

**Block 6. Address of Applicant.** Please provide the full address of the party or parties responsible for the PCN. If more space is needed, attach an extra sheet of paper marked Block 6.

Block 7. Applicant's Telephone Number(s). Please provide the telephone number where you can usually be reached during normal business hours.

Blocks 8 through 11. To be completed, if you choose to have an agent.

Block 8. Authorized Agent's Name and Title. Indicate name of individual or agency, designated by you, to represent you in this process. An agent can be an attorney, builder, contractor, engineer, consultant, or any other person or organization. Note: An agent is not required.

Blocks 9 and 10. Agent's Address and Telephone Number. Please provide the complete mailing address of the agent, along with the telephone number where he / she can be reached during normal business hours.

Block 11. Statement of Authorization. To be completed by the applicant, if an agent is to be employed.

Block 12. Proposed Nationwide Permit Activity Name or Title. Please provide a name identifying the proposed NWP activity, e.g., Windward Marina, Rolling Hills Subdivision, or Smith Commercial Center.

Block 13. Name of Waterbody. Please provide the name (if it has a name) of any stream, lake, marsh, or other waterway to be directly impacted by the NWP activity, If it is a minor (no name) stream, identify the waterbody the minor stream enters.

Block 14. Proposed Activity Street Address. If the proposed NWP activity is located at a site having a street address (not a box number), please enter it in Block 14.

Block 15. Location of Proposed Activity. Enter the latitude and longitude of where the proposed NWP activity is located. Indicate whether the project location provided is the center of the project or whether the project location is provided as the latitude and longitude for each of the "corners" of the project area requiring evaluation. If there are multiple sites, please list the latitude and longitude of each site (center or corners) on a separate sheet of paper and mark as Block 15.

**Block 16. Other Location Descriptions.** If available, provide the Tax Parcel Identification number of the site, Section, Township, and Range of the site (if known), and / or local Municipality where the site is located.

Block 17. Directions to the Site. Provide directions to the site from a known location or landmark. Include highway and street numbers as well as names. Also provide distances from known locations and any other information that would assist in locating the site. You may also provide a description of the location of the proposed NWP activity, such as lot numbers, tract numbers, or you may choose to locate the proposed NWP activity site from a known point (such as the right descending bank of Smith Creek, one mile downstream from the Highway 14 bridge), If a large river or stream, include the river mile of the proposed NWP activity site if known. If there are multiple locations, please indicate directions to each location on a separate sheet of paper and mark as Block 17.

Block 18. Identify the Specific Nationwide Permit(s) You Propose to Use. List the number(s) of the Nationwide Permit(s) you want to use to authorize the proposed activity (e.g., NWP 29).

Block 19. Description of the Proposed Nationwide Permit Activity. Describe the proposed NWP activity, including the direct and indirect adverse environmental effects the activity would cause. The description of the proposed activity should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal. Identify the materials to be used in construction, as well as the methods by which the work is to be done.

Provide sketches when necessary to show that the proposed NWP activity complies with the terms of the applicable NWP(s). Sketches usually clarify the activity and result in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed NWP activity (e.g., a conceptual plan), but do not need to be detailed engineering plans.

The written descriptions and illustrations are an important part of the application. Please describe, in detail, what you wish to do. If more space is needed, attach an extra sheet of paper marked Block 19.

Block 20. Description of Proposed Mitigation Measures. Describe any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed NWP activity. The description of any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or additional mitigation measures.

Block 21. Purpose of Nationwide Permit Activity. Describe the purpose and need for the proposed NWP activity. What will it be used for and why? Also include a brief description of any related activities associated with the proposed project. Provide the approximate dates you plan to begin and complete all work.

Block 22. Quantity of Wetlands, Streams, or Other Types of Waters Directly Affected by the Proposed Nationwide Permit Activity. For discharges of dredged or fill material into waters of the United States, provide the amount of wetlands, streams, or other types of waters filled, flooded, excavated, or drained by the proposed NWP activity. For structures or work in navigable waters of the United States subject to Section 10 of the Rivers and Harbors Act of 1899, provide the amount of navigable waters filled, dredged, or occupied by one or more structures (e.g., aids to navigation, mooring buoys) by the proposed NWP activity.

For multiple NWPs, or for separate and distant crossings of waters of the United States authorized by NWPs 12 or 14, attach an extra sheet of paper marked Block 21 to provide the quantities of wetlands, streams, or other types of waters filled, flooded, excavated, or drained (or dredged or occupied by structures, if in waters subject to Section 10 of the Rivers and Harbors Act of 1899) for each NWP. For NWPs 12 and 14, include the amount of wetlands, streams, or other types of waters filled, flooded, excavated, or drained for each separate and distant crossing of waters or wetlands. If more space is needed, attach an extra sheet of paper marked Block 22.

Block 23. Identify Any Other Nationwide Permit(s), Regional General Permit(s), or Individual Permit(s) Used to Authorize Any Part of Proposed Activity or Any Related Activity. List any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. For linear projects, list other separate and distant crossings of waters and wetlands authorized by NWPs 12 or 14 that do not require PCNs, If more space is needed, attach an extra sheet of paper marked Block 23.

Block 24. Compensatory Mitigation Statement for Losses of Greater Than 1/10 - Acre of Wetlands When Pre - Construction Notification is Required. Paragraph (c) of NWP general condition 23 requires compensatory mitigation at a minimum one - for - one replacement ratio will be required for all wetland losses that exceed 1/10 - acre and require pre - construction notification, unless the district engineer determines in writing that either some other form of mitigation is more environmentally appropriate or the adverse environmental effects of the proposed NWP activity are no more than minimal without compensatory mitigation, and provides an activity - specific waiver of this requirement. Describe the proposed compensatory mitigation for wetland losses greater than 1/10 acre, or provide an explanation of why the district engineer should not require wetland compensatory mitigation for the proposed NWP activity. If more space is needed, attach an extra sheet of paper marked Block 24.

Block 25. Is Any Portion of the Nationwide Permit Activity Already Complete? Describe any work that has already been completed for the NWP activity.

Block 26. List the Name(s) of Any Species Listed As Endangered or Threatened under the Endangered Species Act that Might be Affected by the Nationwide Permit Activity. If you are not a federal agency, and if any listed species or designated critical habitat might be affected or is in the vicinity of the proposed NWP activity, or if the proposed NWP activity is located in designated critical habitat, list the name(s) of those endangered or threatened species that might be affected by the proposed NWP activity or utilize the designated critical habitat that might be affected by the proposed NWP activity. If you are a Federal agency, and the proposed NWP activity requires a PCN, you must provide documentation demonstrating compliance with Section 7 of the Endangered Species Act.

Block 27. List Any Historic Properties that Have the Potential to be Affected by the Nationwide Permit Activity. If you are not a Federal agency, and if any historic properties have the potential to be affected by the proposed NWP activity, list the name(s) of those historic properties that have the potential to be affected by the proposed NWP activity. If you are a Federal agency, and the proposed NWP activity requires a PCN, you must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

Block 28. List the Wild and Scenic River or Congressionally Designated Study River if the Nationwide Permit Activity Would Occur in such a River. If the proposed NWP activity will occur in a river in the National Wild and Scenic River System or in a river officially designated by Congress as a "study river" under the Wild and Scenic Rivers Act, provide the name of the river. For a list of Wild and Scenic Rivers and study rivers, please visit http://www.rivers.gov/.

Block 29. Nationwide Permit Activities that also Require Permission from the Corps Under 33 U.S.C. 408. If the proposed NWP activity also requires permission from the Corps under 33 U.S.C. 408 because it will temporarily or permanently alter, occupy, or use a Corps federal authorized civil works project, indicate whether you have submitted a written request for section 408 permission from the Corps district having jurisdiction over that project.

Block 30. Other Information Required For Nationwide Permit Pre - Construction Notifications. The terms of some of the Nationwide Permits include additional information requirements for preconstruction notifications:

- \* NWP 3, Maintenance –information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals.
- \* NWP 31, Maintenance of Existing Flood Control Facilities -a description of the maintenance baseline and the dredged material disposal site.
- \* NWP 33, Temporary Construction, Access, and Dewatering –a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre project conditions.
- \* NWP 44, Mining Activities –if reclamation is required by other statutes, then a copy of the final reclamation plan must be submitted with the pre-construction

notification.

- \* NWP 45, Repair of Uplands Damaged by Discrete Events –documentation, such as a recent topographic survey or photographs, to justify the extent of the proposed restoration.
- \* NWP 48, Commercial Shellfish Aquaculture Activities –(1) a map showing the boundaries of the project area, with latitude and longitude coordinates for each corner of the project area; (2) the name(s) of the species that will be cultivated during the period this NWP is in effect; (3) whether canopy predator nets will be used; (4) whether suspended cultivation techniques will be used; and (5) general water depths in the project area (a detailed survey is not required).
- \* NWP 49, Coal Remining Activities –a document describing how the overall mining plan will result in a net increase in aquatic resource functions must be submitted to the district engineer and receive written authorization prior to commencing the activity.
- \* NWP 50, Underground Coal Mining Activities –if reclamation is required by other statutes, then a copy of the reclamation plan must be submitted with the pre construction notification.

If more space is needed, attach an extra sheet of paper marked Block 30.

Block 31. Signature of Applicant or Agent. The PCN must be signed by the person proposing to undertake the NWP activity, and if applicable, the authorized party (agent) that prepared the PCN. The signature of the person proposing to undertake the NWP activity shall be an affirmation that the party submitting the PCN possesses the requisite property rights to undertake the NWP activity (including compliance with special conditions, mitigation, etc.).

## DELINEATION OF WETLANDS, OTHER SPECIAL AQUATIC SITES, AND OTHER WATERS

Each PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current wetland delineation manual and regional supplement published by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. The 45 day PCN review period will not start until the delineation is submitted or has been completed by the Corps.

## DRAWINGS AND ILLUSTRATIONS

#### General Information.

Three types of illustrations are needed to properly depict the work to be undertaken. These illustrations or drawings are identified as a Vicinity Map, a Plan View or a Typical Cross - Section Map. Identify each illustration with a figure or attachment number. For linear projects (e.g. roads, subsurface utility lines, etc.) gradient drawings should also be included. Please submit one original, or good quality copy, of all drawings on 8½x11 inch plain white paper (electronic media may be substituted). Use the fewest number of sheets necessary for your drawings or illustrations. Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view, or cross - section). While illustrations need not be professional (many small, private project illustrations are prepared by

hand), they should be clear, accurate, and contain all necessary information.

#### ADDITIONAL INFORMATION AND REQUIREMENTS

For proposed NWP activities that involve discharges into waters of the United States, water quality certification from the State, Tribe, or EPA must be obtained or waived (see NWP general condition 25). Some States, Tribes, or EPA have issued water quality certification for one or more NWPs. Please check the appropriate Corps district web site to see if water quality certification has already been issued for the NWP(s) you wish to use. For proposed NWP activities in coastal states, state Coastal Zone Management Act consistency concurrence must be obtained, or a presumption of concurrence must occur (see NWP general condition 26). Some States have issued Coastal Zone Management Act consistency concurrences for one or more NWPs. Please check the appropriate Corps district web site to see if Coastal Zone Management Act consistency concurrence has already been issued for the NWP(s) you wish to use.



## **EXHIBIT "C-1"**

# Agreement Between BNSF RAILWAY COMPANY and the CONTRACTOR

Kaliway File:		<del></del>
Agency Project:		
	,,	entered into an agreement (hereinafter
		<b>gency's Name</b> for the performance of
certain work in connection	with the following project:	Performance of such
work will necessarily requir	re Contractor to enter BNSF RA	ILWAY COMPANY (hereinafter called
"Railway") right of way and բ	property (hereinafter called "Railw	ay Property"). The Agreement provides
that no work will be commer	nced within Railway Property until	the Contractor employed in connection
with said work for <b>Agency</b> 's	s Name (i) executes and delivers	s to Railway an Agreement in the form
hereof, and (ii) provides in	surance of the coverage and lin	mits specified in such Agreement and
Section 3 herein. If this Ag	preement is executed by a party v	who is not the Owner, General Partner,
President or Vice President	of Contractor, Contractor must ful	rnish evidence to Railway certifying that
the signatory is empowered	to execute this Agreement on beh	alf of Contractor.

Accordingly, in consideration of Railway granting permission to Contractor to enter upon Railway Property and as an inducement for such entry, Contractor, effective on the date of the Agreement, has agreed and does hereby agree with Railway as follows:

## 1) RELEASE OF LIABILITY AND INDEMNITY

Contractor hereby waives, releases, indemnifies, defends and holds harmless Railway for all judgments, awards, claims, demands, and expenses (including attorneys' fees), for injury or death to all persons, including Railway's and Contractor's officers and employees, and for loss and damage to property belonging to any person, arising in any manner from Contractor's or any of Contractor's subcontractors' acts or omissions or any work performed on or about Railway's property or right-of-way. THE LIABILITY ASSUMED BY CONTRACTOR WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE DESTRUCTION, DAMAGE, DEATH, OR INJURY WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF RAILWAY, ITS AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROXIMATELY CAUSED BY THE INTENSIONAL MISCONDUCT OR GROSS NEGLIGENCE OF RAILWAY.



THE INDEMNIFICATION OBLIGATION ASSUMED BY CONTRACTOR INCLUDES ANY CLAIMS, SUITS OR JUDGMENTS BROUGHT AGAINST RAILWAY UNDER THE FEDERAL EMPLOYEE'S LIABILITY ACT, INCLUDING CLAIMS FOR STRICT LIABILITY UNDER THE SAFETY APPLIANCE ACT OR THE LOCOMOTIVE INSPECTION ACT, WHENEVER SO CLAIMED.

Contractor further agrees, at its expense, in the name and on behalf of Railway, that it will adjust and settle all claims made against Railway, and will, at Railway's discretion, appear and defend any suits or actions of law or in equity brought against Railway on any claim or cause of action arising or growing out of or in any manner connected with any liability assumed by Contractor under this Agreement for which Railway is liable or is alleged to be liable. Railway will give notice to Contractor, in writing, of the receipt or dependency of such claims and thereupon Contractor must proceed to adjust and handle to a conclusion such claims, and in the event of a suit being brought against Railway, Railway may forward summons and complaint or other process in connection therewith to Contractor, and Contractor, at Railway's discretion, must defend, adjust, or settle such suits and protect, indemnify, and save harmless Railway from and against all damages, judgments, decrees, attorney's fees, costs, and expenses growing out of or resulting from or incident to any such claims or suits.

In addition to any other provision of this Agreement, in the event that all or any portion of this Article shall be deemed to be inapplicable for any reason, including without limitation as a result of a decision of an applicable court, legislative enactment or regulatory order, the parties agree that this Article shall be interpreted as requiring Contractor to indemnify Railway to the fullest extent permitted by applicable law. THROUGH THIS AGREEMENT THE PARTIES EXPRESSLY INTEND FOR CONTRACTOR TO INDEMNIFY RAILWAY FOR RAILWAY'S ACTS OF NEGLIGENCE.

It is mutually understood and agreed that the assumption of liabilities and indemnification provided for in this Agreement survive any termination of this Agreement.

## 2) **TERM**

This Agreement is effective from the date of the Agreement until (i) the completion of the project set forth herein, and (ii) full and complete payment to Railway of any and all sums or other amounts owing and due hereunder.

## 3) **INSURANCE**

Contractor shall, at its sole cost and expense, procure and maintain during the life of this Agreement the following insurance coverage:

A. Commercial General Liability insurance. This insurance shall contain broad form contractual liability with a combined single limit of a minimum of \$2,000,000 each



occurrence and an aggregate limit of at least \$4,000,000 but in no event less than the amount otherwise carried by the Contractor. Coverage must be purchased on a post 2004 ISO occurrence form or equivalent and include coverage for, but not limit to the following:

- ♦ Bodily Injury and Property Damage
- Personal Injury and Advertising Injury
- ♦ Fire legal liability
- Products and completed operations

This policy shall also contain the following endorsements, which shall be indicated on the certificate of insurance:

- ◆ The definition of insured contract shall be amended to remove any exclusion or other limitation for any work being done within 50 feet of railroad property.
- Waver of subrogation in favor of and acceptable to Railway.
- Additional insured endorsement in favor of and acceptable to Railway.
- ♦ Separation of insureds.
- ◆ The policy shall be primary and non-contributing with respect to any insurance carried by Railway.

It is agreed that the workers' compensation and employers' liability related exclusions in the Commercial General Liability insurance policy(s) required herein are intended to apply to employees of the policy holder and shall not apply to *Railway* employees.

No other endorsements limiting coverage as respects obligations under this Agreement may be included on the policy with regard to the work being performed under this agreement.

- B. Business Automobile Insurance. This insurance shall contain a combined single limit of at least \$1,000,000 per occurrence, and include coverage for, but not limited to the following:
  - Bodily injury and property damage
  - Any and all vehicles owned, used or hired

The policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

- Waiver of subrogation in favor of and acceptable to Railway.
- ♦ Additional insured endorsement in favor of and acceptable to Railway.
- Separation of insureds.
- ◆ The policy shall be primary and non-contributing with respect to any insurance carried by Railway.



- C. Workers Compensation and Employers Liability insurance including coverage for, but not limited to:
  - Contractor's statutory liability under the worker's compensation laws of the state(s) in which the work is to be performed. If optional under State law, the insurance must cover all employees anyway.
  - ◆ Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 by disease policy limit, \$500,000 by disease each employee.

This policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

- Waiver of subrogation in favor of and acceptable to Railway.
- D. Railroad Protective Liability insurance naming only the *Railway* as the Insured with coverage of at least \$2,000,000 per occurrence and \$6,000,000 in the aggregate. The policy Must be issued on a standard ISO form CG 00 35 12 04 and include the following:
  - ♦ Endorsed to include the Pollution Exclusion Amendment
  - Endorsed to include the Limited Seepage and Pollution Endorsement.
  - Endorsed to remove any exclusion for punitive damages.
  - No other endorsements restricting coverage may be added.
  - ◆ The original policy must be provided to the *Railway* prior to performing any work or services under this Agreement
  - Definition of "Physical Damage to Property" shall be endorsed to read: "means direct and accidental loss of or damage to all property owned by any named insured and all property in any named insured care, custody, and control arising out of the acts or omissions of the contractor named on the Declarations.

In lieu of providing a Railroad Protective Liability Policy, Licensee may participate (if available) in Railway's Blanket Railroad Protective Liability Insurance Policy.

## Other Requirements:

Where allowable by law, all policies (applying to coverage listed above) shall contain no exclusion for punitive damages.

Contractor agrees to waive its right of recovery against *Railway* for all claims and suits against *Railway*. In addition, its insurers, through the terms of the policy or policy endorsement, waive their right of subrogation against *Railway* for all claims and suits. Contractor further waives its right of recovery, and its insurers also waive their right of subrogation against *Railway* for loss of its owned or leased property or property under Contractor's care, custody or control.

Allocated Loss Expense shall be in addition to all policy limits for coverages referenced above.



Contractor is not allowed to self-insure without the prior written consent of *Railway*. If granted by *Railway*, any self-insured retention or other financial responsibility for claims shall be covered directly by Contractor in lieu of insurance. Any and all *Railway* liabilities that would otherwise, in accordance with the provisions of this Agreement, be covered by Contractor's insurance will be covered as if Contractor elected not to include a deductible, self-insured retention or other financial responsibility for claims.

Prior to commencing services, Contractor shall furnish to *Railway* an acceptable certificate(s) of insurance from an authorized representative evidencing the required coverage(s), endorsements, and amendments. The certificate should be directed to the following address:

BNSF Railway Company
c/o CertFocus
P.O. Box 140528
Kansas City, MO 64114
Toll Free: 877-576-2378
Fax number: 817-840-7487
Email: BNSF@certfocus.com
www.certfocus.com

Contractor shall notify *Railway* in writing at least 30 days prior to any cancellation, non-renewal, substitution or material alteration.

Any insurance policy shall be written by a reputable insurance company acceptable to *Railway* or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provided.

If coverage is purchased on a "claims made" basis, Contractor hereby agrees to maintain coverage in force for a minimum of three years after expiration, cancellation or termination of this Agreement. Annually Contractor agrees to provide evidence of such coverage as required hereunder.

Contractor represents that this Agreement has been thoroughly reviewed by Contractor's insurance agent(s)/broker(s), who have been instructed by Contractor to procure the insurance coverage required by this Agreement.

Not more frequently than once every five years, *Railway* may reasonably modify the required insurance coverage to reflect then-current risk management practices in the railroad industry and underwriting practices in the insurance industry.

If any portion of the operation is to be subcontracted by Contractor, Contractor shall require that the subcontractor shall provide and maintain insurance coverage(s) as set forth herein,



naming *Railway* as an additional insured, and shall require that the subcontractor shall release, defend and indemnify *Railway* to the same extent and under the same terms and conditions as Contractor is required to release, defend and indemnify *Railway* herein.

Failure to provide evidence as required by this section shall entitle, but not require, *Railway* to terminate this Agreement immediately. Acceptance of a certificate that does not comply with this section shall not operate as a waiver of Contractor's obligations hereunder.

The fact that insurance (including, without limitation, self-insurance) is obtained by Contractor shall not be deemed to release or diminish the liability of Contractor including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by *Railway* shall not be limited by the amount of the required insurance coverage.

In the event of a claim or lawsuit involving *Railway* arising out of this agreement, Contractor will make available any required policy covering such claim or lawsuit.

These insurance provisions are intended to be a separate and distinct obligation on the part of the Contractor. Therefore, these provisions shall be enforceable and Contractor shall be bound thereby regardless of whether or not indemnity provisions are determined to be enforceable in the jurisdiction in which the work covered hereunder is performed.

For purposes of this section, *Railway* shall mean "Burlington Northern Santa Fe LLC", "BNSF Railway Company" and the subsidiaries, successors, assigns and affiliates of each.

## 4) SALES AND OTHER TAXES

In the event applicable sales taxes of a state or political subdivision of a state of the United States are levied or assessed in connection with and directly related to any amounts invoiced by Contractor to Railway ("Sales Taxes"), Railway shall be responsible for paying only the Sales Taxes that Contractor separately states on the invoice or other billing documents provided to Railway; provided, however, that (i) nothing herein shall preclude Railway from claiming whatever Sales Tax exemptions are applicable to amounts Contractor bills Railway, (ii) Contractor shall be responsible for all sales, use, excise, consumption, services and other taxes which may accrue on all services, materials, equipment, supplies or fixtures that Contractor and its subcontractors use or consume in the performance of this Agreement, (iii) Contractor shall be responsible for Sales Taxes (together with any penalties, fines or interest thereon) that Contractor fails to separately state on the invoice or other billing documents provided to Railway or fails to collect at the time of payment by Railway of invoiced amounts (except where Railway claims a Sales Tax exemption), and (iv) Contractor shall be responsible for Sales Taxes (together with any penalties, fines or interest thereon) if Contractor fails to issue separate invoices for each state in which Contractor delivers goods, provides services or, if applicable, transfers intangible rights to Railway.

Upon request, Contractor shall provide Railway satisfactory evidence that all taxes (together with any penalties, fines or interest thereon) that Contractor is responsible to pay under this



Agreement have been paid. If a written claim is made against Contractor for Sales Taxes with respect to which Railway may be liable for under this Agreement, Contractor shall promptly notify Railway of such claim and provide Railway copies of all correspondence received from the taxing authority. Railway shall have the right to contest, protest, or claim a refund, in Railway's own name, any Sales Taxes paid by Railway to Contractor or for which Railway might otherwise be responsible for under this Agreement; provided, however, that if Railway is not permitted by law to contest any such Sales Tax in its own name, Contractor shall, if requested by Railway at Railway's sole cost and expense, contest in Contractor's own name the validity, applicability or amount of such Sales Tax and allow Railway to control and conduct such contest.

Railway retains the right to withhold from payments made under this Agreement amounts required to be withheld under tax laws of any jurisdiction. If Contractor is claiming a withholding exemption or a reduction in the withholding rate of any jurisdiction on any payments under this Agreement, before any payments are made (and in each succeeding period or year as required by law), Contractor agrees to furnish to Railway a properly completed exemption form prescribed by such jurisdiction. Contractor shall be responsible for any taxes, interest or penalties assessed against Railway with respect to withholding taxes that Railway does not withhold from payments to Contractor.

## 5) EXHIBIT "C" CONTRACTOR REQUIREMENTS

The Contractor must observe and comply with all provisions, obligations, requirements and limitations contained in the Agreement, and the Contractor Requirements set forth on Exhibit "C" attached to the Agreement and this Agreement, including, but not be limited to, payment of all costs incurred for any damages to Railway roadbed, tracks, and/or appurtenances thereto, resulting from use, occupancy, or presence of its employees, representatives, or agents or subcontractors on or about the construction site. Contractor shall execute a Temporary Construction Crossing Agreement or Private Crossing Agreement (<a href="http://www.bnsf.com/communities/faqs/permits-real-estate/">http://www.bnsf.com/communities/faqs/permits-real-estate/</a>), for any temporary crossing requested to aid in the construction of this Project, if approved by BNSF.

## 6) TRAIN DELAY

Contractor is responsible for and hereby indemnifies and holds harmless Railway (including its affiliated railway companies, and its tenants) for, from and against all damages arising from any unscheduled delay to a freight or passenger train which affects Railway's ability to fully utilize its equipment and to meet customer service and contract obligations. Contractor will be billed, as further provided below, for the economic losses arising from loss of use of equipment, contractual loss of incentive pay and bonuses and contractual penalties resulting from train delays, whether caused by Contractor, or subcontractors, or by the Railway performing work under this Agreement. Railway agrees that it will not perform any act to unnecessarily cause train delay.



For loss of use of equipment, Contractor will be billed the current freight train hour rate per train as determined from Railway's records. Any disruption to train traffic may cause delays to multiple trains at the same time for the same period.

Additionally, the parties acknowledge that passenger, U.S. mail trains and certain other grain, intermodal, coal and freight trains operate under incentive/penalty contracts between Railway and its customer(s). Under these arrangements, if Railway does not meet its contract service commitments, Railway may suffer loss of performance or incentive pay and/or be subject to penalty payments. Contractor is responsible for any train performance and incentive penalties or other contractual economic losses actually incurred by Railway which are attributable to a train delay caused by Contractor or its subcontractors.

The contractual relationship between Railway and its customers is proprietary and confidential. In the event of a train delay covered by this Agreement, Railway will share information relevant to any train delay to the extent consistent with Railway confidentiality obligations. The rate then in effect at the time of performance by the Contractor hereunder will be used to calculate the actual costs of train delay pursuant to this agreement.

Contractor and its subcontractors must give Railway's representative (\_\_\_\_\_\_\_) weeks advance notice of the times and dates for proposed work windows. Railway and Contractor will establish mutually agreeable work windows for the project. Railway has the right at any time to revise or change the work windows due to train operations or service obligations. Railway will not be responsible for any additional costs or expenses resulting from a change in work windows. Additional costs or expenses resulting from a change in work windows shall be accounted for in Contractor's expenses for the project.

Contractor and subcontractors must plan, schedule, coordinate and conduct all Contractor's work so as to not cause any delays to any trains.



IN WITNESS WHEREOF, each of the parties hereto has caused this Agreement to be executed by its duly authorized officer the day and year first above written.

Contractor's Name	BNSF Railway Company			
Ву:	By:			
Printed Name:	Manager Public Projects			
Title:	Accepted and effective thisday of 20			
Contact Person:				
Address:				
City:				
State: Zip:				
Fax:				
Phone:				
F-mail:				



## Illinois Environmental Protection Agency

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

## **Uncontaminated Soil Certification**

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

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

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

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

I. Source Location Information			
(Describe the location of the source of the Project Name: Burlington Avenue Impro-	·	Office Phone Numl	per, if available:
Physical Site Location (address, includin Dubois Blvd: Ogden Ave to Burlington A	g number and street):	oois Blvd to Grove Ave - S	See Attached Figures
City: Brookfield	State: IL	Zip Code: 60513	
County: Cook	Township: Provis	o; Lyons	
Lat/Long of approximate center of site in	decimal degrees (DD.c	ldddd) to five decimal pla	ces (e.g., 40.67890, -90.12345):
Latitude: 41,82029 Longitude:	- 87.85059		
(Decimal Degrees) Identify how the lat/long data were deter	(-Decimal Degrees) mined:		
○ GPS ② Map Interpolation ○ P	hoto Interpolation (	Survey Other	
IEPA Site Number(s), If assigned: BC	DL:	BOW:	BOA:
Approximate Start Date (mm/dd/yyyy):		_ Approximate End Date	(mm/dd/yyyy):
Estimated Volume of debris (cu. Yd.):	-	-	
II. Owner/Operator Information	for Source Site		ž
Site Owner		Site Operator	
Name:	Village of Brookfield	Name:	
Street Address: 882	0 Brookfield Avenue	Street Address:	
PO Box:		PO Box:	
City: Brook	field State: IL	City:	State:
Zip Code: 60513 Pho	ne: 708.485.7344	Zip Code:	Phone:
Contact:	N-0-3	Contact:	· · · · · · · · · · · · · · · · · · ·
Email, if available:		Email, if available:	

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

IL 532-2922 LPC 663 Rev. 1/2019

#### Latitude: 41.82029

Longitude: - 87.85059

## **Uncontaminated Soil Certification**

## III. Basis for Certification and Attachments

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

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

A limited historical & regulatory review was performed to identify PIPs. Site reconnaissance was performed while sampling to evaluate on-site environmental conditions & potential PIPs. Based on the nature & scope of the project, 22 soil samples were collected for indicator contaminants associated with identified PIPs and screened with a PID. Figures 3, 3A-3F show sample locations.

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

See attached analytical summary tables, laboratory reports and associated NELAC certification. Figures 3, 3A-3F identify the project area that is covered by this certification.

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

(name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 III. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

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

Company Name:	True North Consu	Itants			
Street Address:	1000 E Warrenvill	e Road, Suite 140			
City:	Naperville	State:	IL	Zip Code: 60563	
Phone:	630-717-2880				
Ryan M. LaDieu					
Printed Name:					
Licensed Professional	Ingineer or Geologist Signature:	)	•	5/11/2023 Date:	OFESSION
					RYAN M. LaDIEU
					062-053687
IL 532-2922 LPC 663 Rev. 1/2019		Uncontaminated	l Soil	Certification	Page 2 of 2

## AGGREGATE SUBGRADE IMPROVEMENT (BDE)

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

Add the following Section to the Standard Specifications:

#### "SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT

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

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

Item	Article/Section
(a) Coarse Aggregate	1004.07
(b) Reclaimed Asphalt Pavement (RAP)	1031.09

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

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

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

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

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

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

Add the following to Section 1004 of the Standard Specifications:

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

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

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

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

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

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

Add the following to Article 1031.09 of the Standard Specifications:

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

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

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

## **BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE)**

Effective: November 2, 2006 Revised: August 1, 2017

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

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

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

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

Where: CA = Cost Adjustment, \$.

BPI<sub>P</sub> = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).

BPI<sub>L</sub> = Bituminous Price Index, as published by the Department for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price, \$/ton (\$/metric ton).

 $^{\circ}$ AC $_{V}$  = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the  $^{\circ}$  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 %  $AC_{V.}$ 

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

Where: A = Area of the HMA mixture, sq yd (sq m).

D = Depth of the HMA mixture, in. (mm).

 $G_{mb}$  = Average bulk specific gravity of the mixture, from the approved mix design.

V = Volume of the bituminous material, gal (L).

SG = Specific Gravity of bituminous material as shown on the bill of lading.

<u>Basis of Payment</u>. 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."

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Add the following to Section 109 of the Standard Specifications.

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

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

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

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

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

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

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

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

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

## CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

Effective: June 1, 2010 Revised: November 1, 2014

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

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

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

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

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

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

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

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

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

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

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

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

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

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

#### **Diesel Retrofit Deficiency Deduction**

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

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

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

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

## 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

	Type 1					Type 2					Type 3					Type 4				
Nominal	F	Fill Height: 3' and less,					Fill Height: Greater than 3',				Fill Height: Greater than 10',				Fill Height: Greater than 15',					
Diameter with 1' min			not exceeding 10'					not exceeding 15'					not exceeding 20'							
(in.)	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP
10	Χ	QPL	Χ	QPL	NA	Х	QPL	Х	QPL	NA	Χ	QPL	Χ	QPL	NA	Х	QPL	Χ	QPL	NA
12	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL
15	Χ	QPL	NA	QPL	QPL	Χ	QPL	NA	QPL	QPL	Χ	QPL	NA	QPL	QPL	Χ	QPL	NA	QPL	QPL
18	Χ	QPL	Χ	QPL	QPL	Х	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL
21	Χ	QPL	NA	QPL	NA	Χ	QPL	NA	QPL	NA	Χ	QPL	NA	QPL	NA	Χ	QPL	NA	NA	NA
24	Χ	QPL	Χ	QPL	QPL	Х	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	NA	QPL
27	Χ	NA	NA	NA	NA	Х	NA	NA	NA	NA	Х	NA	NA	NA	NA	Χ	NA	NA	NA	NA
30	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	NA	QPL
36	Χ	QPL	Χ	QPL	QPL	Х	QPL	Х	QPL	QPL	Х	QPL	Χ	QPL	QPL	Χ	QPL	Х	NA	QPL
42	Χ	NA	Χ	QPL	QPL	Х	NA	Χ	QPL	QPL	Х	NA	Χ	NA	QPL	Χ	NA	Х	NA	NA
48	Χ	NA	Χ	QPL	QPL	Χ	NA	Χ	QPL	QPL	Χ	NA	Χ	NA	QPL	Χ	NA	Χ	NA	NA
54	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60	NA	NA	NA	QPL	QPL	NA	NA	NA	QPL	QPL	NA	NA	NA	NA	QPL	NA	NA	NA	NA	NA

Notes: PVC

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

PΕ Polyethylene Pipe

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

Χ Permitted

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

Not Acceptable NA

#### PIPE CULVERTS (metric) TABLE IIIA: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE

			Гуре 1					Type 2	2			1	Гуре 3				,	Type 4		
Nominal Diameter	with 0.3 m min, cover				Fill Height: Greater than 1 m, not exceeding 3 m			Fill Height: Greater than 3 m, not exceeding 4.5 m				Fill Height: Greater than 4.5 m, not exceeding 6 m								
(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	Χ	QPL	NA	Х	QPL	Χ	QPL	NA	Χ	QPL	Χ	QPL	NA
300	Χ	QPL	Χ	QPL	QPL	Х	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL
375	Χ	QPL	NA	QPL	QPL	Х	QPL	NA	QPL	QPL	Χ	QPL	NA	QPL	QPL	Χ	QPL	NA	QPL	QPL
450	Χ	QPL	Χ	QPL	QPL	Х	QPL	Χ	QPL	QPL	Х	QPL	Χ	QPL	QPL	Х	QPL	Χ	QPL	QPL
525	Χ	QPL	NA	QPL	NA	Χ	QPL	NA	QPL	NA	Χ	QPL	NA	QPL	NA	Χ	QPL	NA	NA	NA
600	Χ	QPL	Χ	QPL	QPL	Х	QPL	Χ	QPL	QPL	Х	QPL	Χ	QPL	QPL	Х	QPL	Χ	NA	QPL
675	Χ	NA	NA	NA	NA	Х	NA	NA	NA	NA	Χ	NA	NA	NA	NA	Χ	NA	NA	NA	NA
750	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	NA	QPL
900	Χ	QPL	Χ	QPL	QPL	Х	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Х	QPL	Х	NA	QPL
1050	Χ	NA	Χ	QPL	QPL	Х	NA	Χ	QPL	QPL	Χ	NA	Χ	NA	QPL	Х	NA	Х	NA	NA
1200	Χ	NA	Χ	QPL	QPL	Χ	NA	Χ	QPL	QPL	Χ	NA	Χ	NA	QPL	Χ	NA	Χ	NA	NA
1350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1500	NA	NA	NA	QPL	QPL	NA	NA	NA	QPL	QPL	NA	NA	NA	NA	QPL	NA	NA	NA	NA	NA

Notes: PVC Polyvinyl Chloride Pipe
CPVC Corrugated Polyvinyl Chloride Pipe with a Smooth Interior
PE Polyvethylene Pipe

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

Permitted Χ

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

NA Not Acceptable

#### PIPE CULVERTS TABLE IIIB: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE Type 5 Type 6 Type 7 Fill Height: Greater than 20', Fill Height: Greater than 30', Fill Height: Greater than 25', Nominal not exceeding 25' not exceeding 30' not exceeding 35' Diameter (in.) CPVC PΕ CPE CPP PVC **PVC** PVC **CPVC** PΕ **CPVC** PΕ 10 Χ QPL Χ QPL NA Χ QPL Χ Χ QPL Χ QPL 12 QPL Χ QPL Χ QPL Χ Χ QPL Χ Х 15 Х NA QPL Χ NA Х NA QPL NA QPL QPL 18 Χ QPL Χ NA NA Χ QPL Χ Χ QPL Χ Χ Х QPL Х 21 QPL NA NA NA NA QPL NA 24 Χ QPL Χ NA NA Χ QPL Χ Χ QPL Χ Χ Χ 27 Χ NA NA NA NA NA NA NA NA 30 Χ QPL QPL Χ QPL Χ Χ QPL Χ Χ NA 36 QPL Χ Χ QPL Х Χ QPL Х Χ NA NA 42 Χ NA Χ NA NA Χ NA Χ Χ NA Χ Χ Χ 48 Χ NA NA NA Χ NA Χ NA Х 54 NA 60 NA NA

Notes: PVC Polyvinyl Chloride Pipe

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

X Permitted

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

NA Not Acceptable

# PIPE CULVERTS (metric) TABLE IIIB: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE

			Type 5				Type 6			Type 7		
Nominal Diameter			t: Greater exceeding 7				t: Greater the exceeding		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	Χ	QPL	X	QPL	QPL	X	QPL	X	X	QPL	X	
375	Χ	QPL	NA	NA	QPL	X	QPL	NA	X	QPL	NA	
450	Χ	QPL	X	NA	NA	X	QPL	X	X	QPL	X	
525	Χ	QPL	NA	NA	NA	X	QPL	NA	X	QPL	NA	
600	Χ	QPL	Х	NA	NA	Х	QPL	X	X	QPL	Х	
675	Χ	NA	NA	NA	NA	X	NA	NA	X	NA	NA	
750	Χ	QPL	X	NA	QPL	X	QPL	X	X	QPL	X	
900	Χ	QPL	Х	NA	NA	Х	QPL	Х	X	QPL	Х	
1000	Χ	NA	Χ	NA	NA	X	NA	X	X	NA	X	
1200	Χ	NA	Χ	NA	NA	X	NA	X	X	NA	X	
1350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Notes: PVC

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

Χ Permitted

QPL Permitted for the producers approved for that diameter in the Department's qualified product list Not Acceptable

NA

#### KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE Type 1 Type 2 Nominal Fill Height: 3' and less, Fill Height: Greater than 3', Diameter with 1' min. not exceeding 10' in. CSP **RCCP ESCP** PVC CPVC PΕ CPE CPP **RCCP** PVC CPE **CSP ESCP** CPVC PΕ NA Χ QPL Χ QPL \*X QPL Χ QPL 10 3 Χ NA NA 1 Х 12 Χ QPL Χ QPL QPL \*X Χ QPL Χ QPL IV NA Χ Ш 1 15 IV NA NA Χ QPL NA QPL QPL Ш 1 \*X Х QPL NA QPL 18 Χ 2 Χ Х IV NA NA QPL Х QPL QPL Ш QPL Х QPL

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QPL

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STORM SEWERS

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NA NA RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

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

**ESCP** Extra Strength Clay Pipe PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe with a Smooth Interior

PΕ Polyethylene Pipe

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

Permitted Χ

21

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NA

NA

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

#### KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE Type 1 Type 2 Nominal Fill Height: 1 m and less, Fill Height: Greater than 1 m, Diameter with 300 mm min. not exceeding 3 m mm PVC **RCCP CSP ESCP** CPVC CPE CPP **RCCP** PVC CPE CPP PΕ **CSP ESCP** CPVC PΕ 250 NA 3 Χ QPL Χ QPL NA \*X QPL Χ QPL NA Χ NA 1 Х 300 Χ Χ QPL Χ QPL QPL \*X Χ QPL Χ QPL QPL IV NA Ш 1 375 IV NA NA Χ QPL NA QPL QPL Ш 1 \*X Х **QPL** NA QPL QPL NA Χ 2 Χ Х QPL 450 IV NA QPL Χ QPL QPL Ш QPL Х QPL QPL 525 Ш NA NA Χ QPL NA QPL NA Ш 2 Χ Х QPL NA NA Χ QPL QPL QPL 2 Χ Х QPL QPL QPL 600 Ш NA NA Χ Ш Χ 675 NA Χ NA Ш 3 Χ Χ NA NA NA NA NA NA NA NA 750 Х QPL Х QPL QPL Х Х QPL QPL QPL IV NA NA Ш 3 Х 825 Ш NA NA NA NA Ш NA Χ NA NA NA NA NA NA NA NA Χ QPL Х QPL Χ QPL Χ QPL QPL 900 Ш NA NA QPL Ш NA Χ QPL 1050 Χ Χ NA Χ QPL QPL Χ Х NA Χ QPL Ш NA Ш NA 1200 Х Χ QPL QPL Х Х Χ QPL QPL Ш NA Χ NA Ш NA NA

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STORM SEWERS (metric)

NA NA RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

NA

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

NA

QPL

NA

NA

NA

NA

NA

NA

NA

NA

**ESCP** Extra Strength Clay Pipe PVC Polyvinyl Chloride Pipe

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CPVC Corrugated Polyvinyl Chloride Pipe with a Smooth Interior

PΕ Polyethylene Pipe

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

Permitted Χ

1350

1500

1650

1800

1950

2100

2250

2400

2550

2700

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

Not Acceptable NA

May also use Standard Strength Clay Pipe

NA

#### STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE Type 3 Type 4 Nominal Fill Height: Greater than 10' Fill Height: Greater than 15' Diameter not exceeding 15' not exceeding 20' in. PVC **RCCP CSP ESCP** CPVC CPE CPP **RCCP** PVC CPE CPP PΕ **CSP ESCP CPVC** PΕ NA 2 Χ QPL Χ QPL 3 Χ QPL Χ QPL 10 Χ NA NA Х NA 12 2 Χ QPL Χ QPL QPL Χ QPL Χ QPL QPL Χ IV NA NA Ш 15 Ш 3 Χ Χ QPL NA QPL QPL IV NA NA Χ QPL NA QPL QPL 18 Χ Χ Х QPL Ш NA QPL Χ QPL QPL IV NA NA QPL Х QPL 21 Ш NA NA Χ QPL NA QPL NA IV NA NA Х QPL NA NA NA Χ QPL QPL QPL Х QPL QPL 24 Ш NA NA Χ IV NA NA Χ NA 27 NA Χ NA IV NA X NA NA NA NA NA NA NA NA 30 QPL QPL Х QPL NA NA Х Χ QPL IV NA NA QPL Х NA Ш 33 NA NA NA NA IV NA NA NA Ш NA NA NA NA NA NA NA 36 Χ QPL QPL Χ QPL NA NA Χ QPL QPL IV NA NA Χ NA 42 NA Χ Χ QPL IV Х NA Χ NA Ш NA NA NA NA NA NA 48 Χ QPL Х Χ Ш NA NA Χ NA NA IV NA NA NA NA NA 54 Ш NA NA NA NA NA NA NA IV NA NA NA NA NA NA NA 60 NA QPL NA NA NA Ш NA NA NA NA NA IV NA NA NA NA 66 NA NA NA NA NA NA NA IV NA NA NA NA NA NA NA 72 NA IV Ш NA 78 NA NA NA NA NA NA NA NA NA Ш NA NA NA IV NA NA 84 NA Ш NA NA NA NA NA NA IV NA NA NA NA NA NA NA 90 NA NA NA NA NA NA NA 1680 NA NA NA NA NA NA NA Ш 96 Ш NA NA NA NA NA NA NA 1690 NA NA NA NA NA NA NA 102 1700 Ш NA NA

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NA NA NA 1710 NA NA RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe (RCCP with a number instead of a Roman numeral shall be furnished

according to AASHTO M170 Section 6. This number represents the D-load to produce a 0.01 in crack.)

CSP Concrete Sewer, Storm drain, and Culvert Pipe (number in column indicates strength class) **ESCP** Extra Strength Clay Pipe

NA

Polyvinyl Chloride Pipe PVC

1360

NA

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

NA

PΕ Polyethylene Pipe

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

Permitted Χ

108

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 FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE Type 3 Type 4 Nominal Fill Height: Greater than 3 m, Fill Height: Greater than 4.5 m, Diameter not exceeding 4.5 m not exceeding 6 m mm **RCCP CSP ESCP** PVC CPVC CPE CPP **RCCP PVC** CPE CPP PΕ **CSP ESCP CPVC** PΕ 250 NA 2 QPL Χ QPL 3 Χ QPL Χ QPL Χ Χ NA NA Х NA 300 2 Χ Χ QPL Χ QPL QPL Χ QPL Χ QPL QPL IV NA NA Ш 375 Ш 3 Χ Χ QPL NA QPL QPL IV NA NA Χ QPL NA QPL QPL 450 Χ Χ Х Χ QPL QPL Ш NA QPL Χ QPL QPL IV NA NA QPL 525 Ш NA NA Χ QPL NA QPL NA IV NA NA Х QPL NA NA NA Χ QPL QPL QPL Х QPL QPL 600 Ш NA NA Χ IV NA NA Χ NA 675 NA Χ NA IV NA X NA NA NA NA NA NA NA NA NA Х QPL QPL QPL Х QPL 750 Ш NA NA Χ IV NA NA QPL Х NA 825 NA NA NA NA IV NA NA NA NA Ш NA NA NA NA NA NA Χ QPL QPL QPL Χ QPL 900 NA NA Χ QPL IV NA NA Χ NA 1050 NA Χ NA Χ QPL IV Х NA Χ NA NA Ш NA NA NA NA 1200 Χ QPL Х Χ Ш NA NA Χ NA NA IV NA NA NA NA NA 1350 Ш NA NA NA NA NA NA NA IV NA NA NA NA NA NA NA 1500 NA NA QPL IV NA NA Ш NA NA NA NA NA NA NA NA NA 1650 NA NA NA NA NA NA NA IV NA NA NA NA NA NA NA 1800 NA NA IV NA NA NA Ш NA NA NA NA NA NA NA NA NA 1950 NA Ш NA NA IV NA NA 2100 NA IV NA Ш NA 2250 NA NA NA NA NA NA NA 80 NA NA NA NA NA NA NA Ш 2400 Ш NA NA NA NA NA NA NA 80 NA NA NA NA NA NA NA 2550 NA 80 Ш NA 2700 70 NA NA NA NA NA NA NA NA NA NA

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 FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE

		Тур			Type 6				Type 7							
Nominal Diameter in.		Fill Height: Greater than 20', not exceeding 25'							Fill Height: Greater than 25', not exceeding 30'				Fill Height: Greater than 30', not exceeding 35'			
	RCCP	PVC	CPVC	PE	CPE	CPP	RCCP	PVC	CPVC	PE	RCCP	PVC	CPVC	PE		
10	NA	Х	QPL	Х	QPL	NA	NA	Х	QPL	Х	NA	Χ	QPL	Х		
12	IV	Χ	QPL	Χ	QPL	QPL	V	Χ	QPL	Χ	V	Х	QPL	Χ		
15	IV	Χ	QPL	NA	NA	QPL	V	Χ	QPL	NA	V	Χ	QPL	NA		
18	IV	Χ	QPL	Χ	NA	NA	V	Χ	QPL	Χ	V	X	QPL	Χ		
21	IV	Χ	QPL	NA	NA	NA	V	Χ	QPL	NA	V	Х	QPL	NA		
24	IV	Χ	QPL	Χ	NA	NA	V	Χ	QPL	Χ	V	Х	QPL	Χ		
27	IV	Х	NA	NA	NA	NA	V	Χ	NA	NA	V	Х	NA	NA		
30	IV	Χ	QPL	Χ	NA	QPL	V	Χ	QPL	Χ	V	Х	QPL	Χ		
33	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA		
36	IV	Χ	QPL	Χ	NA	NA	V	Χ	QPL	Χ	V	X	QPL	Χ		
42	IV	Χ	NA	Χ	NA	NA	V	Χ	NA	Χ	V	Х	NA	Χ		
48	IV	Χ	NA	Χ	NA	NA	V	Χ	NA	Χ	V	Х	NA	Χ		
54	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA		
60	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA		
66	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA		
72	V	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA		
78	2020	NA	NA	NA	NA	NA	2370	NA	NA	NA	2730	NA	NA	NA		
84	2020	NA	NA	NA	NA	NA	2380	NA	NA	NA	2740	NA	NA	NA		
90	2030	NA	NA	NA	NA	NA	2390	NA	NA	NA	2750	NA	NA	NA		
96	2040	NA	NA	NA	NA	NA	2400	NA	NA	NA	2750	NA	NA	NA		
102	2050	NA	NA	NA	NA	NA	2410	NA	NA	NA	2760	NA	NA	NA		
108	2060	NA	NA	NA	NA	NA	2410	NA	NA	NA	2770	NA	NA	NA		

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

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe with a Smooth Interior

PE Polyethylene Pipe

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

X Permitted

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

NA Not Acceptable

## STORM SEWERS (metric) KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE

1			Тур	e 5				Тур	pe 6			Тур	e 7		
Nominal Diameter			eight: Gre				Fill He	Fill Height: Greater than 7.5 m, not exceeding 9 m				Fill Height: Greater than 9 m, not exceeding 10.5 m			
mm			ioi excee	ullig 7.5 il	11			HOL EXCE	ealing 9 m			ioi exceed	illig 10.5 il	ı	
	RCCP	PVC	CPVC	PE	CPE	CPP	RCCP	PVC	CPVC	PE	RCCP	PVC	CPVC	PE	
250	NA	Х	QPL	Х	QPL	NA	NA	Х	QPL	Х	NA	Х	QPL	Х	
300	IV	Χ	QPL	Χ	QPL	QPL	V	X	QPL	X	V	X	QPL	X	
375	IV	Χ	QPL	NA	NA	QPL	V	Χ	QPL	NA	V	X	QPL	NA	
450	IV	Χ	QPL	Χ	NA	NA	V	Χ	QPL	Χ	V	Χ	QPL	X	
525	IV	Χ	QPL	NA	NA	NA	V	Χ	QPL	NA	V	X	QPL	NA	
600	IV	Χ	QPL	Χ	NA	NA	V	Χ	QPL	Χ	V	Χ	QPL	Χ	
675	IV	Χ	NA	NA	NA	NA	V	Χ	NA	NA	V	Χ	NA	NA	
750	IV	Χ	QPL	Χ	NA	QPL	V	Χ	QPL	Χ	V	X	QPL	X	
825	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA	
900	IV	Χ	QPL	Χ	NA	NA	V	Χ	QPL	Χ	V	Χ	QPL	Χ	
1050	IV	X	NA	Χ	NA	NA	V	Χ	NA	Χ	V	Χ	NA	X	
1200	IV	Χ	NA	Χ	NA	NA	V	Χ	NA	Χ	V	Χ	NA	Χ	
1350	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA	
1500	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA	
1650	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA	
1800	V	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA	
1950	100	NA	NA	NA	NA	NA	110	NA	NA	NA	130	NA	NA	NA	
2100	100	NA	NA	NA	NA	NA	110	NA	NA	NA	130	NA	NA	NA	
2250	100	NA	NA	NA	NA	NA	110	NA	NA	NA	130	NA	NA	NA	
2400	100	NA	NA	NA	NA	NA	120	NA	NA	NA	130	NA	NA	NA	
2550	100	NA	NA	NA	NA	NA	120	NA	NA	NA	130	NA	NA	NA	
2700	100	NA	NA Culus d	NA	NA in and 6	NA Causas Dia	120	NA	NA	NA nd of a D	130	NA	NA • • • • • • • •	NA	

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

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe with a Smooth Interior

PE Polyethylene Pipe

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

X Permitted

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

NA Not Acceptable"

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

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

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

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

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

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

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

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

### **DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)**

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

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

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

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

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

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

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

good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 21.00 % of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

### **HOT-MIX ASPHALT – LONGITUDINAL JOINT SEALANT (BDE)**

Effective: November 1, 2022 Revised: August 1, 2023

Add the following after the second sentence in the eighth paragraph of Article 406.06(h)(2) of the Standard Specifications:

"If rain is forecasted and traffic is to be on the LJS or if pickup/tracking of the LJS material is likely, the LJS shall be covered immediately following its application with FA 20 fine aggregate mechanically spread uniformly at a rate of  $1.5 \pm 0.5$  lb/sq yd  $(0.75 \pm 0.25$  kg/sq m). Fine aggregate landing outside of the LJS shall be removed prior to application of tack coat."

Add the following after the first sentence in the ninth paragraph of Article 406.06(h)(2) of the Standard Specifications:

"LJS half-width shall be applied at a width of  $9 \pm 1$  in. (225  $\pm$  25 mm) in the immediate lane to be placed with the outside edge flush with the joint of the next HMA lift. The vertical face of any longitudinal joint remaining in place shall also be coated."

Add the following after the eleventh paragraph of Article 406.06(h)(2) of the Standard Specifications:

"لر	"LJS Half-Width Application Rate, lb/ft (kg/m) 1/								
Lift Thickness, in. (mm)	Coarse Graded Mixture (IL-19.0, IL-19.0L, IL-9.5, IL-9.5L, IL-4.75)	Fine Graded Mixture (IL-9.5FG)	SMA Mixture (SMA-9.5, SMA-12.5)						
<sup>3</sup> ⁄ <sub>4</sub> (19)	0.44 (0.66)								
1 (25)	0.58 (0.86)								
1 ¼ (32)	0.66 (0.98)	0.44 (0.66)							
1 ½ (38)	0.74 (1.10)	0.48 (0.71)	0.63 (0.94)						
1 ¾ (44)	0.82 (1.22)	0.52 (0.77)	0.69 (1.03)						
2 (50)	0.90 (1.34)	0.56 (0.83)	0.76 (1.13)						
≥ 2 ¼ (60)	0.98 (1.46)								

<sup>1/</sup> The application rate includes a surface demand for liquid. The thickness of the LJS may taper from the center of the application to a lesser thickness on the edge of the application, provided the correct width and application rate are maintained."

Revise the second paragraph of Article 406.13(b) of the Standard Specifications to read:

Add the following to the end of the second paragraph of Article 406.14 of the Standard Specifications:

<sup>&</sup>quot;Aggregate for covering tack, LJS, or FLS will not be measured for payment."

"Longitudinal joint sealant (LJS) half-width will be paid for at the contract unit price per foot (meter) for LONGITUDINAL JOINT SEALANT, HALF-WIDTH."

### 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.

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

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

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

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

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

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

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

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

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

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

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

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

Table 4 - Requirements for Softener Modified Asphalt Binders							
	Asphalt Grade						
	SM PG 46-28 SM P	G 46-34					
Test	SM PG 52-28 SM P	G 52-34					
	SM PG 58-22 SM P	G 58-28					
	SM PG 64-22						
Small Strain Parameter (AASHTO PP 113)							
BBR, ΔTc, 40 hrs PAV (40 hrs	-5°C min.						
continuous or 2 PAV at 20 hrs)							
Large Strain Parameter (Illinois Modified							
AASHTO T 391) DSR/LAS Fatigue	> E4 0/						
Property, Δ G* peak τ, 40 hrs PAV	≥ 54 %						
(40 hrs continuous or 2 PAV at 20 hrs)							

The following grades may be specified as tack coats.

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

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

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

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

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

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

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

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

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

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

## PORTLAND CEMENT CONCRETE (BDE)

Effective: August 1, 2023

Revise the second paragraph of Article 1103.03(a)(4) the Standard Specifications to read:

"The dispenser system shall provide a visual indication that the liquid admixture is actually entering the batch, such as via a transparent or translucent section of tubing or by independent check with an integrated secondary metering device. If approved by the Engineer, an alternate indicator may be used for admixtures dosed at rates of 25 oz/cwt (1630 mL/100 kg) or greater, such as accelerating admixtures, corrosion inhibitors, and viscosity modifying admixtures."

## RAILROAD PROTECTIVE LIABILITY INSURANCE (BDE)

Effective: December 1, 1986 Revised: January 1, 2022

<u>Description</u>. Railroad Protective Liability and Property Damage Liability Insurance shall be carried according to Article 107.11 of the Standard Specifications. A separate policy is required for each railroad unless otherwise noted.

NAMED INSURED & ADDRESS	NUMBER & SPEED OF PASSENGER TRAINS	NUMBER & SPEED OF FREIGHT TRAINS
BNSF Railway Corporation 2650 Lou Menk Drive Fort Worth, Texas 76131	51, 1-70MPH	51, 1-70MPH

Class 1 RR (Y or N): Y

DOT/AAR No.: 079503P RR Mile Post: 0012.736 RR Division: Chicago RR Sub-Division: Chicago

For Freight/Passenger Information Contact: Jake Rzewnicki
For Insurance Information Contact: Jake Rzewnicki

Phone: 913-551-4275 Phone: 913-551-4275

Class 1 RR (Y or N):

DOT/AAR No.: RR Mile Post: RR Division: RR Sub-Division:

For Freight/Passenger Information Contact:

For Insurance Information Contact:

Phone:

<u>Basis of Payment</u>. Providing Railroad Protective Liability and Property Damage Liability Insurance will be paid for at the contract unit price per Lump Sum for RAILROAD PROTECTIVE LIABILITY INSURANCE.

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

Class -	– Туре	Seeds	lb/acre (kg/hectare)
4	Native Grass 2/6/	Andropogon gerardi (Big Blue Stem) 5/	4 (4)
		Schizachyrium scoparium (Little Blue Stem) 5/	5 (5)
		Bouteloua curtipendula (Side-Oats Grama) 5/	5 (5)
		Elymus canadensis (Canada Wild Rye) 5/	1 (1)
		Panicum virgatum (Switch Grass) 5/	1 (1)
		Sorghastrum nutans (Indian Grass) 5/ Annual Ryegrass	2 (2) 25 (25)
		Oats, Spring	25 (25) 25 (25)
		Perennial Ryegrass	15 (15)
4A	Low Profile	Schizachyrium scoparium	5 (5)
	Native Grass 2/6/	(Little Blue Stem) 5/	
		Bouteloua curtipendula	5 (5)
		(Side-Oats Grama) 5/	4 (4)
		Elymus canadensis (Canada Wild Rye) 5/	1 (1)
		Sporobolus heterolepis	0.5 (0.5)
		(Prairie Dropseed) 5/	(112)
		Annual Ryegrass	25 (25)
		Oats, Spring	25 (25)
		Perennial Ryegrass	15 (15)
4B	Wetland Grass and	Annual Ryegrass	25 (25)
	Sedge Mixture 2/6/	Oats, Spring	25 (25)
		Wetland Grasses (species below) 5/	6 (6)
	Species:		% By Weight
	Calamagrostis canad	densis (Blue Joint Grass)	12
	Carex lacustris (Lake	e-Bank Sedge)	6
	Carex slipata (Awl-Fi	<b>5</b> /	6
	Carex stricta (Tussoc		6
	Carex vulpinoidea (F	ox Seage) (Needle Spike Rush)	6 3
	Eleocharis obtusa (B		3
	Glyceria striata (Fow		14
	Juncus effusus (Com		6
	Juncus tenuis (Slend	6	
	Juncus torreyi (Torre	6	
	Leersia oryzoides (R	10	
	Scirpus acutus (Haro		3
	Scirpus atrovirens (D		3
	Bolboschoenus fluvia	atilis (River Bulrush) ernaemontani (Softstem Bulrush)	3
	Scnoenopiectus tabe Spartina pectinata (C	3 4	
	oparima pedimata (C	outu Grassj	4

Class	– Type	Seeds	lb/acre (kg/hectare)
5	Forb with	Annuals Mixture (Below)	1 (1)
	Annuals Mixture 2/ 5/ 6/	Forb Mixture (Below)	10 (10)

Annuals Mixture - Mixture not exceeding 25 % by weight of any one species, of the following:

Coreopsis lanceolata (Sand Coreopsis) Leucanthemum maximum (Shasta Daisy) Gaillardia pulchella (Blanket Flower) Ratibida columnifera (Prairie Coneflower) Rudbeckia hirta (Black-Eyed Susan)

Forb Mixture - Mixture not exceeding 5 % by weight PLS of any one species, of the following:

Amorpha canescens (Lead Plant) 4/ Anemone cylindrica (Thimble Weed) Asclepias tuberosa (Butterfly Weed) Aster azureus (Sky Blue Aster) Symphyotrichum leave (Smooth Aster) Aster novae-angliae (New England Aster) Baptisia leucantha (White Wild Indigo) 4/ Coreopsis palmata (Prairie Coreopsis) Echinacea pallida (Pale Purple Coneflower) Eryngium yuccifolium (Rattlesnake Master) Helianthus mollis (Downy Sunflower) Heliopsis helianthoides (Ox-Eye) Liatris aspera (Rough Blazing Star) Liatris pycnostachya (Prairie Blazing Star) Monarda fistulosa (Prairie Bergamot) Parthenium integrifolium (Wild Quinine) Dalea candida (White Prairie Clover) 4/ Dalea purpurea (Purple Prairie Clover) 4/ Physostegia virginiana (False Dragonhead)

Potentilla arguta (Prairie Cinquefoil)
Ratibida pinnata (Yellow Coneflower)
Rudbeckia subtomentosa (Fragrant Coneflower)
Silphium laciniatum (Compass Plant)
Silphium terebinthinaceum (Prairie Dock)
Oligoneuron rigidum (Rigid Goldenrod)
Tradescantia ohiensis (Spiderwort)
Veronicastrum virginicum (Culver's Root)

Class -	- Туре	Seeds	lb/acre (kg/hectare)
5A	Large Flower Native Forb Mixture 2/ 5/ 6/	Forb Mixture (see below)	5 (5)
	Species:		% By Weight
	Aster novae-angliae	(New England Aster)	5
		ale Purple Coneflower)	10
	Helianthus mollis (Do		10
	Heliopsis helianthoid		10
	Liatris pycnostachya Ratibida pinnata (Yel	10 5	
	Rudbeckia hirta (Blac		10
	Silphium laciniatum (		10
	Silphium terebinthina		20
	Oligoneuron rigidum	(Rigid Goldenrod)	10
5B	Wetland Forb 2/5/6/	Forb Mixture (see below)	2 (2)
	Species:		% By Weight
	Acorus calamus (Swe Angelica atropurpure		3 6
	Asclepias incarnata (		2
	Aster puniceus (Purp		10
	Bidens cernua (Begg	articks)	7
		Im (Spotted Joe Pye Weed)	7
	Eupatorium perfoliatu		7
		(Autumn Sneeze Weed)	2 2
	Iris virginica shrevei ( Lobelia cardinalis (Ca		5
	Lobelia siphilitica (Gr	5 5 2	
	Lythrum alatum (Win		2
	Physostegia virginiar	na (False Dragonhead)	5
	Persicaria pensylvanica (Pennsylvania Smartweed)		10
		(Curlytop Knotweed)	10
	Rudbeckia laciniata (	nianum (Mountain Mint)	5 5
	Oligoneuron riddellii (		2
	Sparganium eurycar		5
6	Conservation	Schizachyrium scoparium	5 (5)
	Mixture 2/6/	(Little Blue Stem) 5/	2 (2)
		Elymus canadensis (Canada Wild Rye) 5/	2 (2)
		Buffalo Grass 5/ 7/	5 (5)
		Vernal Alfalfa 4/	15 (15)
		Oats, Spring	48 (55)
6A	Salt Tolerant Conservation	Schizachyrium scoparium (Little Blue Stem) 5/	5 (5)
	Mixture 2/6/	Elymus canadensis	2 (2)
	·	(Canada Wild Rye) 5/	( )
		Buffalo Grass 5/ 7/	5 (5)
		Vernal Alfalfa 4/	15 (15)
		Oats, Spring	48 (55)
_	T T (	Puccinellia distans (Fults Saltgrass or Salty Alkaligrass)	20 (20)
7	Temporary Turf	Perennial Ryegrass	50 (55)
<u> </u>	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 KNO<sub>3</sub> to break dormancy and dyed to indicate such.

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

## SOURCE OF SUPPLY AND QUALITY REQUIREMENTS (BDE)

Effective: January 2, 2023

Add the following to Article 106.01 of the Standard Specifications:

"The final manufacturing process for construction materials and the immediately preceding manufacturing stage for construction materials shall occur within the United States. Construction materials shall include an article, material, or supply that is or consists primarily of the following.

- (a) Non-ferrous metals;
- (b) Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- (c) Glass (including optic glass);
- (d) Lumber;
- (e) Drywall.

Items consisting of two or more of the listed construction materials that have been combined through a manufacturing process, and items including at least one of the listed materials combined with a material that is not listed through a manufacturing process shall be exempt."

## SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)

Effective: April 2, 2018

Add the following to Section 109 of the Standard Specifications.

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

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

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

## SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: November 2, 2017

Revised: April 1, 2019

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

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

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

### SUBMISSION OF PAYROLL RECORDS (BDE)

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

FEDERAL AID CONTRACTS. Revise the following section of Check Sheet #1 of the Recurring

Special Provisions to read:

### "STATEMENTS AND PAYROLLS

The payroll records shall include the worker's name, 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 <a href="https://lcptracker.com/">https://lcptracker.com/</a>. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option ("No Work", "Suspended", or "Complete") selected."

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

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

In addition to filing certified payroll(s) with the IDOL, the Contractor and each subcontractor shall certify and submit payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers shall not be included on weekly submittals. Instead, the payrolls shall include an

identification number for each employee (e.g., the last four digits of the employee's social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted. The submittals shall be made using LCPtracker Pro software. The software is web-based and can be accessed at <a href="https://lcptracker.com/">https://lcptracker.com/</a>. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option ("No Work", "Suspended", or "Complete") selected."

### TRAINING SPECIAL PROVISIONS (BDE)

Effective: October 15, 1975 Revised: September 2, 2021

This Training Special Provision supersedes Section 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," and is in implementation of 23 U.S.C. 140(a).

As part of the Contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The Contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be 1. In the event the Contractor subcontracts a portion of the contract work, it shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The Contractor shall also ensure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the Contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee it employs on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps it has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he or she has successfully completed a training course leading to journeyman status or in which he or she has been employed as a journeyman. The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor Employment Training Administration shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the Contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the Contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A Contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The Contractor shall furnish the trainee a copy of the program he will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The Contractor shall provide for the maintenance of records and furnish periodic reports documenting its performance under this Training Special Provision.

For contracts with an awarded contract value of \$500,000 or more, the Contractor is required to comply with the Illinois Works Apprenticeship Initiative (30 ILCS 559/20-20 to 20-25) and all applicable administrative rules to the extent permitted by Section 20-20(g). For federally funded projects, the number of trainees to be trained under this contract, as stated in the Training Special Provisions, will be the established goal for the Illinois Works Apprenticeship Initiative 30 ILCS 559/20-20(g). The Contractor shall make a good faith effort to meet this goal. For federally funded projects, the Illinois Works Apprenticeship Initiative will be implemented using the FHWA approved OJT procedures. The Contractor must comply with the recordkeeping and reporting obligations of the Illinois Works Apprenticeship Initiative for the life of the project, including the certification as to whether the trainee/apprentice labor hour goals were met.

<u>Method of Measurement</u>. The unit of measurement is in hours.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price, and total price have been included in the schedule of prices.

## **VEHICLE AND EQUIPMENT WARNING LIGHTS (BDE)**

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

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

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

### WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012 Revised: November 1, 2021

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

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

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

### **WORK ZONE TRAFFIC CONTROL DEVICES (BDE)**

Effective: March 2, 2020

Add the following to Article 701.03 of the Standard Specifications:

"(q) Temporary Sign Supports ......1106.02"

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

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

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

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

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

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

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

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

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions (impact

attenuators), truck mounted attenuators, and other devices not meeting the definitions of Category 1 or 2. Category 3 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 3 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2029. Category 3 devices shall be crash tested for Test Level 3 or the test level specified.

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

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

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

- "(g) Truck Mounted/Trailer Mounted Attenuators. The attenuator shall be approved for use at Test Level 3. Test Level 2 may be used for normal posted speeds less than or equal to 45 mph.
- (k) Temporary Water Filled Barrier. The water filled barrier shall be a lightweight plastic shell designed to accept water ballast and be on the Department's qualified product list.
  - Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings.
- (I) Movable Traffic Barrier. The movable traffic barrier shall be on the Department's qualified product list.

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

### REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- Implementation of Clean Air Act and Federal Water Pollution Control Act
- Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

#### **ATTACHMENTS**

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

#### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid designbuild contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The designbuilder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).
- II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

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

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

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

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

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

- 1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).
- b. The contractor will accept as its operating policy the following statement:

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

- 2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women

- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

### 6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

### 10. Assurances Required:

- a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.
- b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:
  - (1) Withholding monthly progress payments;
  - (2) Assessing sanctions;
  - (3) Liquidated damages, and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.
- c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
- a. The records kept by the contractor shall document the following:

- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
  - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
  - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on <a href="Form FHWA-1391">Form FHWA-1391</a>. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

#### **III. NONSEGREGATED FACILITIES**

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

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

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

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

### 1. Minimum wages (29 CFR 5.5)

- a. Wage rates and fringe benefits. All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.
- b. Frequently recurring classifications. (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:
  - (i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

- (ii) The classification is used in the area by the construction industry; and
- (iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.
- (2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.
- c. Conformance. (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:
  - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
  - (ii) The classification is used in the area by the construction industry; and
  - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.
- (3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to <a href="mailto:DBAconformance@dol.gov">DBAconformance@dol.gov</a>. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.
- (4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to <code>DBAconformance@dol.gov</code>, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.
- (5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

- under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- d. Fringe benefits not expressed as an hourly rate. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- e. Unfunded plans. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
- f. Interest. In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

### 2. Withholding (29 CFR 5.5)

- a. Withholding requirements. The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.
- b. Priority to withheld funds. The Department has priority to funds withheld or to be withheld in accordance with paragraph

- 2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:
- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
  - (2) A contracting agency for its reprocurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
  - (4) A contractor's assignee(s);
  - (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, <u>31</u> U.S.C. 3901–3907.

### 3. Records and certified payrolls (29 CFR 5.5)

- a. Basic record requirements (1) Length of record retention. All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.
- (2) Information required. Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.
- (3) Additional records relating to fringe benefits. Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.
- (4) Additional records relating to apprenticeship. Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.
- b. Certified payroll requirements (1) Frequency and method of submission. The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

- agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.
- (2) Information required. The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker ( e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <a href="https://www.dol.gov/sites/dolgov/files/WHD/">https://www.dol.gov/sites/dolgov/files/WHD/</a> legacy/files/wh347/.pdf or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.
- (3) Statement of Compliance. Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:
  - (i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;
  - (ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and
  - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.
- (4) Use of Optional Form WH–347. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

- (5) Signature. The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.
- (6) Falsification. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.
- (7) Length of certified payroll retention. The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
- c. Contracts, subcontracts, and related documents. The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
- d. Required disclosures and access (1) Required record disclosures and access to workers. The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.
- (2) Sanctions for non-compliance with records and worker access requirements. If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.
- (3) Required information disclosures. Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action

## 4. Apprentices and equal employment opportunity (29 CFR 5.5)

- a. Apprentices (1) Rate of pay. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (2) Fringe benefits. Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.
- (3) Apprenticeship ratio. The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.
- (4) Reciprocity of ratios and wage rates. Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.
- b. Equal employment opportunity. The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

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

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.
- **6. Subcontracts**. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- **8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.
- 9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
- 10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of  $\underline{40}$   $\underline{\text{U.s.c. }3144(b)}$  or  $\S$  5.12(a).
- c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, <u>18</u> <u>U.S.C. 1001</u>.
- **11. Anti-retaliation**. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:
- a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;
- b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or  $\underline{29\ \text{CFR part 1}}$  or  $\underline{3}$ ;
- c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or
- d. Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

# V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

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

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)\* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

\* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

### 3. Withholding for unpaid wages and liquidated damages

- a. Withholding process. The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.
- b. *Priority to withheld funds*. The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:
- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
  - (2) A contracting agency for its reprocurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate:
  - (4) A contractor's assignee(s);
  - (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, <u>31</u> U.S.C. 3901–3907.
- **4. Subcontracts.** The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lowertier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

- **5. Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:
- a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;
- b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;
- c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or
- d. Informing any other person about their rights under CWHSSA or this part.

### VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)
- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees:
  - (2) the prime contractor remains responsible for the quality of the work of the leased employees;

- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
  - (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.
- 2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).
- 5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

### **VII. SAFETY: ACCIDENT PREVENTION**

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

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and

health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

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

# VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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

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

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

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

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

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

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

# IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

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

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

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

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

- e. The terms "covered transaction," "debarred,"
  "suspended," "ineligible," "participant," "person," "principal,"
  and "voluntarily excluded," as used in this clause, are defined
  in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200.
  "First Tier Covered Transactions" refers to any covered
  transaction between a recipient or subrecipient of Federal
  funds and a participant (such as the prime or general contract).
  "Lower Tier Covered Transactions" refers to any covered
  transaction under a First Tier Covered Transaction (such as
  subcontracts). "First Tier Participant" refers to the participant
  who has entered into a covered transaction with a recipient or
  subrecipient of Federal funds (such as the prime or general
  contractor). "Lower Tier Participant" refers any participant who
  has entered into a covered transaction with a First Tier
  Participant or other Lower Tier Participants (such as
  subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<a href="https://www.sam.gov/">https://www.sam.gov/</a>). 2 CFR 180.300, 180.320, and 180.325.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

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

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800:
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800: and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).
- (5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and
- (6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

- a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 - 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<a href="https://www.sam.gov/">https://www.sam.gov/</a>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

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

- a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:
- (1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;
- (2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and
- (3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)
- b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

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# XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

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

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or

cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

### XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

- 1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.
- 2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

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

**ROAD CONTRACTS** (23 CFR 633, Subpart B, Appendix B) This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
- a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.
- 5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region
- The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.