### **Letting July 31, 2020**

## Notice to Bidders, Specifications and Proposal



Contract No. 61G64
WILL County
Section 17-00067-00-BT (Romeoville)
Route MULTI-USE PATH
Project 2QS4-590 ()
District 1 Construction Funds

Prepared by

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# 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. July 31, 2020 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. 61G64
WILL County
Section 17-00067-00-BT (Romeoville)
Project 2QS4-590 ()
Route MULTI-USE PATH
District 1 Construction Funds

Construction of a multi-use path along the natural gas pipeline right of way, from Taylor Road to Normantown Road in Romeoville

- 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, Acting Secretary

## INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

#### Adopted January 1, 2020

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 4-1-16) (Revised 1-1-20)

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#### **BDE SPECIAL PROVISIONS**

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

<u>File</u> Name	<u>Pg.</u>		Special Provision Title	<b>Effective</b>	Revised
80099			Accessible Pedestrian Signals (APS)	April 1, 2003	April 1, 2020
80274			Aggregate Subgrade Improvement	April 1, 2012	April 1, 2016
80192			Automated Flagger Assistance Device	Jan. 1, 2008	7 (prii 1, 2010
80173	91	Х	Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
80246	01		Bituminous Surface Treatment with Fog Seal	Jan. 1, 2020	7 tag. 1, 2017
80241			Bridge Demolition Debris	July 1, 2009	
50241			Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50481			Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50491			Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990 Sept. 1, 1990	April 1, 2010
50531			Building Removal-Case IV (No Asbestos)	Sept. 1, 1990 Sept. 1, 1990	April 1, 2010
80425			Cape Seal	Jan. 1, 2020	April 1, 2010
80384	93	X	Compensable Delay Costs	June 2, 2017	April 1, 2019
80198	93		Completion Date (via calendar days)	April 1, 2008	April 1, 2019
80198			Completion Date (via calendar days)   Completion Date (via calendar days) Plus Working Days	April 1, 2008 April 1, 2008	
80293					July 1, 2016
			Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	•
80311			Concrete End Sections for Pipe Culverts	Jan. 1, 2013	April 1, 2016
80277			Concrete Mix Design – Department Provided	Jan. 1, 2012	April 1, 2016
80261	97	Х	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
80387			Contrast Preformed Plastic Pavement Marking	Nov. 1, 2017	
80029	100	Х	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Mar. 2, 2019
80402	110	Χ	Disposal Fees	Nov. 1, 2018	
80378			Dowel Bar Inserter	Jan. 1, 2017	Jan. 1, 2018
80405			Elastomeric Bearings	Jan. 1, 2019	
80421			Electric Service Installation	Jan. 1, 2020	
80415	112	Х	Emulsified Asphalts	Aug. 1, 2019	
80423			Engineer's Field Office Laboratory	Jan. 1, 2020	
80388	115	Х	Equipment Parking and Storage	Nov. 1, 2017	
80229			Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
80417	116	Х	Geotechnical Fabric for Pipe Underdrains and French Drains	Nov. 1, 2019	
80420			Geotextile Retaining Walls	Nov. 1, 2019	
80304			Grooving for Recessed Pavement Markings	Nov. 1, 2012	Nov. 1, 2017
80422			High Tension Cable Median Barrier Reflectors	Jan. 1, 2020	
80416			Hot-Mix Asphalt – Binder and Surface Course	July 2, 2019	Nov. 1, 2019
80398			Hot-Mix Asphalt – Longitudinal Joint Sealant	Aug. 1, 2018	Nov. 1, 2019
80406			Hot-Mix Asphalt – Mixture Design Verification and Production (Modified for I-FIT Data Collection)	Jan. 1, 2019	Jan. 2, 2020
80347			Hot-Mix Asphalt – Pay for Performance Using Percent	Nov. 1, 2014	July 2, 2019
00202			Within Limits – Jobsite Sampling	April 1 2017	July 2, 2010
80383			Hot-Mix Asphalt – Quality Control for Performance	April 1, 2017	July 2, 2019
80411			Luminaires, LED	April 1, 2019	Mar 1 2010
80393			Manholes, Valve Vaults, and Flat Slab Tops	Jan. 1, 2018	Mar. 1, 2019
80045			Material Transfer Device	June 15, 1999	Aug. 1, 2014
80418			Mechanically Stabilized Earth Retaining Walls	Nov. 1, 2019	
80424	440		Micro-Surfacing and Slurry Sealing	Jan. 1, 2020	
80428	118	X	Mobilization Paint Outlier	April 1, 2020	I 4 0040
80165			Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
80412			Obstruction Warning Luminaires, LED	Aug. 1, 2019	A
80349			Pavement Marking Blackout Tape	Nov. 1, 2014	April 1, 2016
80371	440		Pavement Marking Removal	July 1, 2016	
80389	119	Х	Portland Cement Concrete	Nov. 1, 2017	

	<u>File</u> Name	<u>Pg.</u>		Special Provision Title	<b>Effective</b>	Revised
*	80430	120	Χ	Portland Cement Concrete – Haul Time	July 1, 2020	
	80359			Portland Cement Concrete Bridge Deck Curing	April 1, 2015	Nov. 1, 2019
*	80431			Portland Cement Concrete Pavement Patching	July 1, 2020	
*	80432			Portland Cement Concrete Pavement Placement	July 1, 2020	
	80300			Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	April 1, 2016
	34261			Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
	80157			Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
	80306			Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	Jan. 2, 2020
	80407	121	Χ	Removal and Disposal of Regulated Substances	Jan. 1, 2019	Jan. 1, 2020
	80419	132	Χ	Silt Fence, Inlet Filters, Ground Stabilization and Riprap Filter	Nov. 1, 2019	April 1, 2020
				Fabric		
	80395			Sloped Metal End Section for Pipe Culverts	Jan. 1, 2018	
	80340			Speed Display Trailer	April 2, 2014	Jan. 1, 2017
	80127			Steel Cost Adjustment	April 2, 2014	Aug. 1, 2017
	80408			Steel Plate Beam Guardrail Manufacturing	Jan. 1, 2019	
	80413			Structural Timber	Aug. 1, 2019	
	80397	138	Χ	Subcontractor and DBE Payment Reporting	April 2, 2018	
	80391	139	Χ	Subcontractor Mobilization Payments	Nov. 2, 2017	April 1, 2019
	80317			Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	Aug. 1, 2019
	80298			Temporary Pavement Marking	April 1, 2012	April 1, 2017
	80403			Traffic Barrier Terminal, Type 1 Special	Nov. 1, 2018	
	80409	140	Χ	Traffic Control Devices – Cones	Jan. 1, 2019	
	80410			Traffic Spotters	Jan. 1, 2019	
	20338			Training Special Provisions	Oct. 15, 1975	
	80318			Traversable Pipe Grate for Concrete End Sections	Jan. 1, 2013	Jan. 1, 2018
	80429			Ultra-Thin Bonded Wearing Course	April 1, 2020	
	80288	141	Χ	Warm Mix Asphalt	Jan. 1, 2012	April 1, 2016
	80302	143	Χ	Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
	80414			Wood Fence Sight Screen	Aug. 1, 2019	April 1, 2020
	80427	144	Χ	Work Zone Traffic Control Devices	Mar. 2, 2020	
	80071	146	Χ	Working Days	Jan. 1, 2002	

The following special provisions are in the 2020 Supplemental Specifications and Recurring Special Provisions.

<u>File</u>	Special Provision Title	New Location(s)	<b>Effective</b>	Revised
Name				·
80404	Coarse Aggregate Quality for	Article 1004.01(b)	Jan. 1, 2019	
	Micro-Surfacing and Cape Seals			
80392	Lights on Barricades	Articles 701.16, 701.17(c)(2)	Jan. 1, 2018	
		& 603.07		
80336	Longitudinal Joint and Crack Patching	Check Sheet #36	April 1, 2014	April 1, 2016
80400	Mast Arm Assembly and Pole	Article 1077.03(b)	Aug. 1, 2018	
80394	Metal Flared End Section for Pipe Culverts	Articles 542.07(c) and 542.11	Jan. 1, 2018	April 1, 2018
80390	Payments to Subcontractors	Article 109.11	Nov. 2, 2017	

The following special provisions have been deleted from use.

<u>File</u>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
<u>Name</u>			
80328	Progress Payments	Nov. 2, 2013	

#### STATE OF ILLINOIS

#### **SPECIAL PROVISIONS**

The following Special Provisions supplement the "Standard Specifications for the Road and Bridge Construction", adopted April 1, 2016 (hereinafter 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 the invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the proposed improvement designated as IDOT Section #17-00067-00-BT; Job #C-91-256-19; Project #2QS4(590); Contract #61G64 in Will County, and in case of conflict with any part, or parts, of said specifications, the said special provisions shall take precedence and shall govern.

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#### **LOCATION OF PROJECT**

The project is located in the Village of Romeoville, IL, Will County. The limits of the project are from the northwest corner of Taylor Road and North Pinnacle Drive extending west approximately 1/4 mile to an existing Natural Gas Pipeline (NGPL) ROW, then extends north along the NGPL ROW from Taylor Road for approximately 2 miles to Normantown Road. Gross and Net Project Length is 11,667 Feet (2.21 miles).

#### **DESCRIPTION OF PROJECT**

The work consists of constructing a ten-foot (10') wide multi-use path along Taylor Road ROW and within the Natural Gas Pipeline ROW right-of-way. Work includes hot-mix asphalt surface and binder courses, aggregate base course, concrete sidewalk, ADA ramps, pavement marking, signing, storm sewer culverts, earth excavation and all incidental and collateral work necessary to complete the project as shown on the plans and as described herein.

#### MAINTENANCE OF ROADWAYS

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.

Village of Romeoville Will County

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.

#### **TRAFFIC CONTROL PLAN**

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.

<u>STANDARDS</u>: 701001-02 701006-05 701011-04 701101-05 701301-04 701427-05

701501-06 701502-09 701602-10 701701-10 701801-06 701901-08

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

TC-13 Typical Pavement Markings

SPECIAL PROVISIONS: Maintenance of Roadways

Public Convenience and Safety

Equipment Parking and Storage (BDE)
Traffic Control Devices (Cones) (BDE)
Work Zone Traffic Control Devices (BDE)

#### COORDINATION/SCHEDULING OF WORK

The Contractor shall be advised that the work of all subcontractors will be coordinated by the General Contractor and not by the Engineer.

All equipment must be removed off the Village streets during all holiday weekends as coordinated with the Village.

Placing **Tack Coat** on the path must be done on the day of paving.

Village of Romeoville Will County

Any irrigation systems, brick pavers, decorative rock, special corner landscaping, mailboxes, etc., within the ROW disturbed during construction will be the Contractors responsibility to repair and shall be included in the unit price for the various removal items.

Contractor is expected to inspect all locations before beginning work and have all material on hand to complete the project. No compensation will be had for inadequate inventory, shipping, trucking or re-stocking of materials.

**Stockpiling of material and end of day clean up -** Stockpiles shall not impede traffic, parking or access at any time. Any areas disturbed by stockpiles shall be restored to existing conditions. This work will not be measured for payment and shall be considered included in various items in the contract.

At the end of each working day, the contractor shall provide a steel plate, barricades, warning tape and any other safety measures deemed necessary by the Engineer over the excavated area so that traffic, parking or access is not impeded during non-working hours. Access to the property shall be maintained at all times. Placement of temporary aggregate in the roadway and in driveway areas disturbed by the construction shall be used until final conditions are met. Street clean up and sweeping is also required at the end of each working day. The cost for materials and traffic control items necessary to meet these requirements shall be considered included in various contract pay items.

All water use shall be coordinated with the Village and be in compliance with their rules and regulations.

#### **DUST CONTROL**

The contractor shall be responsible for controlling dust and air-borne dirt generated by his/her construction activities.

The implementation of dust control procedures shall be required if wind or dry soil conditions reduce visibility on adjacent roads and property. Concerns for health and safety to the public using adjacent facilities will be grounds for the implementation of a dust control plan. When circumstances warrant, a specific dust control plan shall be developed by the Contractor and approved by the Engineer. The contractor and the Engineer shall review the nature and extent of dust generating activities and cooperatively develop specific types of control techniques appropriated to that specific situation. Sample techniques that may warrant consideration include such measures as:

- Minimize track out of soil onto nearby publicly traveled roads
- Reduce vehicle speed on unpaved surfaces
- Cover haul vehicles and apply chemical dust suppressants or water to exposed surfaces, particularly to surfaces on which construction vehicles travel

Dust control measures as indicated in the Contractor's approved Dust Control Plan, or as directed by the Engineer shall be readily available for use on the project site. The cost of this work shall be included in the unit prices bid and no additional compensation will be allowed.

#### **SAW CUT JOINTS**

The removal and/or replacement of any driveways, pavement, curb, sidewalk, etc. shall be accomplished by means of a saw cut joint, at the direction of the Engineer. This work will not be paid for separately, but shall be included in the contract unit price bid for the various removal items.

#### **STORM SEWER**

All storm sewer construction shall conform to the latest edition of the "Standard Specifications for Water and Sewer Main Construction in Illinois", and in accordance with the Specification for Construction in the Village of Romeoville unless otherwise noted on the plans.

#### AGGREGATE FOR TEMPORARY ACCESS

Access to driveways shall be maintained at all times. Any temporary aggregate required shall be considered included in the cost of the various bid items.

#### **EROSION CONTROL BLANKETS (WILDLIFE FRIENDLY)**

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

Delete the first and second paragraph of Article 1081.10(a) Excelsior Blanket and substitute the following:

Excelsior blanket shall consist of a machine produced mat of wood excelsior of 100 percent, 6 in. (150 mm) or longer fiber length. The wood from which the excelsior blanket is cut shall be properly cured to achieve adequately curled and barbed fibers.

The blanket shall be of consistent thickness, with the fiber evenly distributed over the entire area of the blanket. The excelsior blanket shall be covered on the top side with a 90 day 100 percent biodegradable, plastic-free netting. Netting material shall be made of natural fiber, including coil (coconut husk fibers), jute or sisal, not altered by synthetic materials. Netting shall be "leno-weave" with movable joints (not fixed or welded), allowing each opening between vertical and horizontal twines in the netting stretchable

and thus reducing the wildlife entanglement potential. Degradable, photodegradable, UV-degradable, oxo-degradable, or oxo-biodegradable plastic netting (including polypropylene, nylon, polyethylene, and polyester) are **not** acceptable alternatives. The netting shall be substantially adhered to the excelsior blanket by a knitting process using biodegradable thread. The netting shall also be entwined with the excelsior blanket for maximum strength and ease of handling.

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

Knitted Straw Mat. Knitted straw mat shall be a machine-produced mat of 100% clean, weed free agricultural straw. The blanket shall be of consistent thickness with the straw evenly distributed over the entire area of the blanket with a functional longevity of up to 12 months. The blanket shall be covered on top and bottom sides with a 100% biodegradable woven natural organic fiber netting. No plastic netting will be allowed. Netting shall be "leno-weave" with movable joints (not fixed or welded). The netting consists of machine directional strands formed from two intertwined yarns with cross directional strands interwoven through the twisted machine strands to form an approximate  $0.50 \times 1.0 \ (1.27 \times 2.54 \ cm)$  mesh. The blanket shall be sewn together with flexible joints on 1.50 inch  $(3.81 \ cm)$  centers with biodegradable thread. The blanket shall be manufactured with a colored thread stitched along both outer edges (approximately 2-5 inches (5-12.5cm) from the edge) as an overlap guide for adjacent mats.

Delete the second paragraph of Article 1081.10(c) (1) Excelsior Blanket and substitute the following:

Both the top and bottom sides of each blanket shall be covered with 100 percent biodegradable, plastic-free netting. Netting material shall be made of natural fiber, including coil (coconut husk fibers), jute or sisal, not altered by synthetic materials. Netting shall be "leno-weave" with movable joints (not fixed or welded). The netting consists of machine directional strands formed from two intertwined yarns with cross directional strands interwoven through the twisted machine strands to form an approximate  $0.50 \times 1.0 (1.27 \times 2.54 \text{ cm})$  mesh.

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

Knitted Straw Mat. The blanket shall be machine-produced 100% biodegradable blanket, which contains 70% agricultural straw and 30% coconut fiber with a functional longevity of up to 18 months. The blanket shall be of consistent thickness with the straw and coconut evenly distributed over the entire area of the mat. The blanket shall be covered on the top and bottom sides with 100% biodegradable woven natural organic fiber netting. The top netting shall be "leno-weave," with movable joints (not fixed or welded). The netting consists of machine directional strands formed from two intertwined yarns with cross directional strands interwoven through the twisted machine

strands to form an approximate  $0.50 \times 1.0 (1.27 \times 2.54 \text{ cm})$  mesh. The blanket shall be sewn together on 1.50 inch (3.81 cm) centers with degradable thread. The blanket shall be manufactured with a colored thread stitched along both outer edges (approximately 2-5 inches (5-12.5cm) from the edge) as an overlap guide for adjacent mats.

Delete Article 1081.10(d) Wire Staples.

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

Biodegradable plastic stakes will be allowed. The biodegradable plastic anchor shall be approximately 6 in (15.24 cm) in length. No metal wire stakes will be allowed.

#### **DETECTABLE WARNINGS**

This item shall consist of the placement of detectable warning plates at the locations shown on the plans and in accordance with the IDOT Standard for Curb Ramps and Sidewalks. The detectable warning plate(s) shall be red in color and meet the Village of Romeoville Standards which are as follows: The Contractor shall furnish and install detectable warning plates manufactured by East Jordan Iron Works, Heavy Duty Load Rating, Duralast detectable warning plates, Brick Red Powder Coating RAL 3016. The Contractor is responsible for the installation of the device according to the manufacturer's specifications and the handicap ramp as described in the contract plans and specifications. All detectable warning plates shall be approved by the Village of Romeoville Public Works Department.

This work will be paid for at the contract unit price per SQUARE FOOT for DETECTABLE WARNINGS and will include all materials, equipment and labor required to complete the work as specified above.

#### SIDEWALK REMOVAL

This item includes the complete removal of concrete sidewalks at locations designated by the Engineer. Sidewalk removal shall be completed in accordance with Section 440 of the Standard Specifications.

The Contractor shall remove existing sidewalk by means of a saw cut to prevent damage to that portion which is to remain in place. Any tree roots within the aggregate base shall be removed prior to installation of the new sidewalk and shall be considered included in this item.

The cost of any excavation which may be necessary to construct a four-inch (4") aggregate base that does not currently exist shall be considered included in this item, and shall be completed in accordance with applicable portions of Sections 202.

This work will be paid for at the contract unit price per SQUARE FOOT for SIDEWALK REMOVAL and will include all equipment and labor required to complete the work as specified above

### COMBINATION CURB AND GUTTER REMOVAL AND COMBINATION CONCRETE CURB AND GUTTER

This item shall consist of the removal and replacement of combination concrete curb and gutter in accordance with Sections 440 and 606 of the Standard Specifications, by means of a sawed joint (straight) at locations as designated by the Engineer. Any and all combination concrete curb and gutter that is instructed to be removed and replaced by Engineer shall be paid for by these items, regardless of the type of curb and gutter found in place. The Contractor shall replace curb and gutter to match the type that is existing in the field unless specifically instructed otherwise by the Engineer.

All grassed areas disturbed by the removal and replacement of this item shall be restored with TOPSOIL FURNISH AND PLACE 4" and SEEDING, CLASS 2A.

The abutting street in front of the curb & gutter and all driveways, carriage walks and sidewalks behind the curb shall be restored to their original condition with like material. The surfaces shall be removed by sawed joints and one-half inch (1/2") preformed joint filler shall be used between new concrete and existing concrete; where concrete driveways, walks, etc. meet curb and gutter; and between the curb and gutter and all steel castings. Where curb and gutter is removed at a driveway location, access to the property shall be maintained with temporary aggregate in accordance with the AGGREGATE FOR TEMPORARY ACCESS special provision contained herein.

All existing pavement removed due to the removal and replacement of combination concrete curb and gutter shall be replaced with a patch in accordance with Section 442 of the Standard Specifications and at a minimum depth of eight inches (8") to the existing surface elevations. Patch shall have minimum width of two foot (2') and consist of six inches (6") of Hot-Mix Asphalt Binder Course, IL 19.0, N70 and two inches (2") of Hot-Mix Asphalt Surface Course, Mix "D", Il-9.5, N70. Aggregate Base Course Type B shall be used below the HMA patch to the bottom of the curb. Saw cutting shall be required as directed by the Engineer to secure a straight joint. Concrete will not be allowed to fill in the gap between the new curb and existing pavement.

The hot-mix asphalt material for patching, pavement removal, required expansion material, and any labor and incidentals for a complete job shall be considered included in the contract unit price bid per FOOT of COMBINATION CURB AND GUTTER REMOVAL and COMBINATION CURB AND GUTTER, TYPE SPECIFIED.

#### **MOBILIZATION & AS-BUILT FIELD DRAWINGS**

The Contractor shall provide the Village/Engineer with as-built drawings (red-lined drawings) and field notes detailing the work as denoting any changes from the design as shown on the plan sheets. The cost for providing this information will be considered included in the unit bid price for MOBILIZATION. Final payment will not be made to the Contractor until these drawings are reviewed and approved by the Village/Engineer.

#### SEEDING, CLASS 1A (MODIFIED)

This work shall consist of Seeding, Class 1A (Modified) in areas as shown in the plans or as directed by the Engineer. All work, materials, and equipment shall conform to Sections 250 and 1081 of the Standard Specifications except as modified herein.

Delete the following from Table 1 – Seeding, Mixtures, Class 1A Salt Tolerant Lawn Mixture:

Perennial Ryegrass 20 (20)

Add the following to Table 1 – Seeding, Mixtures, Class 1A Salt Tolerant Lawn Mixture:

Annual Ryegrass 20 (20)

#### SOLAR-POWERED FLASHING BEACON ASSEMBLY (COMPLETE)

This item shall consist of the furnishing and installation of a solar-powered Rectangular Rapid Flash Beacons (RRFB) and associated pedestrian push button for the path crossing at 135<sup>TH</sup> Street (Romeo Road) and Grand Boulevard. The RRFB shall be installed according to the requirements of the latest edition of the MUTCD, and at the direction of the Engineer. The assembly shall include all components to install the solar panel, control cabinet, electrical components, signage, extra large RRFB, pedestrian pushbutton, 4½" aluminum pole, and concrete foundation. Shop drawings shall be submitted to the Engineer for approval prior to ordering the equipment. The installation of the pedestrian crossing, signs and the RRFB system shall be inspected and approved by the Engineer and Village of Romeoville Public Works. The RRFB assembly and installation shall comply with the FHWA Interim Approval (IA-21) Memo. The following shall be included in the solar-powered flashing beacon assembly:

Solar Panel: 55 watt solar panel with dimensions 25¼"H x 25¾"W x 1½"D, and

adjustable from 40° to 60°. The solar panel shall conform to IP-

67.

Control Cabinet: NEMA 4X rated fiberglass or aluminum with lockable clasps.

Battery: 12V, 40AH sealed gel battery requiring no periodic watering. The

battery shall be functional for 30 days without sun exposure and

have a 5-year lifespan.

Control Circuit: IP-67 NEMA rated enclosure, dustproof and waterproof.

Wireless Communication: Radio shall operate on 900 MHz FHSS network with operating

range from 3.6vdc to 15vdc, and a 3 mile range.

Flashing Beacon: LED modules with dimensions 7½" x 3"; 2 arrays of 8 amber

LEDs, SAE J595 certified. FHWA Interim Approval (IA-21) Memo approved wig-wag flash pattern and frequency. The RRFB shall operate for a predetermined time limit per FHWA Interim Approval (IA-21) Memo. Housing shall be powder coated aluminum. Individual units for both assemblies shall operate in synchronized

patterns.

Activation: ADA pushbutton

Pole: 4.5" diameter aluminum pole conforming to Section 1077.01 of the

Standard Specifications for Road and Bridge Construction and

details on the plans.

Concrete Foundation: PCC foundation conforming to Section 1020 of the Standard

Specifications for Road and Bridge Construction and details on

the plans.

Sign Panels: Sign panels shall be in accordance with Section 720 of the

Standard Specifications, the IDOT standard details for sign mounting, and the Manual on Uniform Traffic Control Devices (MUTCD). Signs provided in both directions for each assembly.

Mounting Hardware: Stainless steel with anti-vandal fasteners

Warranty: 3 year on entire all components

This work will be paid for at the contract unit price per EACH for SOLAR-POWERED FLASHING BEACON ASSEMBLY (COMPLETE) and will include all materials, equipment and labor required to complete the work as specified above.

#### **VIDEO RECORDING CONSTRUCTION ROUTE**

Prior to the start of any construction, the contractor shall video record the area of the construction route. The video recording shall be supplied on a DVD-ROM Disc, for playback in a standard DVD player, and viewing on a television or computer. The contractor shall supply

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the engineer with two copies of the DVD prior to starting construction. The video recording shall include the following:

Existing Site
 Parkway condition
 Pavement condition
 Driveway condition
 Existing manholes

Fire hydrants • Fences • Trees and landscaped areas

The contractor shall also narrate the video recording with reference to the location (station or address) the video recording is being produced from. The video recordings shall also supply a continuous audio record of the location (preferably with address), all anticipated problem areas, items, and features for the complete area to be affected by the construction.

The format of recording and type of recording used shall remain the same throughout the project. The video recording shall produce a clear, stable image with a resolution of not less than 480i. When the recorded information is replayed and reviewed, it shall be free of electrical interference.

The audio portion of the composite signal shall be sufficiently free of electrical interference, background noise, and heavy foreign or regional accents to provide an oral report that is clear and complete and easily discernible. The audio portion of the video recording report shall be recorded by the operating technician as they are being produced and shall include references to the street address and type of construction to be performed at the site as specified in the plans. Audio comments pertaining to special circumstances, which may arise during the excavation, shall also be included. Dubbing the audio information onto the video tract after the video recording is completed will not be permitted.

Two (2) copies of DVD's shall be enclosed in plastic containers, which shall clearly indicate the date the DVD was taken, the designated section(s) of construction contained on the DVD, and the label "Village of Romeoville – Multi-Use Trail 17-00067-00-BT (Project #: 17-R0274.02)".

This work shall be paid for at the contract LUMP SUM price for PRECONSTRUCTION VIDEO TAPING.

#### **DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED**

This work shall be done according to Section 602 of the Standard Specifications. This pay item shall apply to: a storm sewer manhole, sanitary sewer manhole, catch basin, valve vault or inlet.

The existing pavement around each structure to be adjusted or reconstructed shall be removed by a straight, saw-cut joint.

All structures requiring frame and lid adjustment shall also be cleaned to the satisfaction of the Engineer in accordance with Article 602.15. This work shall not be paid for separately, but shall be considered included in the cost of the adjustment or reconstruction.

Any trench backfill needed to fill in the area around the adjusted or reconstructed structure will not be paid for separately, but shall be included in the cost of the structure being adjusted.

After adjustment or reconstruction is completed, the pavement around the structure shall be replaced with Leveling Binder (Hand Method), N50. The leveling binder will be placed on a compacted, prepared subgrade, and the thickness shall match existing conditions. The pavement replacement will not be paid for separately, but considered included in the cost of the structure being adjusted or reconstructed.

All structures to be adjusted shall include furnishing and installation of new frames and lids/grates. The frames shall be of the same height as the total pavement thickness. The lids/grates shall be in accordance with the Village of Romeoville standard details. The existing frames and lids shall be salvaged and shall be delivered to Public Works located at 615 Anderson Drive, Romeoville, IL 60446. The cost of furnishing and installation of the new frame and lid/grate along with the removal, salvaging and delivery of the existing frame and lid/grate to Public Works shall not be paid for separately, but shall be included in the cost of the Structures to be Adjusted.

Concrete rings (maximum 3 rings) with 12-inch total height may be used for adjustments. All adjusting rings shall not be paid for separately, but shall be considered included in the cost of the structures to be adjusted.

External chimney seals will be required for all sanitary sewer manholes to be adjusted. This work will not be paid for separately but shall be included in the cost of the structures to be adjusted.

This work will be paid for at the contract unit price per EACH for DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED, which price shall include all labor, material and equipment to perform the work specified above.

#### **ADJUSTMENTS AND RECONSTRUCTIONS (DISTRICT 1)**

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."

#### AGGREGATE SUBGRADE IMPROVEMENT (D-1)

Effective: February 22, 2012

Revised: April 1, 2016

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.

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

Item Article/Section

- (a) Coarse Aggregate 1004.07
- (b) Reclaimed Asphalt Pavement (RAP) (Notes 1, 2 and 3) 1031
- Note 1. Crushed RAP, from either full depth or single lift removal, may be mechanically blended with aggregate gradation CS 01 but shall not exceed 40 percent by weight of the total product. The top size of the Coarse RAP shall be less than 4 in. (100 mm) and well graded.
- Note 2. RAP having 100 percent passing the 1 1/2 in (37.5 mm) sieve and being well graded, may be used as capping aggregate in the top 3 in. (75 mm) when aggregate gradation CS 01 is used in lower lifts. When RAP is blended with any of the coarse aggregates, the blending shall be done with mechanically calibrated feeders. The final product shall not contain more than 40 percent by weight of RAP.
- Note 3. The RAP used for aggregate subgrade improvement shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".
- **303.03 Equipment.** The vibratory machine shall be according to Article 1101.01, or as approved by the Engineer. The calibration for the mechanical feeders shall have an accuracy of  $\pm$  2.0 percent of the actual quantity of material delivered.
- **303.04 Soil Preparation.** The stability of the soil shall be according to the Department's Subgrade Stability Manual for the aggregate thickness specified.
- **303.05 Placing Aggregate.** The maximum nominal lift thickness of aggregate gradation CS 01 shall be 24 in. (600 mm).
- **303.06 Capping Aggregate.** The top surface of the aggregate subgrade shall consist of a minimum 3 in. (75 mm) of aggregate gradations CA 06 or CA 10. When Reclaimed Asphalt Pavement (RAP) is used, it shall be crushed and screened where 100 percent is passing the 1 1/2 in. (37.5 mm) sieve and being well graded. RAP that has been fractionated to size will not be permitted for use in capping. Capping aggregate will not be required when the aggregate

subgrade improvement is used as a cubic yard pay item for undercut applications. When RAP is blended with any of the coarse aggregates, the blending shall be done with mechanically calibrated feeders.

**303.07 Compaction.** All aggregate lifts 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.

**303.08 Finishing and Maintenance of Aggregate Subgrade Improvement.** 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.

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

**303.10 Basis of Payment.** This work will be paid for at the contract unit price per cubic yard (cubic meter) 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. 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. The top 12 inches of the aggregate subgrade improvement shall be 3 inches of capping material and 9 inches of crushed gravel, crushed stone or crushed concrete. In applications where greater than 36 inches of subgrade material is required, rounded gravel, meeting the CS01 gradation, may be used beginning at a depth of 12 inches below the bottom of pavement.
  - (b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials. Non-mechanically blended RAP may be allowed up to a maximum of 5.0 percent.
  - (c) Gradation.
    - (1) The coarse aggregate gradation for total subgrade thicknesses of 12 in. (300 mm) or greater shall be CS 01.

Grad No.	COARSE AGGREGATE SUBGRADE GRADATIONS Sieve Size and Percent Passing					
	8"	6"	4"	2"	#4	
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20	

	COARSE AGGREGATE SUBGRADE GRADATIONS (Metric)
Grad No.	Sieve Size and Percent Passing

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	200 mm	150 mm	100 mm	50 mm	4.75 mm
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20

(2) The 3 in. (75 mm) capping aggregate shall be gradation CA 6 or CA 10.

#### **QUANTITIES FOR AGGREGATE SUBGRADE IMPROVEMENT**

The quantities and locations for REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL and AGGREGATE SUBGRADE IMPROVEMENT called for in this contract indicate the approximate amount of subgrade improvement to be expected. The actual amounts for the various removal and replacement items shall be determined in the field at the time of construction as marked out by the Engineer in the field. It shall be understood and agreed upon that the unit price for these items shall prevail throughout the period of the contract and that no additional compensation per unit price will be allowed for any increase or decrease in the aggregate subgrade improvement quantity.

#### **DRAINAGE AND INLET PROTECTION UNDER TRAFFIC (DISTRICT 1)**

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

Add the following to Article 603.02 of the Standard Specifications:

- "(i) Temporary Hot-Mix Asphalt (HMA) Ramp (Note 1) ......1030
- (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 ± 1/4 in. (6 mm)			

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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."

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#### **FRICTION AGGREGATE (DISTRICT 1)**

Effective: January 1, 2011 Revised: November 1, 2019

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

Use	Mixture	Aggregates Allowed		
HMA High ESAL Low ESAL	C Surface and Binder IL-9.5 or IL-9.5L SMA Ndesign 50 Surface	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> Crushed Concrete <sup>3/</sup>		
HMA High ESAL	D Surface and Binder IL-9.5 SMA Ndesign 50 Surface			
HMA High ESAL	E Surface IL-9.5 SMA Ndesign 80 Surface	Allowed Alone or in Combination 5/6/:  Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag  No Limestone.  Other Combinations Allowed: Up to With		

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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> or Crushed Concrete <sup>3/</sup>	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag		
HMA	F Surface	Allowed Alone or in C	Allowed Alone or in Combination 5/6/:		
High ESAL	SMA Ndesign 80 Surface	Crystalline Crushed S Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.			
		Other Combinations A	<u>Allowed</u> :		
		Up to	With		
		50% Crushed Gravel <sup>2/</sup> , Crushed Concrete <sup>3/</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. In SMA Ndesign 50, carbonate crushed stone shall not be blended with any of the other aggregates allowed alone in Ndesign 50 SMA binder or Ndesign 50 SMA surface.
- 3/ Crushed concrete will not be permitted in SMA mixes.
- 4/ Crushed steel slag shall not be used as leveling 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."

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#### **GROUND TIRE RUBBER (GTR) MODIFIED ASPHALT BINDER (DISTRICT 1)**

Effective: June 26, 2006 Revised: April 1, 2016

Add the following to the end of article 1032.05 of the Standard Specifications:

"(c) Ground Tire Rubber (GTR) Modified Asphalt Binder. A quantity of 10.0 to 14.0 percent GTR (Note 1) shall be blended by dry unit weight with a PG 64-28 to make a GTR 70-28 or a PG 58-28 to make a GTR 64-28. The base PG 64-28 and PG 58-28 asphalt binders shall meet the requirements of Article 1032.05(a). Compatible polymers may be added during production. The GTR modified asphalt binder shall meet the requirements of the following table.

Test	Asphalt Grade GTR 70-28	Asphalt Grade GTR 64-28
Flash Point (C.O.C.), AASHTO T 48, °F (°C), min.	450 (232)	450 (232)
Rotational Viscosity, AASHTO T 316 @ 275 °F (135 °C), Poises, Pa·s, max.	30 (3)	30 (3)
Softening Point, AASHTO T 53, °F (°C), min.	135 (57)	130 (54)
Elastic Recovery, ASTM D 6084, Procedure A (sieve waived) @ 77 °F, (25 °C), aged, ss, 100 mm elongation, 5 cm/min., cut immediately, %, min.	65	65

Note 1. GTR shall be produced from processing automobile and/or light truck tires by the ambient grinding method. GTR shall not exceed 1/16 in. (2 mm) in any dimension and shall contain no free metal particles or other 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, 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

Add the following to the end of Note 1. 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 must be capable of providing continuous mechanical mixing throughout by continuous agitation and 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."

Revise 1030.02(c) of the Standard Specifications to read:

"(c) RAP Materials (Note 5) ......1031"

Add the following note to 1030.02 of the Standard Specifications:

Note 5. When using reclaimed asphalt pavement and/or reclaimed asphalt shingles, the maximum asphalt binder replacement percentage shall be according to the most recent special provision for recycled materials.

#### **HOT-MIX ASPHALT BINDER AND SURFACE COURSE (DISTRICT 1)**

Effective: November 1, 2019 Revised: February 2, 2020

<u>Description</u>. This work shall consist of constructing a hot-mix asphalt (HMA) binder and/or surface course on a prepared base. Work shall be according to Sections 406 and 1030 of the Standard Specifications, except as modified herein.

Materials. 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		
LINAA LISUL EQAL	SMA 12.5 <sup>2/</sup>	CA 13 <sup>4</sup> , CA 14, or CA 16	
HMA High ESAL	SMA 9.5 <sup>2/</sup>	CA 13 <sup>3/4/</sup> or CA 16 <sup>3/</sup>	
	IL-9.5	CA 16, CM 13 <sup>4/</sup>	
	IL-9.5FG	CA 16	
HMA Low ESAL	IL-19.0L	CA 11 <sup>1/</sup>	
INIA LOW ESAL	IL-19.0; Stabilized Subbase IL-19.0 SMA 12.5 <sup>2/</sup> SMA 9.5 <sup>2/</sup> IL-9.5 IL-9.5FG	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 stone sand, slag sand, or steel slag sand meeting the FA/FM 20 gradation and mineral filler to meet the approved mix design and the mix requirements noted herein.
- 3/ The specified coarse aggregate gradations may be blended.
- 4/ CA 13 shall be 100 percent passing the 1/2 in. (12.5mm) sieve."

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

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

<u>HMA Nomenclature</u>. 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 Article 1030.02 of the Standard Specifications and Supplemental Specifications to read:

"1030.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate	1004.03
(b) Fine Aggregate	1003.03
(c) RAP Material	1031
(d) Mineral Filler	1011
(e) Hydrated Lime	1012.01
(f) Slaked Quicklime (Note 1)	
(g) Performance Graded Asphalt Binder (Note 2)	1032
(h) Fibers (Note 3)	
(i) Warm Mix Asphalt (WMA) Technologies (Note 4)	

Note 1. Slaked guicklime shall be according to ASTM C 5.

Note 2. 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. The elastic recovery shall be a minimum of 80.

Note 3. 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 4. Warm mix additives or foaming processes shall be selected from the Department's Qualified Producer List, "Technologies for the Production of Warm Mix Asphalt (WMA)"."

## <u>Mixture Design</u>. Revise Article 1030.04(a)(1) of the Standard Specifications and the Supplemental Specifications to read:

High ESAL, MIXTURE COMPOSITION (% PASSING) 1/										
Sieve	IL-19.0	mm	SMA	12.5	SMA	A 9.5	IL-	9.5mm	IL-4.7	75 mm
Size	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
3/8 in. (9.5 mm)				65	90	100	90	100		100
#4 (4.75 mm)	40	60	20	30	36	50	34	69	90	100
#8 (2.36 mm)	20	42	16	24 4/	16	324/	34 5/	52 <sup>2/</sup>	70	90
#16 (1.18 mm)	15	30					10	32	50	65
#30 (600 μm)			12	16	12	18				
#50 (300 μm)	6	15					4	15	15	30
#100 (150 μm)	4	9					3	10	10	18
#200 (75 μm)	3	6	7.0	9.0 3/	7.5	9.5 <sup>3/</sup>	4	6	7	9 3/
#635 (20 μm)			≤ ;	3.0	≤ ;	3.0				
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		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.

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- 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.

Revise Article 1030.04(b)(1) of the Standard Specifications to read:

"(1) High ESAL Mixtures. The target value for the air voids of the HMA shall be 4.0 percent, for IL-4.75 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.

	VOLUMETRIC REQUIREMENTS High ESAL							
	Voids in the	Voids Filled with Asphalt Binder						
Ndesign	IL-19.0; Stabilized Subbase IL- 19.0	(VFA), %						
50		65 – 78 <sup>2/</sup>						
70	13.5	65 - 75						
90	10.0	15.0		03 - 73				

- 1/ Maximum draindown for IL-4.75 shall be 0.3 percent.
- 2/ VFA for IL-4.75 shall be 72-85 percent."

Revise the table in Article 1030.04(b)(3) to read:

"VOLUMETRIC REQUIREMENTS, SMA 12.5 1/ and SMA 9.5 1/				
Ndesign	Design Air Voids Target %	Voids in the Mineral Aggregate (VMA), % min.	Voids Filled with Asphalt (VFA), %	
80 4/	3.5	17.0 <sup>2/</sup> 16.0 <sup>3/</sup>	75 - 83	

- 1/ Maximum draindown shall be 0.3 percent. The draindown shall be determined at the JMF asphalt binder content at the mixing temperature plus 30 °F.
- 2/ Applies when specific gravity of coarse aggregate is ≥ 2.760.
- 3/ Applies when specific gravity of coarse aggregate is < 2.760.
- 4/ Blending of different types of aggregate will not be permitted. 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.

Add to the end of Article 1030.05 (d) (2) a. of the Standard Specifications:

"During production, the Contractor shall test SMA mixtures for draindown according to AASHTO T305 at a frequency of 1 per day of production."

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."

Quality Control/Quality Assurance (QC/QA). Revise the third paragraph of Article 1030.05(d)(3) 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."

Add the following paragraphs to the end of Article 1030.05(d)(3):

- Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 4 in. (100 mm), from each pavement edge (i.e. for a 5 in. (125 mm) lift the near edge of the density gauge or core barrel shall be within 5 in. (125 mm) from the edge of pavement). Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.
  - a. Confined Edge. Each confined edge density shall be represented by a oneminute nuclear density reading or a core density and shall be included in the

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- average of density readings or core densities taken across the mat which represents the Individual Test.
- b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced 10 ft (3 m) apart longitudinally along the unconfined pavement edge and centered at the random density test location.

When a longitudinal joint sealant (LJS) is applied, longitudinal joint density testing will not be required on the joint(s) sealed."

Revise the second table in Article 1030.05(d)(4) and its notes to read:

"DENSITY CONTROL LIMITS				
Mixture Composition	Parameter	Individual Test (includes confined edges)	Unconfined Edge Joint Density, minimum	
IL-4.75	Ndesign = 50	93.0 – 97.4 % 1/	91.0%	
IL-9.5FG	Ndesign = 50 - 90	93.0 – 97.4 %	91.0%	
IL-9.5	Ndesign = 90	92.0 – 96.0 %	90.0%	
IL-9.5, IL-9.5L,	Ndesign < 90	92.5 – 97.4 %	90.0%	
IL-19.0	Ndesign = 90	93.0 – 96.0 %	90.0%	
IL-19.0, IL-19.0L	Ndesign < 90	93.0 <sup>2/</sup> – 97.4 %	90.0%	
SMA	Ndesign = 80	93.5 – 97.4 %	91.0%	

- 1/ Density shall be determined by cores or by correlated, approved thin lift nuclear gauge.
- 2/ 92.0 % when placed as first lift on an unimproved subgrade."

Equipment. Add the following to Article 1101.01 of the Standard Specifications:

"(h) Oscillatory Roller. The oscillatory roller shall be self-propelled and provide a smooth operation when starting, stopping, or reversing directions. The oscillatory roller shall be able to operate in a mode that will provide tangential impact force with or without vertical impact force by using at least one drum. The oscillatory roller shall be equipped with water tanks and sprinkling devices, or other approved methods, which shall be used to wet the drums to prevent material pickup. The drum(s) amplitude and frequency of the tangential and vertical impact force shall be approximately the same in each direction and meet the following requirements:

- (1) The minimum diameter of the drum(s) shall be 42 in. (1070 mm);
- (2) The minimum length of the drum(s) shall be 57 in. (1480 mm);
- (3) The minimum unit static force on the drum(s) shall be 125 lb/in. (22 N/m); and
- (4) The minimum force on the oscillatory drum shall be 18,000 lb (80 kN)."

### Construction Requirements.

Add the following to Article 406.03 of the Standard Specifications:

"(j) Oscillatory Roller ......1101.01"

Revise the third paragraph of Article 406.05(a) to read:

"All depressions of 1 in. (25 mm) or more in the surface of the existing pavement shall be filled with binder. At locations where heavy disintegration and deep spalling exists, the area shall be cleaned of all loose and unsound material, tacked, and filled with binder (hand method)."

Revise Article 406.05(c) to read.

"(c) Binder (Hand Method). Binder placed other than with a finishing machine will be designated as binder (hand method) and shall be compacted with a roller to the satisfaction of the Engineer. Hand tamping will be permitted when approved by the Engineer."

Revise the special conditions for mixture IL-4.75 in Article 406.06(b)(2)e. to read:

"e. The mixture shall be overlaid within 5 days of being placed."

Revise Article 406.06(d) to read:

"(d) Lift Thickness. The minimum compacted lift thickness for HMA binder and surface courses shall be as follows.

MINIMUM COMPACTED LIFT THICKNESS			
Mixture Composition	Thickness, in. (mm)		
IL-4.75	3/4 (19) - over HMA surfaces <sup>1/</sup> 1 (25) - over PCC surfaces <sup>1/</sup>		
IL-9.5FG 1 1/4 (32)			
IL-9.5, IL-9.5L 1 1/2 (38)			
SMA 9.5 1 3/4 (45)			
SMA 12.5 2 (51)			
IL-19.0, IL-19.0L	2 1/4 (57)		

1/ The maximum compacted lift thickness for mixture IL-4.75 shall be 1 1/4 in. (32 mm)."

Revise Table 1 and Note 3/ of Table 1 in Article 406.07(a) of the Standard Specifications to read:

"TABLE 1 - MINIMUM ROLLER REQUIREMENTS FOR HMA					
	Density Requirement				
Binder and Surface 1/	V <sub>D</sub> , P <sup>3/</sup> , T <sub>B</sub> , 3W, O <sub>T</sub> , O <sub>B</sub>	P <sup>3/</sup> , O <sub>T</sub> , O <sub>B</sub>	V <sub>S</sub> , T <sub>B</sub> , T <sub>F,</sub> O <sub>T</sub>	As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7).	
IL-4.75 and SMA 4/5/	T <sub>B,</sub> 3W, O <sub>T</sub>		T <sub>F</sub> , 3W, O <sub>T</sub>		
Bridge Decks <sup>2/</sup>	Тв		T <sub>F</sub>	As specified in Articles 582.05 and 582.06.	

3/ A vibratory roller (V<sub>D</sub>) or oscillatory roller (O<sub>T</sub> or O<sub>B</sub>) may be used in lieu of the pneumatic-tired roller on mixtures containing polymer modified asphalt binder."

Add the following to EQUIPMENT DEFINITION in Article 406.07(a) contained in the Errata of the Supplemental Specifications:

- " $O_T$  Oscillatory roller, tangential impact mode. Maximum speed is 3.0 mph (4.8 km/h) or 264 ft/min (80 m/min).
- O<sub>B</sub> Oscillatory roller, tangential and vertical impact mode, operated at a speed to produce not less than 10 vertical impacts/ft (30 impacts/m)."

Delete last sentence of the second paragraph of Article 1102.01(a) (4) b. 2.

Add to the end of Article 1102.01 (a) (4) b. 2.:

"As an option, collected dust (baghouse) may be used in lieu of manufactured mineral filler according to the following:

- (a.) Sufficient collected dust (baghouse) is available for production of the SMA mix for the entire project.
- (b.) A mix design was prepared based on collected dust (baghouse).

Revise Article 1030.04 (d) of the Standard Specifications to read:

"(d) Verification Testing. High ESAL, IL-4.75, and SMA mix designs submitted for verification will be tested to ensure that the resulting mix designs will pass the required criteria for the Hamburg Wheel Test (IL mod AASHTO T-324) and the Tensile Strength Test (IL mod AASHTO T-283). The Department will perform a verification test on gyratory specimens compacted by the Contractor. If the mix fails the Department's verification test, the Contractor shall make the necessary changes to the mix and resubmit compacted specimens to the Department for verification. If the mix fails again, the mix design will be rejected.

All new mix designs will be required to be tested, prior to submittal for Department verification and shall meet the following requirements:

(1)Hamburg Wheel Test criteria. The maximum allowable rut depth shall be 0.5 in. (12.5 mm). The minimum number of wheel passes at the 0.5 in. (12.5 mm) rut depth criteria shall be based on the high temperature binder grade of the mix as specified in the mix requirements table of the plans.

Illinois Modified AASHTO T 324 Requirements <sup>1/</sup>

Asphalt Binder Grade	# Repetitions	Max Rut Depth (mm)
PG 70 -XX (or higher)	20,000	12.5
PG 64 -XX (or lower)	10,000	12.5

1/ When produced at temperatures of  $275 \pm 5$  °F ( $135 \pm 3$  °C) or less, loose Warm Mix Asphalt shall be oven aged at  $270 \pm 5$  °F ( $132 \pm 3$  °C) for two hours prior to gyratory compaction of Hamburg Wheel specimens.

Note: For SMA Designs (N-80) the maximum rut depth is 6.0 mm at 20,000 repetitions.

For IL 4.75mm Designs (N-50) the maximum rut depth is 9.0mm at 15,000 repetitions.

(2) Tensile Strength Criteria. The minimum allowable conditioned tensile strength shall be 60 psi (415 kPa) for non-polymer modified performance graded (PG) asphalt binder and 80 psi (550 kPa) for polymer modified PG asphalt binder. The maximum allowable unconditioned tensile strength shall be 200 psi (1380 kPa)."

<u>Production Testing</u>. Revise first paragraph of Article 1030.06(a) of the Standard Specifications to read:

"(a) High ESAL, IL-4.75, WMA, and SMA Mixtures. For each contract, a 300 ton (275 metric tons) test strip, except for SMA mixtures it will be 400 ton (363 metric ton), will be required at the beginning of HMA production for each mixture at the beginning of 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."

Add the following after the sixth paragraph in Article 1030.06 (a) of the Standard Specifications:

"The Hamburg Wheel test shall also be conducted on all HMA mixtures from a sample taken within the first 500 tons (450 metric tons) on the first day of production or during start up with a split reserved for the Department. The mix sample shall be tested according to the Illinois Modified AASHTO T 324 and shall meet the requirements specified herein. Mix production shall not exceed 1500 tons (1350 metric tons) or one day's production, whichever comes first, until the testing is completed and the mixture is found to be in conformance. The requirement to cease mix production may be waived if the plant produced mixture demonstrates conformance prior to start of mix production for a contract. If the mixture fails to meet the Hamburg Wheel criteria, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria"

### Method of Measurement:

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

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

<u>Basis of Payment</u>. Replace the second through the fifth paragraphs of Article 406.14 with the following:

"HMA binder and surface courses will be paid for at the contract unit price per ton (metric ton) for MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS; HOT-MIX ASPHALT BINDER

COURSE (HAND METHOD), of the Ndesign specified; HOT-MIX ASPHALT BINDER COURSE, of the mixture composition and Ndesign specified; HOT-MIX ASPHALT SURFACE COURSE, of the mixture composition, friction aggregate, and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT BINDER COURSE (HAND METHOD), of the Ndesign specified; POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, of the mixture composition and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, of the mixture composition, friction aggregate, and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, STONE MATRIX ASPHALT, of the mixture composition and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, of the mixture composition, friction aggregate, and Ndesign specified."

### RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (DISTRICT 1)

Effective: November 1, 2012 Revise: November 1, 2019

Revise Section 1031 of the Standard Specifications to read:

### "SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES

**1031.01 Description.** Reclaimed asphalt pavement and reclaimed asphalt shingles shall be according to the following.

- (a) Reclaimed Asphalt Pavement (RAP). RAP is the material resulting from cold milling or crushing an existing hot-mix asphalt (HMA) pavement. RAP will be considered processed FRAP after completion of both crushing and screening to size. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.
- (b) Reclaimed Asphalt Shingles (RAS). Reclaimed asphalt shingles (RAS). RAS is from the processing and grinding of preconsumer or post-consumer shingles. RAS shall be a clean and uniform material with a maximum of 0.5 percent unacceptable material, as defined in Central Bureau of Materials Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources", by weight of RAS. All RAS used shall come from a Central Bureau of Materials approved processing facility where it shall be ground and processed to 100 percent passing the 3/8 in. (9.5 mm) sieve and 90 percent passing the #4 (4.75 mm) sieve. RAS shall meet the testing requirements specified herein. In addition, RAS shall meet the following Type 1 or Type 2 requirements.
  - (1) Type 1. Type 1 RAS shall be processed, preconsumer asphalt shingles salvaged from the manufacture of residential asphalt roofing shingles.
  - (2) Type 2. Type 2 RAS shall be processed post-consumer shingles only, salvaged from residential, or four unit or less dwellings not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP).

**1031.02 Stockpiles.** RAP and RAS stockpiles shall be according to the following.

(a) RAP Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. Additional processed RAP (FRAP) shall be stockpiled in a separate working pile, as designated in the QC Plan, and only added to the sealed stockpile when test results for the working pile are complete and are found to meet tolerances specified herein for the original sealed FRAP stockpile. Stockpiles shall be sufficiently separated to prevent intermingling at the base. All stockpiles (including unprocessed RAP and FRAP) shall be identified by signs indicating the type as listed below (i.e. "Non- Quality, FRAP -#4 or Type 2 RAS", etc...).

- (1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. All FRAP shall be processed prior to testing and sized into fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP in the coarse fraction shall pass the maximum sieve size specified for the mixture composition of the mix design.
- (2) Restricted FRAP (B quality) stockpiles shall consist of RAP from Class I, HMA (High ESAL), or HMA (High ESAL). If approved by the Engineer, the aggregate from a maximum 3.0 in. (75 mm) single combined pass of surface/binder milling will be classified as B quality. All millings from this application will be processed into FRAP as described previously.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed (FRAP) prior to testing. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (4) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from HMA shoulders, bituminous stabilized subbases or HMA (Low ESAL)/HMA (Low ESAL) IL-19.0L binder mixture. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".
- RAP or FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, plant cleanout etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.
- (b) RAS Stockpiles. Type 1 and Type 2 RAS shall be stockpiled separately and shall be sufficiently separated to prevent intermingling at the base. Each stockpile shall be signed indicating what type of RAS is present.
  - However, a RAS source may submit a written request to the Department for approval to blend mechanically a specified ratio of Type 1 RAS with Type 2 RAS. The source will not be permitted to change the ratio of the blend without the Department prior written

approval. The Engineer's written approval will be required, to mechanically blend RAS with any fine aggregate produced under the AGCS, up to an equal weight of RAS, to improve workability. The fine aggregate shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The fine aggregate shall be one that is approved for use in the HMA mixture and accounted for in the mix design and during HMA production.

Records identifying the shingle processing facility supplying the RAS, RAS type, and lot number shall be maintained by project contract number and kept for a minimum of three years.

### **1031.03 Testing.** FRAP and RAS testing shall be according to the following.

- (a) FRAP Testing. When used in HMA, the FRAP shall be sampled and tested either during processing or after stockpiling. It shall also be sampled during HMA production.
  - (1) During Stockpiling. For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).
  - (2) Incoming Material. For testing as incoming material, washed extraction samples shall be run at a minimum frequency of one sample per 2000 tons (1800 metric tons) or once per week, whichever comes first.
  - (3) After Stockpiling. For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP/FRAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

Before extraction, each field sample of FRAP, shall be split to obtain two samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedure. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

- (b) RAS Testing. RAS shall be sampled and tested during stockpiling according to Central Bureau of Materials Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources". The Contractor shall also sample as incoming material at the HMA plant.
  - (1) During Stockpiling. Washed extraction and testing for unacceptable materials shall be run at the minimum frequency of one sample per 200 tons (180 metric tons) for the first 1000 tons (900 metric tons) and one sample per 1000 tons (900 metric tons) thereafter. A minimum of five samples are required for stockpiles

less than 1000 tons (900 metric tons). Once a  $\leq$  1000 ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS shall be in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.

(2) Incoming Material. For testing as incoming material at the HMA plant, washed extraction shall be run at the minimum frequency of one sample per 250 tons (227 metric tons). A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). The incoming material test results shall meet the tolerances specified herein.

The Contractor shall obtain and make available all test results from start of the initial stockpile sampled and tested at the shingle processing facility in accordance with the facility's QC Plan.

Before extraction, each field sample shall be split to obtain two samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedures. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

### **1031.04 Evaluation of Tests.** Evaluation of test results shall be according to the following.

(a) Evaluation of FRAP Test Results. All test results shall be compiled to include asphalt binder content, gradation and, when applicable (for slag), G<sub>mm</sub>. A five test average of results from the original pile will be used in the mix designs. Individual extraction test results run thereafter, shall be compared to the average used for the mix design, and will be accepted if within the tolerances listed below.

Parameter	FRAP	
No. 4 (4.75 mm)	± 6 %	
No. 8 (2.36 mm)	± 5 %	
No. 30 (600 μm)	± 5 %	
No. 200 (75 μm)	± 2.0 %	
Asphalt Binder	± 0.3 %	
G <sub>mm</sub>	± 0.03 <sup>1/</sup>	

1/ For stockpile with slag or steel slag present as determined in the current Manual of Test Procedures Appendix B 21, "Determination of Reclaimed Asphalt Pavement Aggregate Bulk Specific Gravity".

If any individual sieve and/or asphalt binder content tests are out of the above tolerances when compared to the average used for the mix design, the FRAP stockpile shall not be

used in Hot-Mix Asphalt unless the FRAP representing those tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

The Contractor shall maintain a representative moving average of five tests to be used for Hot-Mix Asphalt production.

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the ITP, "Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)" or Illinois Modified AASHTO T-164-11, Test Method A.

(b) Evaluation of RAS Test Results. All of the test results, with the exception of percent unacceptable materials, shall be compiled and averaged for asphalt binder content and gradation. A five test average of results from the original pile will be used in the mix designs. Individual test results run thereafter, when compared to the average used for the mix design, will be accepted if within the tolerances listed below.

Parameter	RAS
No. 8 (2.36 mm)	± 5 %
No. 16 (1.18 mm)	± 5 %
No. 30 (600 µm)	± 4 %
No. 200 (75 µm)	± 2.5 %
Asphalt Binder Content	± 2.0 %

If any individual sieve and/or asphalt binder content tests are out of the above tolerances when compared to the average used for the mix design, the RAS shall not be used in Hot-Mix Asphalt unless the RAS representing those tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

(c) Quality Assurance by the Engineer. The Engineer may witness the sampling and splitting conduct assurance tests on split samples taken by the Contractor for quality control testing a minimum of once a month.

The overall testing frequency will be performed over the entire range of Contractor samples for asphalt binder content and gradation. The Engineer may select any or all split samples for assurance testing. The test results will be made available to the Contractor as soon as they become available.

The Engineer will notify the Contractor of observed deficiencies.

Differences between the Contractor's and the Engineer's split sample test results will be considered acceptable if within the following limits.

Test Parameter	Acceptable Limits of Precision	
----------------	--------------------------------	--

% Passing: <sup>1/</sup>	FRAP	RAS
1/2 in.	5.0%	
No. 4	5.0%	
No. 8	3.0%	4.0%
No. 30	2.0%	4.0%
No. 200	2.2%	4.0%
Asphalt Binder Content	0.3%	3.0%
$G_{mm}$	0.030	

1/ Based on washed extraction.

In the event comparisons are outside the above acceptable limits of precision, the Engineer will immediately investigate.

(d) Acceptance by the Engineer. Acceptable of the material will be based on the validation of the Contractor's quality control by the assurance process.

### 1031.05 Quality Designation of Aggregate in RAP and FRAP.

- (a) RAP. The aggregate quality of the RAP for homogeneous, conglomerate, and conglomerate "D" quality stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.
  - (1) RAP from Class I, HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.
  - (2) RAP from HMA (Low ESAL) IL-19.0L binder mixture is designated as Class D quality coarse aggregate.
  - (3) RAP from Class I, HMA (High ESAL) binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate.
  - (4) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.
- (b) FRAP. If the Engineer has documentation of the quality of the FRAP aggregate, the Contractor shall use the assigned quality provided by the Engineer.

If the quality is not known, the quality shall be determined as follows. Fractionated RAP stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5,000 tons (4,500 metric tons). The Contractor shall obtain a representative sample witnessed by the Engineer. The sample shall be a minimum of 50 lb (25 kg). The sample shall be extracted according to Illinois Modified AASHTO T 164 by a consultant laboratory prequalified by the Department for the specified testing. The consultant laboratory shall submit the test results along with the recovered aggregate to

the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample to the Central Bureau of Materials Aggregate Lab for MicroDeval Testing, according to ITP 327. A maximum loss of 15.0 percent will be applied for all HMA applications. The fine aggregate portion of the fractionated RAP shall not be used in any HMA mixtures that require a minimum of "B" quality aggregate or better, until the coarse aggregate fraction has been determined to be acceptable thru a MicroDeval Testing.

**1031.06 Use of FRAP and/or RAS in HMA.** The use of FRAP and/or RAS shall be the Contractor's option when constructing HMA in all contracts.

- (a) FRAP. The use of FRAP in HMA shall be as follows.
  - (1) Coarse Aggregate Size (after extraction). The coarse aggregate in all FRAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
  - (2) Steel Slag Stockpiles. FRAP stockpiles containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in HMA (High ESAL and Low ESAL) mixtures regardless of lift or mix type.
  - (3) Use in HMA Surface Mixtures (High and Low ESAL). FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall have coarse aggregate that is Class B quality or better. FRAP shall be considered equivalent to limestone for frictional considerations unless produced/screened to minus 3/8 inch.
  - (4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP in which the coarse aggregate is Class C quality or better.
  - (5) Use in Shoulders and Subbase. FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, Restricted FRAP, conglomerate, or conglomerate DQ.
- (b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.
- (c) FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with FRAP in HMA mixtures up to a maximum of 5.0 percent by weight of the total mix.

When FRAP is used alone or FRAP is used in conjunction with RAS, the percent of virgin asphalt binder replacement (ABR) shall not exceed the amounts listed below for a given N Design.

### Maximum Asphalt Binder Replacement (ABR) for FRAP with RAS Combination

HMA Mixtures	Maximum % ABR		
Ndesign	Binder <sup>5/</sup>	Surface <sup>5/</sup>	Polymer Modified 3/
30L	50	40	30
50	40	35	30
70	40	30	30
90	40	30	30
SMA			30
IL-4.75			40

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the percent asphalt binder replacement shall not exceed 50 % of the total asphalt binder in the mixture.
- 2/ When the binder replacement exceeds 15 % for all mixes, except for SMA and IL-4.75, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 % binder replacement using a virgin asphalt binder grade of PG64-22 will be reduced to a PG58-28). When constructing full depth HMA and the ABR is less than 15 %, the required virgin asphalt binder grade shall be PG64-28.
- 3/ When the ABR for SMA or IL-4.75 is 15 % or less, the required virgin asphalt binder shall be SBS PG76-22 and the elastic recovery shall be a minimum of 80. When the ABR for SMA or IL-4.75 exceeds 15%, the virgin asphalt binder grade shall be SBS PG70-28 and the elastic recovery shall be a minimum of 80.
- 4/ When FRAP or RAS is used alone, the maximum percent asphalt binder replacement designated on the table shall be reduced by 10 %.
- 5/ When the mix has Illinois Flexibility Index Test (I-FIT) requirements, the maximum percent asphalt binder replacement designated on the table may be increased by 5%.
- **1031.07 HMA Mix Designs.** At the Contractor's option, HMA mixtures may be constructed utilizing FRAP and/or RAS material meeting the detailed requirements specified herein.
  - (a) FRAP and/or RAS. FRAP and /or RAS mix designs shall be submitted for verification. If additional FRAP or RAS stockpiles are tested and found to be within tolerance, as defined under "Evaluation of Tests" herein, and meet all requirements herein, the

Village of Romeoville Will County

additional FRAP or RAS stockpiles may be used in the original design at the percent previously verified.

(b) RAS. Type 1 and Type 2 RAS are not interchangeable in a mix design.

The RAP, FRAP and RAS stone specific gravities ( $G_{sb}$ ) shall be according to the "Determination of Aggregate Bulk (Dry) Specific Gravity ( $G_{sb}$ ) of Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)" procedure in the Department's Manual of Test Procedures for Materials.

**1031.08 HMA Production.** HMA production utilizing FRAP and/or RAS shall be as follows.

A scalping screen, gator, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAS and FRAP feed system to remove or reduce oversized and agglomerated material.

If during mix production, corrective actions fail to maintain FRAP, RAS or QC/QA test results within control tolerances or the requirements listed herein, the Contractor shall cease production of the mixture containing FRAP or RAS and conduct an investigation that may require a new mix design.

- (a) FRAP. The coarse aggregate in all FRAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.
- (b) RAS. RAS shall be incorporated into the HMA mixture either by a separate weight depletion system or by using the RAP weigh belt. Either feed system shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes. The portion of RAS shall be controlled accurately to within ± 0.5 percent of the amount of RAS utilized. When using the weight depletion system, flow indicators or sensing devices shall be provided and interlocked with the plant controls such that the mixture production is halted when RAS flow is interrupted.
- (c) HMA Plant Requirements. HMA plants utilizing FRAP and/or RAS shall be capable of automatically recording and printing the following information.
  - (1) Dryer Drum Plants.
    - a. Date, month, year, and time to the nearest minute for each print.
    - b. HMA mix number assigned by the Department.
    - c. Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).

- d. Accumulated dry weight of RAS and FRAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- e. Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.
- f. Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
- g. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.
- Aggregate RAS and FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAS and FRAP are printed in wet condition.)
- i. When producing mixtures with FRAP and/or RAS, a positive dust control system shall be utilized.
- j. Accumulated mixture tonnage.
- k. Dust Removed (accumulated to the nearest 0.1 ton (0.1 metric ton))
- (2) Batch Plants.
  - a. Date, month, year, and time to the nearest minute for each print.
  - b. HMA mix number assigned by the Department.
  - c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
  - d. Mineral filler weight to the nearest pound (kilogram).
  - e. RAS and FRAP weight to the nearest pound (kilogram).
  - f. Virgin asphalt binder weight to the nearest pound (kilogram).
  - g. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.

The printouts shall be maintained in a file at the plant for a minimum of one year or as directed by the Engineer and shall be made available upon request. The printing system will be inspected by the Engineer prior to production and verified at the beginning of each construction season thereafter.

1031.09 RAP in Aggregate Surface Course and Aggregate Wedge Shoulders, Type B. The use of RAP in aggregate surface course and aggregate shoulders shall be as follows.

- (a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Non-Quality" and "FRAP". The testing requirements of Article 1031.03 shall not apply. RAP used shall be according to the current Central Bureau of Materials Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".
- (b) Gradation. The RAP material shall meet the gradation requirements for CA 6 according to Article 1004.01(c), except the requirements for the minus No. 200 (75 μm) sieve shall not apply. The sample for the RAP material shall be air dried to constant weight prior to being tested for gradation."

Section No. 17-00067-00-BT Village of Romeoville Will County

### **PUBLIC CONVENIENCE AND SAFETY (DISTRICT 1)**

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."

Contract #61G64 Section No. 17-00067-00-BT Village of Romeoville Will County

### **STATUS OF UTILITIES (DISTRICT 1)**

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

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

### **UTILITIES TO BE ADJUSTED**

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

STAGE / LOCATION	TYPE	DESCRIPTION	OWNER
NGPL ROW Sta 35+75 RT/LT Sta 63+35 RT/LT Sta 64+54 RT/LT Sta 75+89 RT/LT Sta 90+17 LT Sta 94+90 LT Sta 103+18 RT/LT Sta 109+65 RT	Natural Gas Pipeline	Utility to relocate pipeline markers during construction. Contractor to coordinate project schedule to allow for these relocations.	NATURAL GAS PIPELINE CO.

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

Agency/Company Responsible to Resolve Conflict	Name of contact	Phone	E-mail address
NATURAL GAS	MARK	815-693-	MARK_THORSON@KINDERMORGAN.COM
PIPELINE CO.	THORSON	0520	
ONEOK NORTH	DANIELLE	815-318-	DANIELLE.WALLIN@ONEOK.COM
SYSTEMS LLC	WALLIN	4809	
AT&T	STEVEN	630-573-	SP9653@ATT.COM
	PESOLA	5703	

COMED	SOLVATORE	847-508-	SOLVATORE.RIGITANO@COMED.COM
	RIGITANO	9901	
COMCAST	CHRIS BAKER	224-243-	CHRIS_BAKER@CABLE.COMCAST.COM
		6330	
NICOR	CHARLES	630-388-	CPARROT@SOUTHERNCO.COM
	PAROTT	3319	
METRO FIBERNET,	KORIE NELLIS	812-213-	KORIE.NELLIS@METRONETINC.COM
LLC		1378	_
VINAKOM	DICKY PATEL	847-592-	DICKY.PATEL@VINAKOM.COM
COMMUNICATIONS		5785	_

### <u>UTILITIES TO BE WATCHED AND PROTECTED</u>

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

STAGE / LOCATION	TYPE	DESCRIPTION	OWNER
NGPL ROW Sta 10+25 LT to Sta 113+58 LT	30" Natural Gas Pipeline	Proposed multi-use path construction is adjacent to existing gas line.	NATURAL GAS PIPELINE CO.
NGPL ROW Sta 10+92 LT Sta 30+22 LT Sta 33+22 LT Sta 44+00 LT Sta 53+75 LT Sta 56+51 LT Sta 69+70 LT	30" Natural Gas Pipeline	Culvert/Pipe Underdrain Installation over existing gas pipeline.	NATURAL GAS PIPELINE CO.
NGPL ROW Sta 10+25 RT to Sta 113+58 RT	42" Natural Gas Pipeline	Proposed multi-use path construction is adjacent to existing gas line.	NATURAL GAS PIPELINE CO.
NGPL ROW Sta 10+92 RT Sta 30+22 RT Sta 33+22 RT Sta 44+00 RT Sta 53+75 RT Sta 56+51 RT Sta 69+70 RT	42" Natural Gas Pipeline	Culvert/Pipe Underdrain Installation over existing gas pipeline.	NATURAL GAS PIPELINE CO.

NGPL ROW Sta 95+00 RT to Sta 113+58 RT	24" Natural Gas Pipeline	Proposed multi-use path construction is adjacent to existing gas line.	NATURAL GAS PIPELINE CO.
NGPL ROW Sta 33+66 RT	24" Natural Gas Pipeline	Culvert Installation over existing gas pipeline.	NATURAL GAS PIPELINE CO.
NGPL ROW Sta 36+25 LT/RT	24" Natural Gas Pipeline	Proposed multi-use path construction over existing gas line.	ONEOK NORTH SYSTEMS LLC
NGPL ROW Sta 64+23 LT/RT Sta 74+42 LT/RT Sta 75+50 LT/RT	Buried Fiberoptic Cable in Conduit	Proposed multi-use path construction over existing fiber.	METRO FIBERNET, LLC
TAYLOR RD ROW Sta 119+95 RT to Sta 133+48 RT	Buried Cable	Proposed multi-use path construction is adjacent to existing buried cable.	AT&T

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

Agency/Company Responsible to	Name of contact	Phone	E-mail address
Resolve Conflict			
NATURAL GAS	MARK	815-693-	MARK_THORSON@KINDERMORGAN.COM
PIPELINE CO.	THORSON	0520	_
ONEOK NORTH	DANIELLE	815-318-	DANIELLE.WALLIN@ONEOK.COM
SYSTEMS LLC	WALLIN	4809	_
METRO	KORIE NELLIS	812-213-	KORIE.NELLIS@METRONETINC.COM
FIBERNET, LLC		1378	_
AT&T	STEVEN	630-573-	SP9653@ATT.COM
	PESOLA	5703	J

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.

**AVAILABLE REPORTS** 

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.

# ☐ No project specific reports were prepared. When applicable, the following checked reports and record intreference upon request:

applicable, the following checked reports and record information is available for Bidders' ence upon request:
□ Record structural plans
□ Preliminary Site Investigation (PSI)
☑ Preliminary Environmental Site Assessment (PESA)
□ Soils/Geotechnical Report
☐ Boring Logs
□ Pavement Cores
□ Location Drainage Study (LDS)
□ Hydraulic Report
□ Noise Analysis
□ Other:

Those seeking these reports should request access from:

John D. Hilsen ,PE, Senior Civil Engineer Robinson Engineering Ltd. Direct: (708) 225-8241

Email: jhilsen@reltd.com

## 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.

	general liability insurance policy in accordance with Article 107.27:
_	
_	
_	
_	
	The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.



### 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  (Describe the location	<b>on Information</b> n of the source of the ui	ocontaminated soil	1		
Project Name: Multi-		icontaminated son	•	umber, if available:	815-886-7200
	n (address, including nu	ımber and street):			0.0000.200
•	Path in the natural gas	•	from Taylor Road to N	Normantown Road	
City: Romeovi	lle	State: IL	Zip Code: 60446		
County: Will		Township: Plain	field		
Lat/Long of approxim	ate center of site in dec	imal degrees (DD.	ddddd) to five decimal	places (e.g., 40.67	890, -90.12345):
Latitude: <u>41.65244</u>	Longitude: -	88.11983	_		
(Decimal D	• ,	(-Decimal Degrees	3)		
•	ng data were determine				
	nterpolation ( ) Photo	Interpolation (	Survey 🕢 Other		
	ole location S1 for the p	roject area were o			
IEPA Site Number(s),	if assigned: BOL:		_ BOW:	BOA:	
Approximate Start Da	ate (mm/dd/yyyy): <u>Fel</u>	7, 2020	_ Approximate End D	ate (mm/dd/yyyy):	Oct 30, 2020
Estimated Volume of	debris (cu. Yd.): 2,0	00	_		
		0.00			
II. Owner/Operat Site Owner	tor Information for	Source Site	Site Operator		
	\ <u>@</u> 11	( D ) '''	·		
Name:		e of Romeoville	Name:		
Street Address:	1050 \	V. Romeo Road	Street Address:		
PO Box:			PO Box:		
City:	Romeoville	State: IL	City:		State:
Zip Code:	60446 Phone:	815-886-7200	Zip Code:	Pho	one:
Contact:	Eric Bjork - Public	Works Director	Contact:		
Email if available	ehiork/	nomeoville ora	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.

Project Name: Multi-Use Path Latitude: 41.65244 Longitude: - 88.11983

### **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.

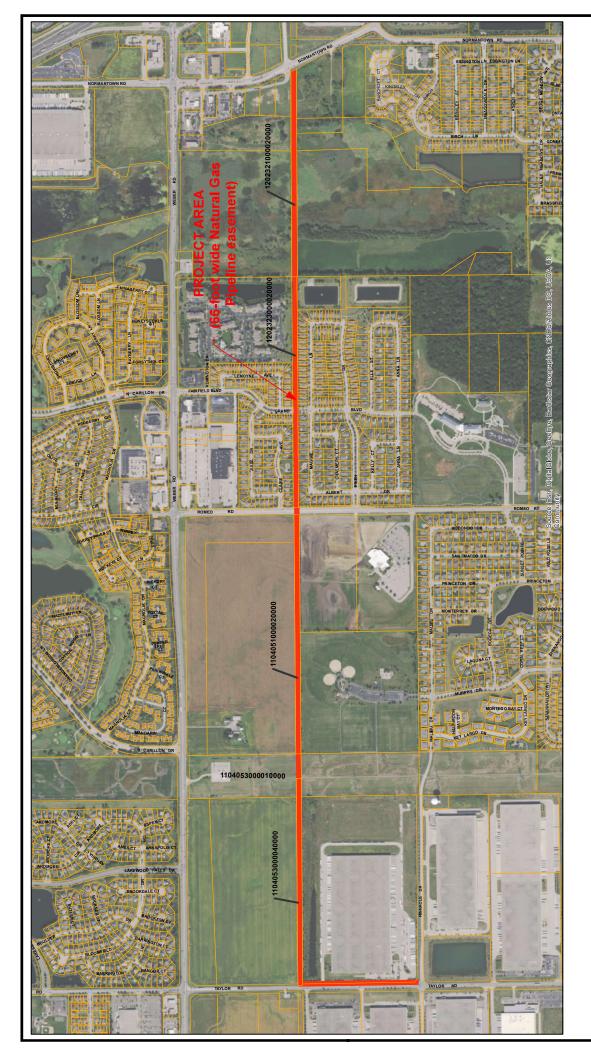
a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

A PESA of the project area was conducted by GEOCON and the findings were presented in the PESA Report dated February 17, 2017. Four grab topsoil samples were collected from the 0-12" depth interval in the proposed multi-use path project area.

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]:

The grab samples identified as S1, S2, S3 and S4 were tested by an accredited laboratory for VOCs, SVOCs and pH. Sample S3 was also tested for Pesticides. The samples were reported to meet the objectives of the IEPA MAC Table dated 8/27/12. Attachments: laboratory report, analytical tables, and sample location map.

Professional Geologi	ist	Seal Oi	LICEII	seu Floiessiona	al Eligilieer of Elcelist	5 <b>u</b>
the best of my knowledge a ILCS 5/22.51 or 22.51a] an certify that the soil pH is with part of a cleanup or remova	wman, P.G.  that the information submitted and belief, true, accurate and and 35 III. Adm. Code 1100.20 thin the range of 6.25 to 9.0. all of contaminants. All necess ally makes a false, fictitious	d comple 5(a), I ce In addit ssary doo	ding but te. In acceptify that tion, I cel cumenta	not limited to, all atta cordance with the End the soil from this site rtify that the soil has tion is attached.	invironmental Protection Acte is uncontaminated soil. I not been removed from the orally or in writing, to the	ation, is to at [415 also e site as
EPA commits a Class 4 fe	elony. A second or subseq	juent of	fense af	ter conviction is a (	Class 3 felony. (415 ILCS	5/44(h))
Company Namo	Bahinean Engineering Ltd.					
Company Name: Street Address:	Robinson Engineering, Ltd. 10045 W. Lincoln Highway					
	Frankfort	State:		Zip Code: 60423		
City: Phone:	815-523-7925	. State.	<u>                                     </u>	Zip Code. <u>60423</u>		
Karl F. Newman, P	.G.		_			
Licensed Professional Engi Licensed Professional Geo			_	Feb 7, 2020 <b>Date</b> :	QROFESSIONAL O	
	-				KARL F NEWMAN 196-000152	



THIS FIGURE IS A REPRODUCTION OF ESRI ONLINE MAPS AERIAL PHOTOGRAPH.



FIGURE 1: SAMPLE LOCATION MAP

Proposed Multi Use Path Taylor Road to Normantown Road Romeoville, Will County, Illinois 60446

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PROJECT NO: 17-R0274.02 DATE: 2/3/2020

17-R0274.02-FIG-1

SITE: Multi-Use Path Taylor Road to Normanton Road, Romeoville, Illinois 60446 REL 17-R0274.02		SAMPLE I LAB: First Environm	SAMPLE DATE: January 28, 2020 LAB: First Environmental Laboratories, Inc. MATRIX: Soil
ANALYTE	MAXIMUM ALLOWABLE CONCENTRATIONS	SAMPLE IDENTIFICATION	NTIFICATION
	(MACs)	S1	S2
Hd	6.25 to 9.0	7.30	7.89
VOLATILE ORGANIC COMPOUNDS (VOCs)			
ACETONE	25	QN	QN
BENZENE	0.03	QN	QN
BROMODICHLOROMETHANE	9.0	QN	QN
BROMOFORM	0.8	ND	QN
BROMOMETHANE		ND	QN
2-BUTANONE (METHYL ETHYL KETONE)	17	ND	QN
CARBON DISULFIDE	6	ND	QN
CARBON TETRACHLORIDE	0.07	QN	QN
CHLOROBENZENE	1	QN	QN
CHLORODIBROMOMETHANE	0.4	QN	QN
CHLOROETHANE		QN	QN
CHLOROFORM	0.3	ND	QN
CHLOROMETHANE		ND	QN
1,1-DICHLOROETHANE	23	ND	QN
1,2-DICHLOROETHANE	0.02	ND	QN
1,1-DICHLOROETHENE	90'0	ND	QN
CIS-1,2-DICHLOROETHENE	0.4	ND	QN
TRANS-1,2-DICHLOROETHENE	0.7	ND	QN
1,2-DICHLOROPROPANE	0.03	ND	QN
CIS-1,3-DICHLOROPROPANE	0.005	ND	ND
TRANS-1,3-DICHLOROPROPENE	0.005	ND	QN
ETHYLBENZENE	13	ND	QN
2-HEXANONE		QN	QN
METHYL TERTIARY-BUTYL ETHER (MTBE)	0.32	ND	QN
4-METHYL-2-PENTANONE (MIBK)		ND	QN
METHYLENE CHLORIDE	0.02	ND	ND
STYRENE	4	ND	ND
1,1,2,2-TETRACHLOROETHANE		ND	QN

THE SAMPLE RESULTS WERE COMPARED TO THE SUMMARY OF MAXIMUM ALL OWABLE CONCENTRATIONS (MAC) OF CHEMICAL CONSTITUENTS IN UNCONTAMINATED SOILS USED AS FILL MATERIAL AT REGULATED FILL OPERATIONS (35 ILLINOIS ADMINISTRATIVE CODE (IAC) 1100. SUBPART F) DATED AUGUST 27, 2012 XYLENES (TOTAL)

LIL RESULTS ARE EXPRESSED IN PARTS-PER-MILLION (mg/kg) CONCENTRATIONS. -: NO REMEDIATION OBJECTIVE ESTABLISHED BY THE IEPA FOR THIS CHEMICAL.

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TETRACHLOROETHENE (PERCHLOROETHYLENE)

1,1,1-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE TRICHLOROETHENE

TOLUENE

VINYL CHLORIDE VINYL ACETATE

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ND: ANALYTE NOT DETECTED ABOVE THE REPORTING LIMIT OF THE LABORATORY THE LABORATORY REPORTING LIMITS AND THE SW-846 TEST METHODS USED ARE PROVIDED IN THE LABORATORY REPORT.

SAMPLE DATE: January 28, 2020 LAB: First Environmental Laboratories, Inc. MATRIX: Soil Taylor Road to Normanton Road, Romeoville, Illinois 60446 REL 17-R0274.02 SITE: Multi-Use Path

וובר וויוסבו איטב			MAINIA. OOI
ANALYTE	MAXIMUM ALLOWABLE CONCENTRATIONS	SAMPLEIDE	SAMPLE IDENTIFICATION
	(MACS)	S1	S2
SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs)			
ACENAPHTHENE	570	ND	QN
ACENAPHTHYLENE		ND	QN
ANTHRACENE	12,000	ND	QN
BENZIDINE		QN	QN
BENZO(a)ANTHRACENE (within Chicago corporate limits) <sup>a</sup>	1.1		
BENZO(a)ANTHRACENE (within MSA excluding Chicago) <sup>a</sup>	1.8	ND	QN
BENZO(a)ANTHRACENE (within non-MSA or outside populated area) <sup>a</sup>	6.0		
BENZO(a)PYRENE (within Chicago corporate limits) <sup>a</sup>	1.3		
BENZO(a)PYRENE (within MSA excluding Chicago) <sup>a</sup>	2.1	ND	QN
BENZO(a)PYRENE (within non-MSA) <sup>a</sup>	86:0		
BENZO(a)PYRENE (outside a populated area) <sup>a</sup>	60.0		
BENZO(b)FLUORANTHENE (within Chicago corporate limits) <sup>a</sup>	1.5		
BENZO(b)FLUORANTHENE (within MSA excluding Chicago) <sup>a</sup>	2.1	ND	ΩN
BENZO(b)FLUORANTHENE (within non-MSA or outside populated area) <sup>a</sup>	6.0		
BENZO(k)FLUORANTHENE	6	ND	ΠN
BENZO(g,h,i)PERYLENE		ND	ΠN
BENZOIC ACID	400	ND	ΠN
BENZYL ALCOHOL		ND	ΩN
BIS(2-CHLOROETHOXY)METHANE		ND	ΠN
BIS(2-CHLOROETHYL)ETHER	99.0	ND	ΠN
BIS(2-CHLOROISOPROPYL)ETHER	-	ND	ΩN
BIS(2-ЕТНҮLHEXYL)РНТНАLATE	46	ND	ΠN
4-BROMOPHENYL-PHENYLETHER	-	ND	ΠN
BUTYLBENZYLPHTHALATE	930	ND	ΠN
CARBAZOLE	9.0	ND	ΠN
4-CHLOROANILINE	0.7	ND	ND
4-CHLORO-3-METHYLPHENOL	1	ND	ND
2-CHLORONAPTHALENE		ND	ND
2-CHLOROPHENOL	1.5	ND	ND
4-CHLOROPHENYL-PHENYLETHER	-	ND	ND
CHRYSENE	88	ND	ΩN
DIBENZO(a,h)ANTHRACENE (within Chicago corporate limits) <sup>a</sup>	0.20		
DIBENZO(a,h)ANTHRACENE (within MSA excluding Chicago) <sup>a</sup>	0.42	ND	ΠN
DIBENZO(a,h)ANTHRACENE (within non-MSA)ª	0.15		
DIBENZO(a,h)ANTHRACENE (outside populated area) <sup>a</sup>	0.09		
DIBENZOFURAN		ND	ΠN
1,2-DICHLOROBENZENE	17	ND	ΠN
1,3-DICHLOROBENZENE		ND	QN

ALL RESULTS ARE EXPRESSED IN PARTS-PER-MILLION (mg/kg) CONCENTRATIONS.

THE SAMPLE RESULTS WERE COMPARED TO THE SUMMARY OF MAXIMUM ALLOWABLE CONCENTRATIONS (MAC) OF CHEMICAL CONSTITUENTS IN UNCONTAMINATED SOILS USED AS FILL MATERIAL AT REGULATED FILL OPERATIONS (36 ILLINOIS ADMINISTRATIVE CODE (IAC) 1100.SUBPART F) DATED AUGUST 27, 2012 ... NO REMEDIATION OBJECTIVE ESTABLISHED BY THE IEPA FOR THIS CHEMICAL.

ND: ANALYTE NOT DETECTED ABOVE THE REPORTING LIMIT OF THE LABORATORY THE LABORATORY REPORTING LIMITS AND THE SW-846 TEST METHODS USED ARE PROVIDED IN THE LABORATORY REPORT. THE LOCATION OF THE CCDD FILL SITE DETERMINES THE ALLOWABLE CONCENTRATION.

SITE: Multi-Use Path	SAMPLE DATE: January 28, 2020
Taylor Road to Normanton Road, Romeoville, Illinois 60446	LAB: First Environmental Laboratories, Inc.
REL 17-R0274.02	MATRIX: Soil

NEL 11-N0214.02			MAIRIA: SOII
ANALYTE	MAXIMUM ALLOWABLE CONCENTRATIONS	SAMPLE IDENTIFICATION	NTIFICATION
SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs)	(MACS)	S1	S2
1,4-DICHLOROBENZENE	2	QN	ND
3,3'-DICHLOROBENZIDINE	1.3	g.	QN
2,4-DICHLOROPHENOL	0.48	Q.	QN
DIETHYLPHTHALTE	470	QN	ND
2,4-DIMET HYLPHENOL	6	QN	ND
DIMETHYLPHTHALATE	1	Q.	QN
Di-n-BUTYLPHTHALATE	2,300	QN	ND
4,6-DINITRO-2-METHYLPHENOL		QN	ND
2,4-DINITROPHENOL	3.3	QN	ND
2,4-DINITROTOLUENE	0.25	Q.	QN
2,6-DINITROTOLUENE	0.26	QN	ND
DI-n-OCTYLPHTHALATE	1,600	QN	QN
FLUORANTHENE	3,100	QV.	QN
FLUORENE	095	QN	QN
HEXACHLOROBENZENE	0.4	QN	QN
HEXACHLOROBUTADIENE	-	QN	QN
HEXACHLOROCYCLOPENTADIENE	1.1	<u>Q</u>	QN
HEXACHLOROETHANE	0.5	Q.	QN
INDENO(1,2,3-cd)PYRENE (within MSA excluding Chicago) <sup>a</sup>	1.6	QN.	ND
INDENO(1,2,3-cd)PYRENE (within Chicago corporate limits	6:0		
or within a populated area in a non-MSA or oustide populated area) <sup>a</sup>			
ISOPHORONE	8	Q.	QN
2-METHYLNAPHTHALENE	:	g	ND
2-METHYLPHENOL	15	g.	QN
3&4-METHYPHENOL		QN.	ND
NAPHTHALENE	1.8	QN	ND
2-NITROANILINE		QN	QN
3-NITROANILINE		QN	ND
4-NITROANILINE		ND	ND
NITROBENZENE	0.26	QN	ND
2-NITROPHENOL	:	QN	ND
4-NITROPHENOL	:	QN	ND
N-NITROSO-DI-n-PROPYLAMINE	0.0018	QV	ND
n-NITROSODIMETHYLAMINE		QN	ND
n-NITROSODIPHENYLAMINE	1	QN	ND
PENTACHLOROPHENOL	0.02	ND	ND
PHENANTHRENE		ND	ND
PHENOL	100	ND	ND
PYRENE	2,300	ND	ND
PYRIDINE		QN	ND
1,2,4-TRICHLOROBENZENE	5	ND	ND
2,4,5-TRICHLOROPHENOL	26	QN	ND
2,4,6-TRICHLOROPHENOL	0.66	ND	ND
ALL RESULTS ARE EXPRESSED IN PARTS-PER-MILLION (mg/kg) CONCENTRATIONS.			

ALL RESULTS ARE EXPRESSED IN PARTS-PER-MILLION (mg/kg) CONCENTRATIONS.

THE SAMPLE RESULTS WERE COMPARED TO THE SUMMARY OF MAXIMUM ALLOWABLE CONCENTRATIONS (MAC) OF CHEMICAL CONSTITUENTS IN UNCONTAMINATED SOILS

USED AS FILL MATERIAL AT REGULATED FILL OPERATIONS (35 ILLINOIS ADMINISTRATIVE CODE (IAC) 1100. SUBPART F) DATED AUGUST 27, 2012

<sup>—:</sup> NO REMEDIATION OBJECTIVE ESTABLISHED BY THE IEPA FOR THIS CHEMICAL. ND: ANALYTE NOT DETECTED ABOVE THE REPORTING LIMIT OF THE LABORATORY THE LABORATORY REPORTING LIMITS AND THE SW-846 TEST METHODS USED ARE PROVIDED IN THE LABORATORY REPORT. THE LOCATION OF THE CCDD FILL SITE DETERMINES THE ALLOWABLE CONCENTRATION.

SITE: Multi-Use Path Taylor Road to Normanton Road, Romeoville, Illinois  60446 REL 17-R0274.02		SAMPLE LAB: First Environn	SAMPLE DATE: January 28, 2020 LAB: First Environmental Laboratories, Inc. MATRIX: Soil
ANALYTE	MAXIMUM ALLOWABLE CONCENTRATIONS	SAMPLEIDE	SAMPLE IDENTIFICATION
	(MACs)	S3	84
Hd	6.25 to 9.0	7.90	8.08
VOLATILE ORGANIC COMPOUNDS (VOCs)			
ACETONE	25	QN	QN
BENZENE	0.03	QN	QN
BROMODICHLOROMETHANE	9.0	QN	QN
BROMOFORM	0.8	ND	QN
BROMOMETHANE	-	QN	QN
2-BUTANONE (METHYL ETHYL KETONE)	17	QN	QN
CARBON DISULFIDE	6	ND	QN
CARBON TETRACHLORIDE	200	ND	QN
CHLOROBENZENE	1	ND	QN
CHLORODIBROMOMETHANE	0.4	ND	QN
CHLOROETHANE		ND	QN
CHLOROFORM	0.3	ND	QN
CHLOROMETHANE	-	QN	QN
1,1-DICHLOROETHANE	23	ND	QN
1,2-DICHLOROETHANE	0.02	ND	QN
1,1-DICHLOROETHENE	90'0	ND	QN
CIS-1,2-DICHLOROETHENE	0.4	ND	QN
TRANS-1,2-DICHLOROETHENE	0.7	ND	QN
1,2-DICHLOROPROPANE	0.03	ND	QN
CIS-1,3-DICHLOROPROPANE	0.005	ND	QN
TRANS-1,3-DICHLOROPROPENE	0:00	QN	QN
ETHYLBENZENE	13	ND	QN
2-HEXANONE	-	QN	QN

THE SAMPLE RESULTS WERE COMPARED TO THE SUMMARY OF MAXIMUM ALL OWABLE CONCENTRATIONS (MAC) OF CHEMICAL CONSTITUENTS IN UNCONTAMINATED SOILS USED AS FILL MATERIAL AT REGULATED FILL OPERATIONS (35 ILLINOIS ADMINISTRATIVE CODE (IAC) 1100. SUBPART F) DATED AUGUST 27, 2012 ND: ANALYTE NOT DETECTED ABOVE THE REPORTING LIMIT OF THE LABORATORY THE LABORATORY REPORTING LIMITS AND THE SW-846 TEST METHODS USED ARE PROVIDED IN THE LABORATORY REPORT. -: NO REMEDIATION OBJECTIVE ESTABLISHED BY THE IEPA FOR THIS CHEMICAL. <u>LL RESULTS ARE EXPRESSED IN PARTS-PER-MILLION (mg/k</u>

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1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHENE)

1,1,1-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE

TOLUENE

TRICHLOROETHENE

VINYL ACETATE VINYL CHLORIDE

XYLENES (TOTAL)

METHYL TERTIARY-BUTYL ETHER (MTBE<u>)</u> 4-METHYL-2-PENTANONE (MIBK)

METHYLENE CHLORIDE

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LAB: First Environmental Laboratories, Inc. Taylor Road to Normanton Road, Romeoville, Illinois 60446 SITE: Multi-Use Path REL 17-R0274.02

SAMPLE DATE: January 28, 2020

MATRIX: Soil

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ANALYTE	MAXIMUM ALLOWABLE CONCENTRATIONS	SAMPLEIDE	SAMPLE IDENTIFICATION
	(MACS)	S3	S4
SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs)			
ACENAPHTHENE	570	QN	ND
ACENAPHTHYLENE	:	QN	QN
ANTHRACENE	12,000	QN	QN
BENZIDINE	:	QN	ND
BENZO(a)ANTHRACENE (within Chicago corporate limits) <sup>a</sup>	1.1		
BENZO(a)ANTHRACENE (within MSA excluding Chicago) <sup>a</sup>	1.8	QN	QN
BENZO(a)ANTHRACENE (within non-MSA or outside populated area) <sup>a</sup>	0.9		
BENZO(a)PYRENE (within Chicago corporate limits) <sup>a</sup>	1.3		
BENZO(a)PYRENE (within MSA excluding Chicago) <sup>a</sup>	2.1	QN	QN
BENZO(a)PYRENE (within non-MSA) <sup>a</sup>	0.98		
BENZO(a)PYRENE (outside a populated area) <sup>a</sup>	0.09		
BENZO(b)FLUORANTHENE (within Chicago corporate limits) <sup>a</sup>	1.5		
BENZO(b)FLUORANTHENE (within MSA excluding Chicago) <sup>a</sup>	2.1	QN	ND
BENZO(b)FLUORANTHENE (within non-MSA or outside populated area) <sup>a</sup>	6.0		
BENZO(k)FLUORANTHENE	6	QN	QN
BENZO(g,h,i)PERYLENE		QN	QN
BENZOIC ACID	400	QN	QN
BENZYL ALCOHOL		QN	QN
BIS(2-CHLOROETHOXY)METHANE		QN	QN
BIS(2-CHLOROETHYL)ETHER	99'0	QN	ND
BIS(2-CHLOROISOPROPYL)ETHER		QN	QN
BIS(2-ETHYLHEXYL)PHTHALATE	46	QN	QN
4-BROMOPHENYL-PHENYLETHER	1	QN	QN
BUTYLBENZYLPHTHALATE	930	QN	QN
CARBAZOLE	9.0	QN	QN
4-CHLOROANILINE	0.7	QN	QN
4-CHLORO-3-METHYLPHENOL		ON	ND
2-CHLORONAPTHALENE	-	ND	ND
2-CHLOROPHENOL	1.5	QN	ND
4-CHLOROPHENYL-PHENYLETHER	-	QN	ND
CHRYSENE	88	QN	QN
DIBENZO(a,h)ANTHRACENE (within Chicago corporate limits) <sup>a</sup>	0.20		
DIBENZO(a,h)ANTHRACENE (within MSA excluding Chicago) <sup>a</sup>	0.42	QN	QN
DIBENZO(a,h)ANTHRACENE (within non-MSA)*	0.15		
DIBENZO(a,h)ANTHRACENE (outside populated area) <sup>a</sup>	0.09		
DIBENZOFURAN		QN	QN
1,2-DICHLOROBENZENE	17	ND	ND
1,3-DICHLOROBENZENE		ND	ND

ALL RESULTS ARE EXPRESSED IN PARTS-PER-MILLION (mg/kg) CONCENTRATIONS.

THE SAMPLE RESULTS WERE COMPARED TO THE SUMMARY OF MAXIMUM ALLOWABLE CONCENTRATIONS (MAC) OF CHEMICAL CONSTITUENTS IN UNCONTAMINATED SOILS USED AS FILL MATERIAL AT REGULATED FILL OPERATIONS (36 ILLINOIS ADMINISTRATIVE CODE (IAC) 1100.SUBPART F) DATED AUGUST 27, 2012

ND: ANALYTE NOT DETECTED ABOVE THE REPORTING LIMIT OF THE LABORATORY THE LABORATORY REPORTING LIMITS AND THE SW-846 TEST METHODS USED ARE PROVIDED IN THE LABORATORY REPORT. THE LOCATION OF THE CCDD FILL SITE DETERMINES THE ALLOWABLE CONCENTRATION. -: NO REMEDIATION OBJECTIVE ESTABLISHED BY THE IEPA FOR THIS CHEMICAL.

SITE: Multi-Use Path	SAMPLE DATE: January 28, 2020
Taylor Road to Normanton Road, Romeoville, Illinois 60446	LAB: First Environmental Laboratories, Inc.
REL 17-R0274.02	MATRIX: Soil

KEL 17-K02/4.02			MAIRIX: Soil
ANALYTE	MAXIMUM ALLOWABLE CONCENTRATIONS	SAMPLE IDER	SAMPLE IDENTIFICATION
SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS)	(MACS)	S3	S4
1,4-DICHLOROBENZENE	2	QN	ND
3,3'-DICHLOROBENZIDINE	1.3	QN	ND
2,4-DICHLOROPHENOL	0.48	ND	ND
DIETHYLPHTHALTE	470	ND	ND
2,4-DIMETHYLPHENOL	6	QN	ND
DIMETHYLPHTHALATE		QN	ND
Di-n-BUTYLPHTHALATE	2,300	ND	ND
4,6-DINITRO-2-METHYLPHENOL		ND	ND
2,4-DINITROPHENOL	3.3	QN	ND
2,4-DINITROTOLUENE	0.25	QN	ND
2,6-DINITROTOLUENE	0.26	QN	ND
DI-n-OCTYLPHTHALATE	1,600	QN	QN
FLUORANTHENE	3,100	QN	ND
FLUORENE	260	QN	ND
HEXACHLOROBENZENE	0.4	QN	QN
HEXACHLOROBUTADIENE		QN	QN
HEXACHLOROCYCLOPENTADIENE	1.1	QN	QN
HEXACHLOROETHANE	0.5	QN	QN
INDENO(1,2,3-cd)PYRENE (within MSA excluding Chicago) <sup>a</sup>	1.6	QN	ND
INDENO(1,2,3-cd)PYRENE (within Chicago corporate limits	6:0		
or within a populated area in a non-MSA or oustide populated area) <sup>a</sup>			
ISOPHORONE	8	QN	QN
2-METHYLNAPHTHALENE		QN	QN
2-METHYLPHENOL	15	QV	ND
3&4-METHYPHENOL	-	Q	ND
NAPHTHALENE	1.8	QN	ND
2-NITROANILINE	-	QN	QN
3-NITROANILINE		QN	ND
4-NITROANILINE	-	QN	QN
NITROBENZENE	0.26	ND	ND
2-NITROPHENOL		ND	ND
4-NITROPHENOL		QN	ND
N-NITROSO-DI-n-PROPYLAMINE	0.0018	ND	ND
n-NITROSODIMETHYLAMINE		QN	ND
n-NITROSODIPHENYLAMINE	1	ND	ND
PENTACHLOROPHENOL	0.02	ND	ND
PHENANTHRENE		ND	ND
PHENOL	100	QN	ND
PYRENE	2,300	ND	ND
PYRIDINE		QV	ND
1,2,4-TRICHLOROBENZENE	5	Q	ND
2,4,5-TRICHLOROPHENOL	26	QN	QN
2,4,6-TRICHLOROPHENOL	0.66	ND	ND
ALL RESULTS ARE EXPRESSED IN PARTS-PER-MILLION (mg/kg) CONCENTRATIONS.			

ALL RESULTS ARE EXPRESSED IN PARTS-PER-MILLION (mg/kg) CONCENTRATIONS. THE SAMPLE RESULTS WERE COMPARED TO THE S*UMMARY OF MAXIMUM ALLOWABLE* CONCENTRATIONS (MAC) OF CHEMICAL CONSTITUENTS IN UNCONTAMINATED SOILS USED AS FILL MATERIAL AT REGULATED FILL OPERATIONS (35 ILLINOIS ADMINISTRATIVE CODE (IAC) 1100. SUBPART F) DATED AUGUST 27, 2012

—: NO REMEDIATION OBJECTIVE ESTABLISHED BY THE IEPA FOR THIS CHEMICAL. ND: ANALYTE NOT DETECTED ABOVE THE REPORTING LIMIT OF THE LABORATORY THE LABORATORY REPORTING LIMITS AND THE SW-846 TEST METHODS USED ARE PROVIDED IN THE LABORATORY REPORT.

THE LOCATION OF THE CCDD FILL SITE DETERMINES THE ALLOWABLE CONCENTRATION.

SITE: Multi-Use Path		SAMPLE DATE: January 28, 2020
Taylor Road to Normanton Road, Romeoville, Illinois 60446 REL 17-R0274.02	LAB:	LAB: First Environmental Laboratories, Inc. MATRIX: Soil
HTY ANA	MAXIMUM ALLOWABLE CONCENTRATIONS	SAMPLE IDENTIFICATION
	(MACs)	S3
PESTICIDES		
ALDRIN	0.94	QN
ALPHA-BHC	0.0074	QN
BETA-BHC	1	QN
DELTA-BHC	-	QN
GAMMA-BHC (LINDANE)	0.009	QN
ALPHA-CHLORDANE	-	QN
GAMMA-CHLORDANE	-	QN
4,4'-DDD	3	QN
4,4'-DDE	2	QN
4,4'-DDT	2	QN
DIELDRIN	0.603	QN
ENDOSULFAN I	18	QN
ENDOSULFAN II	18	QN
ENDOSULFAN SULFATE	-	QN
ENDRIN	1	QN
ENDRIN ALDEHYDE	-	QN
ENDRIN KETONE	-	QN

THE SAMPLE RESULTS WERE COMPARED TO THE *SUMMARY OF MAXIMUM ALLOWABLE CONCENTRATIONS (MAC) OF CHEMICAL CONSTITUENTS IN UNCONTAMINATED SOILS*USED AS FILL MATERIAL AT REGULATED FILL OPERATIONS (35 ILLINOIS ADMINISTRATIVE CODE (IAC) 1100.SUBPART F) DATED AUGUST 27, 2012

---: NO REMEDIATION OBJECTIVE ESTABLISHED BY THE IEPA FOR THIS CHEMICAL. ALL RESULTS ARE EXPRESSED IN PARTS-PER-MILLION (mg/kg) CONCENTRATIONS.

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HEPTACHLOR

ND: ANALYTE NOT DETECTED ABOVE THE REPORTING LIMIT OF THE LABORATORY THE LABORATORY REPORTING LIMITS AND THE SW-846 TEST METHODS USED ARE PROVIDED IN THE LABORATORY REPORT.

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

February 05, 2020

Ms. Erin Curley **ROBINSON ENGINEERING, LTD**10045 West Lincoln Highway

Frankfort, IL 60423

Project ID: Multi-Use Path NGPL-ROW 17R0274.02

First Environmental File ID: 20-0483 Date Received: January 28, 2020

Dear Ms. Erin Curley:

The above referenced project was analyzed as directed on the enclosed chain of custody record.

All Quality Control criteria as outlined in the methods and current IL ELAP/NELAP have been met unless otherwise noted. QA/QC documentation and raw data will remain on file for future reference. Our accreditation number is 100292 and our current certificate is number 1002922019-1: effective 08/22/2019 through 02/28/2020.

I thank you for the opportunity to be of service to you and look forward to working with you again in the future. Should you have any questions regarding any of the enclosed analytical data or need additional information, please contact me at (630) 778-1200.

Sincerely,

Ryan Gerrick Project Manager



1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

### **Case Narrative**

ROBINSON ENGINEERING, LTD

Lab File ID: 20-0483

Project ID: Multi-Use Path NGPL-ROW 17R0274.02

Date Received: January 28, 2020

All quality control criteria, as outlined in the methods, have been met except as noted below or on the following analytical report.

The results in this report apply to the samples in the following table:

Laboratory Sample ID	Client Sample Identifier	Date/Time Collected		
20-0483-001	S1	1/28/2020 12:58		
20-0483-002	S2	1/28/2020 12:32		
20-0483-003	S3	1/28/2020 12:16		
20-0483-004	S4	1/28/2020 12:04		

### **Sample Batch Comments:**

Sample acceptance criteria were met.

#### **Method Comments**

Lab Number	Sample ID	Comments:
20-0483-003	S3	Pesticides 1 of 2 surrogate recoveries outside control limits; low bias.



1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

### **Case Narrative**

### ROBINSON ENGINEERING, LTD

Lab File ID: 20-0483

Project ID: Multi-Use Path NGPL-ROW 17R0274.02

Date Received: January 28, 2020

All quality control criteria, as outlined in the methods, have been met except as noted below or on the following analytical report.

The following is a definition of flags that may be used in this report:

Flag	Description	Flag	Description
A	Method holding time is 15 minutes from collection. Lab an	alysis	was performed as soon as possible.
B Analyte was found in the method blank.		L	LCS recovery outside control limits.
<	Analyte not detected at or above the reporting limit.	M	MS recovery outside control limits; LCS acceptable.
С	Sample received in an improper container for this test.	P	Chemical preservation pH adjusted in lab.
D	Surrogates diluted out; recovery not available.	Q	Result was determined by a GC/MS database search.
Е	Estimated result; concentration exceeds calibration range.	S	Analysis was subcontracted to another laboratory.
G	Surrogate recovery outside control limits.	Т	Result is less than three times the MDL value.
Н	Analysis or extraction holding time exceeded.	W	Reporting limit elevated due to sample matrix.
J	Estimated result; concentration is less than routine RL but greater than MDL.	N	Analyte is not part of our NELAC accreditation or accreditation may not be available for this parameter.
RL	Routine Reporting Limit (Lowest amount that can be detected when routine weights/volumes are used without dilution.)	ND	Analyte was not detected using a library search routine; No calibration standard was analyzed.

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### **Analytical Report**

Client:

ROBINSON ENGINEERING, LTD

**Date Collected:** 01/28/20

Project ID:

Multi-Use Path NGPL-ROW 17R0274.02

Time Collected: 12:58

Sample ID:

**S**1

Date Received:

01/28/20

Sample No:

20-0483-001

**Date Reported:** 02/05/20

Results are reported on a dry weight basis.

Analyte	Re	esult	R.L.	Units	Flags
Solids, Total Analysis Date: 01/28/20	Method: 2540B				
Total Solids	79	9.55		%	
<b>Volatile Organic Compounds</b> Analysis Date: 01/29/20	Method: 5035A/8260B				
Acetone	< 20	00	200	ug/kg	
Benzene	< 5.	.0	5.0	ug/kg	
Bromodichloromethane	< 5.	.0	5.0	ug/kg	
Bromoform	< 5.	.0	5.0	ug/kg	
Bromomethane	< 10	0.0	10.0	ug/kg	
2-Butanone (MEK)	< 10	00	100	ug/kg	
Carbon disulfide	< 5.	.0	5.0	ug/kg	
Carbon tetrachloride	< 5.	.0	5.0	ug/kg	
Chlorobenzene	< 5.	.0	5.0	ug/kg	
Chlorodibromomethane	< 5.	.0	5.0	ug/kg	
Chloroethane	< 10	0.0	10.0	ug/kg	
Chloroform	< 5.	.0	5.0	ug/kg	
Chloromethane	< 10	0.0	10.0	ug/kg	
1,1-Dichloroethane	< 5.	.0	5.0	ug/kg	
1,2-Dichloroethane	< 5.	.0	5.0	ug/kg	
1,1-Dichloroethene	< 5.	.0	5.0	ug/kg	
cis-1,2-Dichloroethene	< 5.	.0	5.0	ug/kg	
trans-1,2-Dichloroethene	< 5.	.0	5.0	ug/kg	
1,2-Dichloropropane	< 5.	.0	5.0	ug/kg	
cis-1,3-Dichloropropene	< 4	.0	4.0	ug/kg	
trans-1,3-Dichloropropene	< 4	.0	4.0	ug/kg	
Ethylbenzene	< 5	.0	5.0	ug/kg	
2-Hexanone	< 1	0.0	10.0	ug/kg	
Methyl-tert-butylether (MTBE)	< 5	.0	5.0	ug/kg	
4-Methyl-2-pentanone (MIBK)	< 1	0.0	10.0	ug/kg	
Methylene chloride	< 2	0.0	20.0	ug/kg	
Styrene	< 5		5.0	ug/kg	
1,1,2,2-Tetrachloroethane	< 5	.0	5.0	ug/kg	
Tetrachloroethene	< 5	.0	5.0	ug/kg	
Toluene	< 5	.0	5.0	ug/kg	
1,1,1-Trichloroethane	< 5	.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5	.0	5.0	ug/kg	
Trichloroethene	< 5	.0	5.0	ug/kg	

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### **Analytical Report**

Client:ROBINSON ENGINEERING, LTDDate Collected:01/28/20Project ID:Multi-Use Path NGPL-ROW 17R0274.02Time Collected:12:58Sample ID:S1Date Received:01/28/20Sample No:20-0483-001Date Reported:02/05/20

Analyte		Result	R.L.	Units	Flags
<b>Volatile Organic Compounds</b> Analysis Date: 01/29/20	Method: 5035A/82	260B			
Vinyl acetate		< 10.0	10.0	ug/kg	
Vinyl chloride		< 10.0	10.0	ug/kg	
Xylene, Total		< 5.0	5.0	ug/kg	
<b>Semi-Volatile Compounds</b> Analysis Date: 01/31/20	Method: 8270C		<b>Preparation</b> Preparation I		
Acenaphthene		< 330	330	ug/kg	
Acenaphthylene		< 330	330	ug/kg	
Anthracene		< 330	330	ug/kg	
Benzidine		< 330	330	ug/kg	
Benzo(a)anthracene		< 330	330	ug/kg	
Benzo(a)pyrene		< 90	90	ug/kg	
Benzo(b)fluoranthene		< 330	330	ug/kg	
Benzo(k)fluoranthene		< 330	330	ug/kg	
Benzo(ghi)perylene		< 330	330	ug/kg	
Benzoic acid		< 330	330	ug/kg	
Benzyl alcohol		< 330	330	ug/kg	
bis(2-Chloroethoxy)methane		< 330	330	ug/kg	
bis(2-Chloroethyl)ether		< 330	330	ug/kg	
bis(2-Chloroisopropyl)ether		< 330	330	ug/kg	
bis(2-Ethylhexyl)phthalate		< 330	330	ug/kg	
4-Bromophenyl phenyl ether		< 330	330	ug/kg	
Butyl benzyl phthalate		< 330	330	ug/kg	
Carbazole		< 330	330	ug/kg	
4-Chloroaniline		< 330	330	ug/kg	
4-Chloro-3-methylphenol		< 330	330	ug/kg	
2-Chloronaphthalene		< 330	330	ug/kg	
2-Chlorophenol		< 330	330	ug/kg	
4-Chlorophenyl phenyl ether		< 330	330	ug/kg	
Chrysene		< 330	330	ug/kg	
Dibenzo(a,h)anthracene		< 90	90	ug/kg	
Dibenzofuran		< 330	330	ug/kg	
1,2-Dichlorobenzene		< 330	330	ug/kg	
1,3-Dichlorobenzene		< 330	330	ug/kg	
1,4-Dichlorobenzene		< 330	330	ug/kg	
3,3'-Dichlorobenzidine		< 660	660	ug/kg	
2,4-Dichlorophenol		< 330	330	ug/kg	



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### **Analytical Report**

Client:ROBINSON ENGINEERING, LTDDate Collected:01/28/20Project ID:Multi-Use Path NGPL-ROW 17R0274.02Time Collected:12:58Sample ID:S1Date Received:01/28/20Sample No:20-0483-001Date Reported:02/05/20

Analyte		Result	R.L.	Units	Flags
Semi-Volatile Compounds Analysis Date: 01/31/20	Method: 8270C		Preparation Method 3540C Preparation Date: 01/29/20		
Diethyl phthalate		< 330	330	ug/kg	
2,4-Dimethylphenol		< 330	330	ug/kg	
Dimethyl phthalate		< 330	330	ug/kg	
Di-n-butyl phthalate		< 330	330	ug/kg	
4,6-Dinitro-2-methylphenol		< 1,600	1600	ug/kg	
2,4-Dinitrophenol		< 1,600	1600	ug/kg	
2,4-Dinitrotoluene		< 250	250	ug/kg	
2,6-Dinitrotoluene		< 260	260	ug/kg	
Di-n-octylphthalate		< 330	330	ug/kg	
Fluoranthene		< 330	330	ug/kg	
Fluorene		< 330	330	ug/kg	
Hexachlorobenzene		< 330	330	ug/kg	
Hexachlorobutadiene		< 330	330	ug/kg	
Hexachlorocyclopentadiene		< 330	330	ug/kg	
Hexachloroethane		< 330	330	ug/kg	
Indeno(1,2,3-cd)pyrene		< 330	330	ug/kg	
Isophorone		< 330	330	ug/kg	
2-Methylnaphthalene		< 330	330	ug/kg	
2-Methylphenol		< 330	330	ug/kg	
3 & 4-Methylphenol		< 330	330	ug/kg	
Naphthalene		< 330	330	ug/kg	
2-Nitroaniline		< 1,600	1600	ug/kg	
3-Nitroaniline		< 1,600	1600	ug/kg	
4-Nitroaniline		< 1,600	1600	ug/kg	
Nitrobenzene		< 260	260	ug/kg	
2-Nitrophenol		< 1,600	1600	ug/kg	
4-Nitrophenol		< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine		< 90	90	ug/kg	
n-Nitrosodimethylamine		< 330	330	ug/kg	
n-Nitrosodiphenylamine		< 330	330	ug/kg	
Pentachlorophenol		< 330	330	ug/kg	
Phenanthrene		< 330	330	ug/kg	
Phenol		< 330	330	ug/kg	
Pyrene		< 330	330	ug/kg	
Pyridine		< 330	330	ug/kg	
1,2,4-Trichlorobenzene		< 330	330	ug/kg	



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### **Analytical Report**

ROBINSON ENGINEERING, LTD Client:

Multi-Use Path NGPL-ROW 17R0274.02

Sample ID: **S**1

Project ID:

Sample No:

20-0483-001

Date Collected: 01/28/20

Time Collected: 12:58

Date Received: 01/28/20

**Date Reported:** 02/05/20

Analyte		Result	R.L.	Units	Flags
Semi-Volatile Compounds Analysis Date: 01/31/20	Method: 8270C			<b>Method 354</b> Date: 01/29/20	
2,4,5-Trichlorophenol 2,4,6-Trichlorophenol		< 330 < 330	330 330	ug/kg ug/kg	
<b>pH @ 25°C, 1:2</b> Analysis Date: 01/30/20 9:30	Method: 9045D 2	004			
pH @ 25°С, 1:2		7.30		Units	

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### **Analytical Report**

Client:ROBINSON ENGINEERING, LTDDate Collected:01/28/20Project ID:Multi-Use Path NGPL-ROW 17R0274.02Time Collected:12:32Sample ID:S2Date Received:01/28/20Sample No:20-0483-002Date Reported:02/05/20

Analyte		Result	R.L.	Units	Flags
Solids, Total Analysis Date: 01/29/20	Method: 2540B				
Total Solids		79.48		%	
<b>Volatile Organic Compounds</b> Analysis Date: 01/29/20	Method: 5035A/8260E	3			
Acetone	<	200	200	ug/kg	
Benzene	<	5.0	5.0	ug/kg	
Bromodichloromethane	<	5.0	5.0	ug/kg	
Bromoform	<	5.0	5.0	ug/kg	
Bromomethane	<	10.0	10.0	ug/kg	
2-Butanone (MEK)	<	100	100	ug/kg	
Carbon disulfide	<	5.0	5.0	ug/kg	
Carbon tetrachloride	<	5.0	5.0	ug/kg	
Chlorobenzene	<	5.0	5.0	ug/kg	
Chlorodibromomethane	<	5.0	5.0	ug/kg	
Chloroethane	<	10.0	10.0	ug/kg	
Chloroform	<	5.0	5.0	ug/kg	
Chloromethane	<	10.0	10.0	ug/kg	
1,1-Dichloroethane	<	5.0	5.0	ug/kg	
1,2-Dichloroethane	<	5.0	5.0	ug/kg	
1,1-Dichloroethene	<	5.0	5.0	ug/kg	
cis-1,2-Dichloroethene	<	5.0	5.0	ug/kg	
trans-1,2-Dichloroethene	<	5.0	5.0	ug/kg	
1,2-Dichloropropane	<	5.0	5.0	ug/kg	
cis-1,3-Dichloropropene	<	4.0	4.0	ug/kg	
trans-1,3-Dichloropropene	<	4.0	4.0	ug/kg	
Ethylbenzene	<	5.0	5.0	ug/kg	
2-Hexanone	<	10.0	10.0	ug/kg	
Methyl-tert-butylether (MTBE)	<	5.0	5.0	ug/kg	
4-Methyl-2-pentanone (MIBK)	<	10.0	10.0	ug/kg	
Methylene chloride		20.0	20.0	ug/kg	
Styrene		5.0	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	<	5.0	5.0	ug/kg	
Tetrachloroethene	<	5.0	5.0	ug/kg	
Toluene	<	5.0	5.0	ug/kg	
1,1,1-Trichloroethane		5.0	5.0	ug/kg	
1,1,2-Trichloroethane	<	5.0	5.0	ug/kg	
Trichloroethene	<	5.0	5.0	ug/kg	



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### **Analytical Report**

ROBINSON ENGINEERING, LTD **Client:** 

Multi-Use Path NGPL-ROW 17R0274.02

Sample ID: **S2** 

2,4-Dichlorophenol

Project ID:

Date Collected: 01/28/20

Time Collected: 12:32

Date Received: 01/28/20

<b>Sample No:</b> 20-0483-002			Date F	Reported: 0	2/05/20
Results are reported on a dry weigh	t basis.				
Analyte		Result	R.L.	Units	Flags
Volatile Organic Compounds Analysis Date: 01/29/20	Method: 5035A/82	260B			
Vinyl acetate		< 10.0	10.0	ug/kg	
Vinyl chloride		< 10.0	10.0	ug/kg	
Xylene, Total		< 5.0	5.0	ug/kg	
Semi-Volatile Compounds Analysis Date: 01/31/20	Method: 8270C		<b>Preparation</b> Preparation I		
Acenaphthene		< 330	330	ug/kg	
Acenaphthylene		< 330	330	ug/kg	
Anthracene		< 330	330	ug/kg	
Benzidine		< 330	330	ug/kg	
Benzo(a)anthracene		< 330	330	ug/kg	
Danga (a) my mana		< 00	00	na/ka	

Acchaphthene	, 550	330	66 MB	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzidine	< 330	330	ug/kg	
Benzo(a)anthracene	< 330	330	ug/kg	
Benzo(a)pyrene	< 90	90	ug/kg	
Benzo(b)fluoranthene	< 330	330	ug/kg	
Benzo(k)fluoranthene	< 330	330	ug/kg	
Benzo(ghi)perylene	< 330	330	ug/kg	
Benzoic acid	< 330	330	ug/kg	
Benzyl alcohol	< 330	330	ug/kg	
bis(2-Chloroethoxy)methane	< 330	330	ug/kg	
bis(2-Chloroethyl)ether	< 330	330	ug/kg	
bis(2-Chloroisopropyl)ether	< 330	330	ug/kg	
bis(2-Ethylhexyl)phthalate	< 330	330	ug/kg	
4-Bromophenyl phenyl ether	< 330	330	ug/kg	
Butyl benzyl phthalate	< 330	330	ug/kg	
Carbazole	< 330	330	ug/kg	
4-Chloroaniline	< 330	330	ug/kg	
4-Chloro-3-methylphenol	< 330	330	ug/kg	
2-Chloronaphthalene	< 330	330	ug/kg	
2-Chlorophenol	< 330	330	ug/kg	
4-Chlorophenyl phenyl ether	< 330	330	ug/kg	
Chrysene	< 330	330	ug/kg	
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
Dibenzofuran	< 330	330	ug/kg	
1,2-Dichlorobenzene	< 330	330	ug/kg	
1,3-Dichlorobenzene	< 330	330	ug/kg	
1,4-Dichlorobenzene	< 330	330	ug/kg	
3,3'-Dichlorobenzidine	< 660	660	ug/kg	
			**	

< 330

330

ug/kg



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### **Analytical Report**

ROBINSON ENGINEERING, LTD Client:

Multi-Use Path NGPL-ROW 17R0274.02

Sample ID:

Project ID:

S2

Sample No:

20-0483-002

Date Collected: 01/28/20

Time Collected: 12:32

Date Received: 01/28/20

Results are reported on a dry weight basis.		Result	R.L. Units Fla		
Analyte		Result	K.L.	Units	Flags
<b>Semi-Volatile Compounds</b> Analysis Date: 01/31/20	Method: 8270C	<b>Preparation Method 3540</b> Preparation Date: 01/29/20			
Diethyl phthalate		< 330	330	ug/kg	
2,4-Dimethylphenol		< 330	330	ug/kg	
Dimethyl phthalate		< 330	330	ug/kg	
Di-n-butyl phthalate		< 330	330	ug/kg	
4,6-Dinitro-2-methylphenol		< 1,600	1600	ug/kg	
2,4-Dinitrophenol		< 1,600	1600	ug/kg	
2,4-Dinitrotoluene		< 250	250	ug/kg	
2,6-Dinitrotoluene		< 260	260	ug/kg	
Di-n-octylphthalate		< 330	330	ug/kg	
Fluoranthene		< 330	330	ug/kg	
Fluorene		< 330	330	ug/kg	
Hexachlorobenzene		< 330	330	ug/kg	
Hexachlorobutadiene		< 330	330	ug/kg	
Hexachlorocyclopentadiene		< 330	330	ug/kg	
Hexachloroethane		< 330	330	ug/kg	
Indeno(1,2,3-cd)pyrene		< 330	330	ug/kg	
Isophorone		< 330	330	ug/kg	
2-Methylnaphthalene		< 330	330	ug/kg	
2-Methylphenol		< 330	330	ug/kg	
3 & 4-Methylphenol		< 330	330	ug/kg	
Naphthalene		< 330	330	ug/kg	
2-Nitroaniline		< 1,600	1600	ug/kg	
3-Nitroaniline		< 1,600	1600	ug/kg	
4-Nitroaniline		< 1,600	1600	ug/kg	
Nitrobenzene		< 260	260	ug/kg	
2-Nitrophenol		< 1,600	1600	ug/kg	
4-Nitrophenol		< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine		< 90	90	ug/kg	
n-Nitrosodimethylamine		< 330	330	ug/kg	
n-Nitrosodiphenylamine		< 330	330	ug/kg	
Pentachlorophenol		< 330	330	ug/kg	
Phenanthrene		< 330	330	ug/kg	
Phenol		< 330	330	ug/kg	
Pyrene		< 330	330	ug/kg	
Pyridine		< 330	330	ug/kg	
1,2,4-Trichlorobenzene		< 330	330	ug/kg	



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### **Analytical Report**

ROBINSON ENGINEERING, LTD **Client:** 

Time Collected: 12:32

Date Collected: 01/28/20

Project ID:

Multi-Use Path NGPL-ROW 17R0274.02

Sample ID: S2 Date Received:

01/28/20

Sample No:

20-0483-002

**Date Reported:** 02/05/20

Analyte		Result	R.L.	Units	Flags
Semi-Volatile Compounds Analysis Date: 01/31/20	Method: 8270C		<b>Preparation</b> Preparation I		
2,4,5-Trichlorophenol		< 330	330	ug/kg	
2,4,6-Trichlorophenol		< 330	330	ug/kg	
pH @ 25°C, 1:2 Analysis Date: 01/30/20 9:30	Method: 9045D 2	004			
pH @ 25°C, 1:2		7.89		Units	



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### **Analytical Report**

ROBINSON ENGINEERING, LTD Client:

Multi-Use Path NGPL-ROW 17R0274.02

Sample ID: **S**3

Project ID:

20-0483-003 Sample No:

**Date Collected:** 01/28/20

Time Collected: 12:16

Date Received: **Date Reported:** 02/05/20

01/28/20

Analyte		Result	R.L.	Units	Flags
Solids, Total Analysis Date: 01/29/20	Method: 2540B				
Total Solids		78.40		%	
Volatile Organic Compounds Analysis Date: 01/29/20	Method: 5035A/826	60B			
Acetone		< 200	200	ug/kg	
Benzene		< 5.0	5.0	ug/kg	
Bromodichloromethane		< 5.0	5.0	ug/kg	
Bromoform		< 5.0	5.0	ug/kg	
Bromomethane		< 10.0	10.0	ug/kg	
2-Butanone (MEK)		< 100	100	ug/kg	
Carbon disulfide		< 5.0	5.0	ug/kg	
Carbon tetrachloride		< 5.0	5.0	ug/kg	
Chlorobenzene		< 5.0	5.0	ug/kg	
Chlorodibromomethane		< 5.0	5.0	ug/kg	
Chloroethane		< 10.0	10.0	ug/kg	
Chloroform		< 5.0	5.0	ug/kg	
Chloromethane		< 10.0	10.0	ug/kg	
1,1-Dichloroethane		< 5.0	5.0	ug/kg	
1,2-Dichloroethane		< 5.0	5.0	ug/kg	
1,1-Dichloroethene		< 5.0	5.0	ug/kg	
cis-1,2-Dichloroethene		< 5.0	5.0	ug/kg	
trans-1,2-Dichloroethene		< 5.0	5.0	ug/kg	
1,2-Dichloropropane		< 5.0	5.0	ug/kg	
cis-1,3-Dichloropropene		< 4.0	4.0	ug/kg	
trans-1,3-Dichloropropene		< 4.0	4.0	ug/kg	
Ethylbenzene		< 5.0	5.0	ug/kg	
2-Hexanone		< 10.0	10.0	ug/kg	
Methyl-tert-butylether (MTBE)		< 5.0	5.0	ug/kg	
4-Methyl-2-pentanone (MIBK)		< 10.0	10.0	ug/kg	
Methylene chloride		< 20.0	20.0	ug/kg	
Styrene		< 5.0	5.0	ug/kg	
1,1,2,2-Tetrachloroethane		< 5.0	5.0	ug/kg	
Tetrachloroethene		< 5.0	5.0	ug/kg	
Toluene		< 5.0	5.0	ug/kg	
1,1,1-Trichloroethane		< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane		< 5.0	5.0	ug/kg	
Trichloroethene		< 5.0	5.0	ug/kg	



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### **Analytical Report**

ROBINSON ENGINEERING, LTD Client:

Multi-Use Path NGPL-ROW 17R0274.02

Sample ID: **S**3

Project ID:

20-0483-003 Sample No:

Results are reported on a dry weight basis.

**Date Collected:** 01/28/20

Time Collected: 12:16

**Date Received:** 01/28/20

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds Analysis Date: 01/29/20	Method: 5035A/8260B			
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	

Vinyl chloride		< 10.0	10.0	ug/kg	
Xylene, Total		< 5.0	5.0	ug/kg	
Semi-Volatile Compounds Analysis Date: 01/31/20	Method: 8270C	Preparation Method 3540C Preparation Date: 01/29/20			
Acenaphthene		< 330	330	ug/kg	
Acenaphthylene		< 330	330	ug/kg	
Anthracene		< 330	330	ug/kg	
Benzidine		< 330	330	ug/kg	
Benzo(a)anthracene		< 330	330	ug/kg	
Benzo(a)pyrene		< 90	90	ug/kg	
Benzo(b)fluoranthene		< 330	330	ug/kg	
Benzo(k)fluoranthene		< 330	330	ug/kg	
Benzo(ghi)perylene		< 330	330	ug/kg	
Benzoic acid		< 330	330	ug/kg	
Benzyl alcohol		< 330	330	ug/kg	
bis(2-Chloroethoxy)methane		< 330	330	ug/kg	
bis(2-Chloroethyl)ether		< 330	330	ug/kg	
bis(2-Chloroisopropyl)ether		< 330	330	ug/kg	
bis(2-Ethylhexyl)phthalate		< 330	330	ug/kg	
4-Bromophenyl phenyl ether		< 330	330	ug/kg	
Butyl benzyl phthalate		< 330	330	ug/kg	
Carbazole		< 330	330	ug/kg	
4-Chloroaniline		< 330	330	ug/kg	
4-Chloro-3-methylphenol		< 330	330	ug/kg	
2-Chloronaphthalene		< 330	330	ug/kg	
2-Chlorophenol		< 330	330	ug/kg	
4-Chlorophenyl phenyl ether		< 330	330	ug/kg	
Chrysene		< 330	330	ug/kg	
Dibenzo(a,h)anthracene		< 90	90	ug/kg	
Dibenzofuran		< 330	330	ug/kg	
1,2-Dichlorobenzene		< 330	330	ug/kg	
1,3-Dichlorobenzene		< 330	330	ug/kg	
1,4-Dichlorobenzene		< 330	330	ug/kg	
3,3'-Dichlorobenzidine		< 660	660	ug/kg	
2,4-Dichlorophenol		< 330	330	ug/kg	

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### **Analytical Report**

ROBINSON ENGINEERING, LTD Client:

Multi-Use Path NGPL-ROW 17R0274.02

Sample ID: **S**3

Project ID:

20-0483-003 Sample No:

Results are reported on a dry weight basis.

Date Collected:	01/28/20
Time Collected:	12:16
Date Received:	01/28/20

Analyte		Result	R.L.	Units	Flags
Semi-Volatile Compounds Analysis Date: 01/31/20	Method: 8270C		<b>Preparation</b> Preparation D		
Diethyl phthalate		< 330	330	ug/kg	
2,4-Dimethylphenol		< 330	330	ug/kg	
Dimethyl phthalate		< 330	330	ug/kg	
Di-n-butyl phthalate		< 330	330	ug/kg	
4,6-Dinitro-2-methylphenol		< 1,600	1600	ug/kg	
2,4-Dinitrophenol		< 1,600	1600	ug/kg	
2,4-Dinitrotoluene		< 250	250	ug/kg	
2,6-Dinitrotoluene		< 260	260	ug/kg	
Di-n-octylphthalate		< 330	330	ug/kg	
Fluoranthene		< 330	330	ug/kg	
Fluorene		< 330	330	ug/kg	
Hexachlorobenzene		< 330	330	ug/kg	
Hexachlorobutadiene		< 330	330	ug/kg	
Hexachlorocyclopentadiene		< 330	330	ug/kg	
Hexachloroethane		< 330	330	ug/kg	
Indeno(1,2,3-cd)pyrene		< 330	330	ug/kg	
Isophorone		< 330	330	ug/kg	
2-Methylnaphthalene		< 330	330	ug/kg	
2-Methylphenol		< 330	330	ug/kg	
3 & 4-Methylphenol		< 330	330	ug/kg	
Naphthalene		< 330	330	ug/kg	
2-Nitroaniline		< 1,600	1600	ug/kg	
3-Nitroaniline		< 1,600	1600	ug/kg	
4-Nitroaniline		< 1,600	1600	ug/kg	
Nitrobenzene		< 260	260	ug/kg	
2-Nitrophenol		< 1,600	1600	ug/kg	
4-Nitrophenol		< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine		< 90	90	ug/kg	
n-Nitrosodimethylamine		< 330	330	ug/kg	
n-Nitrosodiphenylamine		< 330	330	ug/kg	
Pentachlorophenol		< 330	330	ug/kg	
Phenanthrene		< 330	330	ug/kg	
Phenol		< 330	330	ug/kg	
Pyrene		< 330	330	ug/kg	
Pyridine		< 330	330	ug/kg	
1,2,4-Trichlorobenzene		< 330	330	ug/kg	

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### **Analytical Report**

Client: ROBINSON ENGINEERING, LTI

**Project ID:** Multi-Use Path NGPL-ROW 17R0274.02

Sample ID: S3

**Sample No:** 20-0483-003

Results are reported on a dry weight basis.

IG, LTD	<b>Date Collected:</b>	01/28/20
U 17D0074 00	Ti C-1141	10.16

Time Collected: 12:16

Date Received: 01/28/20

Results are reported on a dry weigh	nt basis.				
Analyte		Result	R.L.	Units	Flags
Semi-Volatile Compounds Analysis Date: 01/31/20	Method: 8270C			<b>Method 354</b> Date: 01/29/20	
2,4,5-Trichlorophenol		< 330	330	ug/kg	
2,4,6-Trichlorophenol		< 330	330	ug/kg	
Pesticides Analysis Date: 01/30/20	Method: 8081A			Method 354 Date: 01/29/20	
Aldrin		< 8.0	8.0	ug/kg	
alpha-BHC		< 2.0	2.0	ug/kg	
beta-BHC		< 8.0	8.0	ug/kg	
delta-BHC		< 8.0	8.0	ug/kg	
gamma-BHC (Lindane)		< 8.0	8.0	ug/kg	
alpha-Chlordane		< 80.0	80.0	ug/kg	
gamma-Chlordane		< 80.0	80.0	ug/kg	
4,4'-DDD		< 16.0	16.0	ug/kg	
4,4'-DDE		< 16.0	16.0	ug/kg	
4,4'-DDT		< 16.0	16.0	ug/kg	
Dieldrin		< 16.0	16.0	ug/kg	
Endosulfan I		< 8.0	8.0	ug/kg	
Endosulfan II		< 16.0	16.0	ug/kg	
Endosulfan sulfate		< 16.0	16.0	ug/kg	
Endrin		< 16.0	16.0	ug/kg	
Endrin aldehyde		< 16.0	16.0	ug/kg	
Endrin ketone		< 16.0	16.0	ug/kg	
Heptachlor		< 8.0	8.0	ug/kg	
Heptachlor epoxide		< 8.0	8.0	ug/kg	
Methoxychlor		< 80.0	80	ug/kg	
Toxaphene		< 160	160	ug/kg	
<b>pH @ 25°C, 1:2</b> Analysis Date: 01/30/20 9:30	Method: 9045D 2	004	-		
рН @ 25°C, 1:2		7.90		Units	



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### **Analytical Report**

Client:ROBINSON ENGINEERING, LTDDate Collected:01/28/20Project ID:Multi-Use Path NGPL-ROW 17R0274.02Time Collected:12:04Sample ID:S4Date Received:01/28/20Sample No:20-0483-004Date Reported:02/05/20

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Solids, Total Analysis Date: 01/29/20	Method: 2540B				
Total Solids		79.31		%	
<b>Volatile Organic Compounds</b> Analysis Date: 01/29/20	Method: 5035A/826	60B			
Acetone		< 200	200	ug/kg	
Benzene		< 5.0	5.0	ug/kg	
Bromodichloromethane		< 5.0	5.0	ug/kg	
Bromoform		< 5.0	5.0	ug/kg	
Bromomethane		< 10.0	10.0	ug/kg	
2-Butanone (MEK)		< 100	100	ug/kg	
Carbon disulfide		< 5.0	5.0	ug/kg	
Carbon tetrachloride		< 5.0	5.0	ug/kg	
Chlorobenzene		< 5.0	5.0	ug/kg	
Chlorodibromomethane		< 5.0	5.0	ug/kg	
Chloroethane		< 10.0	10.0	ug/kg	
Chloroform		< 5.0	5.0	ug/kg	
Chloromethane		< 10.0	10.0	ug/kg	
1,1-Dichloroethane		< 5.0	5.0	ug/kg	
1,2-Dichloroethane		< 5.0	5.0	ug/kg	
l,1-Dichloroethene		< 5.0	5.0	ug/kg	
cis-1,2-Dichloroethene		< 5.0	5.0	ug/kg	
trans-1,2-Dichloroethene		< 5.0	5.0	ug/kg	
1,2-Dichloropropane		< 5.0	5.0	ug/kg	
cis-1,3-Dichloropropene		< 4.0	4.0	ug/kg	
trans-1,3-Dichloropropene		< 4.0	4.0	ug/kg	
Ethylbenzene		< 5.0	5.0	ug/kg	
2-Hexanone		< 10.0	10.0	ug/kg	
Methyl-tert-butylether (MTBE)		< 5.0	5.0	ug/kg	
4-Methyl-2-pentanone (MIBK)		< 10.0	10.0	ug/kg	
Methylene chloride		< 20.0	20.0	ug/kg	
Styrene		< 5.0	5.0	ug/kg	
1,1,2,2-Tetrachloroethane		< 5.0	5.0	ug/kg	
Tetrachloroethene		< 5.0	5.0	ug/kg	
Toluene		< 5.0	5.0	ug/kg	
1,1,1-Trichloroethane		< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane		< 5.0	5.0	ug/kg	
Trichloroethene		< 5.0	5.0	ug/kg	

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### **Analytical Report**

Client: ROBINSON ENGINEERING, LTD

Multi-Use Path NGPL-ROW 17R0274.02

Sample ID: S4

Project ID:

**Sample No:** 20-0483-004

Results are reported on a dry weight basis.

Date Collected: 01/28/20

Time Collected: 12:04

Date Received: 01/28/20

Analyte		Result	R.L.	Units	Flags
Volatile Organic Compounds Analysis Date: 01/29/20	Method: 5035A/82	260B			
Vinyl acetate		< 10.0	10.0	ug/kg	
Vinyl chloride		< 10.0	10.0	ug/kg	
Xylene, Total		< 5.0	5.0	ug/kg	
Semi-Volatile Compounds Analysis Date: 01/31/20	Method: 8270C		<b>Preparation</b> Preparation D		
Acenaphthene		< 330	330	ug/kg	
Acenaphthylene		< 330	330	ug/kg	
Anthracene		< 330	330	ug/kg	
Benzidine		< 330	330	ug/kg	
Benzo(a)anthracene		< 330	330	ug/kg	
Benzo(a)pyrene		< 90	90	ug/kg	
Benzo(b)fluoranthene		< 330	330	ug/kg	
Benzo(k)fluoranthene		< 330	330	ug/kg	
Benzo(ghi)perylene		< 330	330	ug/kg	
Benzoic acid		< 330	330	ug/kg	
Benzyl alcohol		< 330	330	ug/kg	
bis(2-Chloroethoxy)methane		< 330	330	ug/kg	
bis(2-Chloroethyl)ether		< 330	330	ug/kg	
bis(2-Chloroisopropyl)ether		< 330	330	ug/kg	
bis(2-Ethylhexyl)phthalate		< 330	330	ug/kg	
4-Bromophenyl phenyl ether		< 330	330	ug/kg	
Butyl benzyl phthalate		< 330	330	ug/kg	
Carbazole		< 330	330	ug/kg	
4-Chloroaniline		< 330	330	ug/kg	
4-Chloro-3-methylphenol		< 330	330	ug/kg	
2-Chloronaphthalene		< 330	330	ug/kg	
2-Chlorophenol		< 330	330	ug/kg	
4-Chlorophenyl phenyl ether		< 330	330	ug/kg	
Chrysene		< 330	330	ug/kg	
Dibenzo(a,h)anthracene		< 90	90	ug/kg	
Dibenzofuran		< 330	330	ug/kg	
1,2-Dichlorobenzene		< 330	330	ug/kg	
1,3-Dichlorobenzene		< 330	330	ug/kg	
1,4-Dichlorobenzene		< 330	330	ug/kg	
3,3'-Dichlorobenzidine		< 660	660	ug/kg	
2,4-Dichlorophenol		< 330	330	ug/kg	
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### **Analytical Report**

Client:ROBINSON ENGINEERING, LTDDate Collected:01/28/20Project ID:Multi-Use Path NGPL-ROW 17R0274.02Time Collected:12:04Sample ID:S4Date Received:01/28/20

Sample No: 20-0483-004 Date Reported: 02/05/20

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Semi-Volatile Compounds Analysis Date: 01/31/20	Method: 8270C		<b>Preparation</b> Preparation D	Method 354 Date: 01/29/20	10C )
Diethyl phthalate		< 330	330	ug/kg	
2,4-Dimethylphenol		< 330	330	ug/kg	
Dimethyl phthalate		< 330	330	ug/kg	
Di-n-butyl phthalate		< 330	330	ug/kg	
4,6-Dinitro-2-methylphenol		< 1,600	1600	ug/kg	
2,4-Dinitrophenol		< 1,600	1600	ug/kg	
2,4-Dinitrotoluene		< 250	250	ug/kg	
2,6-Dinitrotoluene		< 260	260	ug/kg	
Di-n-octylphthalate		< 330	330	ug/kg	
Fluoranthene		< 330	330	ug/kg	
Fluorene		< 330	330	ug/kg	
Hexachlorobenzene		< 330	330	ug/kg	
Hexachlorobutadiene		< 330	330	ug/kg	
Hexachlorocyclopentadiene		< 330	330	ug/kg	
Hexachloroethane		< 330	330	ug/kg	
Indeno(1,2,3-cd)pyrene		< 330	330	ug/kg	
Isophorone		< 330	330	ug/kg	
2-Methylnaphthalene		< 330	330	ug/kg	
2-Methylphenol		< 330	330	ug/kg	
3 & 4-Methylphenol		< 330	330	ug/kg	
Naphthalene		< 330	330	ug/kg	
2-Nitroaniline		< 1,600	1600	ug/kg	
3-Nitroaniline		< 1,600	1600	ug/kg	
4-Nitroaniline		< 1,600	1600	ug/kg	
Nitrobenzene		< 260	260	ug/kg	
2-Nitrophenol		< 1,600	1600	ug/kg	
4-Nitrophenol		< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine		< 90	90	ug/kg	
n-Nitrosodimethylamine		< 330	330	ug/kg	
n-Nitrosodiphenylamine		< 330	330	ug/kg	
Pentachlorophenol		< 330	330	ug/kg	
Phenanthrene		< 330	330	ug/kg	
Phenol		< 330	330	ug/kg	
Pyrene		< 330	330	ug/kg	
Pyridine		< 330	330	ug/kg	
1,2,4-Trichlorobenzene		< 330	330	ug/kg	

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### **Analytical Report**

Client:ROBINSON ENGINEERING, LTDDate Collected:01/28/20Project ID:Multi-Use Path NGPL-ROW 17R0274.02Time Collected:12:04Sample ID:S4Date Received:01/28/20Sample No:20-0483-004Date Reported:02/05/20

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Semi-Volatile Compounds Analysis Date: 01/31/20	Method: 8270C			Method 354 Date: 01/29/20	
2,4,5-Trichlorophenol		< 330	330	ug/kg	
2,4,6-Trichlorophenol		< 330	330	ug/kg	
pH @ 25°C, 1:2 Analysis Date: 01/30/20 9:30	Method: 9045D 2	004			
pH @ 25°С, 1:2		8.08		Units	

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# CHAIN OF CUSTODY RECORD

first Invironmental Aboratories, Inc.	

Phone: (630) 778-1200 • Fax: (630) 778-1233 E-mail: firstinfo@firstenv.com • www.firstenv.com First Environmental Laboratories IEPA Certification #100292 1600 Shore Road, Suite D Naperville, Illinois 60563

, Ltd.	State: IL Zip: (00 423	140.00m		
Company Name: Robinson Engineering, Ltd.	Sity: Frank (For t	Phone: 815-523-7965 e-mail: ecurley Ore Hd. Com	Send Report To: Erin Curley	Sampled By: SOEL DIZABITCKI

Project I.D.: //	Project I.D.: MILLET USE PATH NOFLERUM P.O. #: Rameoville, IL		Diogottle.	Sept.			IN YON OUT	
17 ROBY4,02	22	led .	18/1	THE POST		TOH	Dr.	
Doto/Time Taken	Sample Description	Matrix		_	_		Comments	Lab I.D.
1/20/20 17:EXO	1.5	8	X	X		THINE		20-0483-001
1/28/20 17:27	87	X	X	X				2001
11/28/20 12:16A	200	χ σ	X	X				-003
1/28/20 12:016	SH	8	X	X				700-
FOR LAB USE ONLY:		LAB COURIER USE ONLY:	ONLY:					
Cooler Temperature: 0.1-6°C Yes No. 12	6°C Yes/No. 12 °C	Sample Refrigerated: Yes_	d: Yes No	Program:	☐ TACO/SRP	CCDD	NPDES LUST	SDWA
Received within 5 hrs. or collection.	collection:				e Key: S-Soil S	: S-Soil SL-Sludge D	*Matrix Code Key: S-Soil SL-Sludge DW-Drinking Water	
Notes and Special Instructions:	ructions: 5 DAY TURN	N:		AA AA - AA GOOGAA			1	
la l								
	1 3 4 4 4		6		0 0	,		
Polingiiched Bu	Dar Callet M. Da	Date/Time /-28- 40	1	Received By:	7	4	Date/Time 61/28/20	25.58
V			10 20					

80

338 Received By:

Date/Time

Date/Time\_

Relinquished By:

Rev. 6/19



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



Rout e	Marked Route	Section Number
Off System, See Plans	N/A	17-00067-00-BT
Project Number	County	Cont racNumber
2QS4 (59 <b>0</b>	WILL	61G64
This plan has been prepared to comply with the ILR10 (Permit ILR10), issued by the Illinois Eractivities.		
I certify under penalty of law that this documer system designed to assure that qualified person the person or persons who manage the system submitted is, to the best of my knowledge and submitting false information, including the pos	onnel properly gathered and evaluated the info m, or those persons directly responsible for ga I belief, true, accurate and complete. I am awa	thering the information, the information are that there are significant penalties for
Signatur e		Date
8- Br		2/25/20
Print Name	Ti_bb	Agency
Eric Bjork	Director of Public Works	Village of Romeoville
A. Provide a description of the project location This project is located in the Village of Pinnacle Drive. The path extends were ROW, then extends north along the North Road. (S5, T36, R10 & S32, T37, R10)  B. Provide a description of the construction as improvements, in-stream work, installation.	of Romeoville starting in the north RON st approximately 1/4 mile to an existin NGPL ROW from Taylor Road for approximately (41°38'20.69"N, 88° 7'10.23"W)	V of Taylor Road just west of North g Natural Gas Pipe Line (NGPL) oximately 2 miles to Normantown the number of construction stages, drainage
The project consists of constructing a along the NGPL ROW between Taylo	ten-foot (10') wide multi-use path alo or Road and Normantown Road. Erosi	ng north ROW of Taylor Road and
C. Provide the estimated duration of this proje	ect:	
D. The total area of the construction site is est	timated to be 5.1 acre	S.
	sturbed by excavation, grading or other activit	ies is 5.1 acres.
E. The following are weighted averages of the Section 4-102 of the IDOT Drainage Manua		fter construction activities are completed; see
Before Construction = 0.4		
After Construction = 0.9		

F. List all soils found within project boundaries; include map unit name, slope information, and erosivity:
Silty Clay Loam, Silt Loam and Houghton Muck. See attached map.
G. If wetlands were delineated for this project, provide an extent of wetland acreage at the site; see Phase I report:
0.41 Acres
H. Provide a description of potentially erosive areas associated with this project:
Excavation, HMA multi-use path and PCC sidewalk construction, and culvert construction
<ol> <li>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.):</li> </ol>
Excavation for the proposed multi-use path between stations 22+00 to 24+00, 83+00 to 93+00 and 108+00 to 111+50 have slopes along the NGPL ROW that range between 2.5% to 5.0%.
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 Romeoville
village of Northeoville
L. The following is a list of General NPDES ILR40 permittees within whose reporting jurisdiction this project is located:
Village of Romeoville
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:
Lily Cache Slough
<ul> <li>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.</li> <li>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</li> </ul>
that area.
Areas within the NGPL Easement outside limits of construction shall remain undisturbed. The wetlands between Station 90+00 LT to 104+00 LT and 94+00 RT to 104+00 RT will remain undisturbed. Double perimeter erosion control barrier will be provided along limits of the existing wetlands.
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.
Existing wetlands along the NGPL ROW between stations 90+00 to 104+00.
303(d) Listed receiving waters for suspended solids, turbidity, or siltation.  The name(s) of the listed water body, and identification of all pollutants causing impairment:
N/A

Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event:

Provide a description of the location(s) of direct discharge from the pr	roject site to the 303(d) water body:
Provide a description of the location(s) of any dewatering discharges	to the MS4 and/or water body:
Applicable Federal, Tribal, State, or Local Programs	
57	
Floodplain  There is existing floodplain in the project area associated	I with the Lily Cache Slough
	with the Lify Cache Glough.
☐ Historic Preservation	
Receiving waters with Total Maximum Daily Load (TMDL) for sedi	iment, total suspended solids, turbidity or siltation
The name(s) of the listed water body:	
Provide a description of the erosion and sediment control strategy that assumptions and requirements of the TMDL:	at will be incorporated into the site design that is consistent with the
If a specific numeric waste load allocation has been established that we necessary steps to meet that allocation:	would apply to the project's discharges, provide a description of the
☐ Threatened and Endangered Species/Illinois Natural Areas (INAI)	/Nature Preserves
Other	
Wetland  There are existing wetlands adjacent to the project area on the plans and double perimeter erosion control barrier existing weltand.	associated with the Lily Cache Slough. Limits are shown r is provided along the project limits adjacent to the
P. The following pollutants of concern will be associated with this cons  ☐ Antifreeze / Coolants  ☐ Concrete  ☐ Concrete Curing Compounds  ☐ Concrete Truck Waste	<ul> <li>Solid Waste Debris</li> <li>☐ Solvents</li> <li>☑ Waste water from cleaning construction equipments</li> <li>☐ Other (Specify)</li> </ul>
	☐ Other (Specify)
☐ Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) ☐ Soil Sediment	Other (Specify) Other (Specify)

II. Controls:

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in Section I.C above and for all use areas, borrow sites, and waste sites. For each measure discussed, the Contractor will be responsible for its implementation as indicated. The Contractor shall provide to the Resident Engineer a plan for the implementation of the measures indicated. The Contractor, and subcontractors, will notify the Resident Engineer of any proposed changes, maintenance, or modifications to keep construction activities compliant with the Permit ILR10. Each such Contractor has signed the required certification on forms which are attached to, and are a part of, this plan:

- A. Erosion and Sediment Controls: At a minimum, controls must be coordinated, installed and maintained to:
  - 1. Minimize the amount of soil exposed during construction activity;
  - 2. Minimize the disturbance of steep slopes;

disturbed areas within the project limits.

- 3. Maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible;
- 4. Minimize soil compaction and, unless infeasible, preserve topsoil.
- B. **Stabilization Practices**: Provided below is a description of interim and permanent stabilization practices, including site- specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II.B.1 and II.B.2, stabilization measures shall be initiated **immediately** where construction activities have temporarily or permanently ceased, but in no case more than **one (1) day** after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of fourteen (14) or more calendar days.
  - 1. Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
- 2. On areas where construction activity has temporarily ceased and will resume after fourteen (14) days, a temporary stabilization method can be used. The following stabilization practices will be used for this project: ☐ Erosion Control Blanket / Mulching Temporary Turf (Seeding, Class 7) Temporary Mulching Geotextiles □ Permanent Seeding □ Preservation of Mature Seeding Other (Specify) Protection of Trees Other (Specify) Sodding Other (Specify) ▼ Temporary Erosion Control Seeding Other (Specify) Describe how the stabilization practices listed above will be utilized during construction: Temporary erosion control seeding, erosion control blankets and permanent seeding will help prevent erosion in

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

Erosion control blankets and permanent seeding will help permently stabilize the project area to help prevent erosion in areas disturbed within the project limits.

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

Aggregate Ditch	
Concrete Revetment Mats	Stabilized Trench Flow
☐ Dust Suppression	☐ Slope Mattress
Dewatering Filtering	☐ Slope Walls
Gabions	☐ Temporary Ditch Check
☐ In-Stream or Wetland Work	☐ Temporary Pipe Slope Drain

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<ul> <li>□ Level Spreaders</li> <li>□ Paved Ditch</li> <li>□ Permanent Check Dams</li> <li>☑ Perimeter Erosion Barrier</li> <li>□ Permanent Sediment Basin</li> <li>□ Retaining Walls</li> <li>☑ Riprap</li> <li>□ Rock Outlet Protection</li> <li>□ Sediment Trap</li> </ul>	Temporary Sediment Basin Temporary Stream Crossing Turf Reinforcement Mats Other (Specify) Other (Specify) Other (Specify) Other (Specify)
Perimeter Erosion Barrier Permanent Sediment Basin Retaining Walls Riprap Rock Outlet Protection	Other (Specify) Other (Specify) Other (Specify)
<ul> <li>□ Permanent Sediment Basin</li> <li>□ Retaining Walls</li> <li>□ Riprap</li> <li>□ Rock Outlet Protection</li> </ul>	Other (Specify) Other (Specify)
<ul><li>☐ Retaining Walls</li><li>☑ Riprap</li><li>☐ Rock Outlet Protection</li></ul>	Other (Specify)
☐ Rock Outlet Protection	
Rock Outlet Protection	Other (Specify)
Sediment Trap	Other (Specify)
<u> </u>	Other (Specify)
Storm Drain Inlet Protection	Other (Specify)
Describe how the structural practices listed above will be utilized dur Perimeter Erosion Barrier will be used in areas where w Storm Drain Inlet filters will be used to protect drainage	ater could potentially run off-site or toward wetlands.
Describe how the structural practices listed above will be utilized after	er construction activities have been completed:
Riprap is provided at culvert end sections to prevent ero	sion associated from these point discharges.
D. <b>Treatment Chemicals</b> Will polymer flocculants or treatment chemicals be utilized on this pro	
	nt Controls: Provided below is a description of measures that will be ollutants in storm water discharges that will occur after construction ay be subject to Section 404 of the Clean Water Act.
	er detention structures (including wet ponds), storm water retention and natural depressions, infiltration of runoff on site, and sequentia
Water Pollution Control) of the IDOT BDE Manual. If prac	ed on the technical guidance in Chapter 41 (Construction Site Storm tices other than those discussed in Chapter 41 are selected for om those covered in Chapter 41, the technical basis for such decisions
non-erosive velocity flow from the structure to a water course so	and along the length of any outfall channel as necessary to provide a that the natural physical and biological characteristics and functions onditions such as the hydroperiod and hydrodynamics present prior to
Description of permanent storm water management controls:	
Permanent Seeding and Riprap at culvert end sections.	
1 1	

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

- G. **Contractor Required Submittals:** Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342A.
- 1. The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:
  - Approximate duration of the project, including each stage of the project
  - Rainy season, dry season, and winter shutdown dates
  - Temporary stabilization measures to be employed by contract phases
  - Mobilization time-frame
  - Mass clearing and grubbing/roadside clearing dates
  - · Deployment of Erosion Control Practices
  - Deployment of Sediment Control Practices (including stabilized cons
  - Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
  - Paving, saw-cutting, and any other pavement related operations
  - · Major planned stockpiling operation
  - Time frame for other significant long-term operations or activities that may plan non-storm water discharges as dewatering, grinding, etc
    - Permanent stabilization activities for each area of the project
- 2. During the pre-construction meeting, the Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:
  - Temporary Ditch Checks Identify what type and the source of Temporary Ditch Checks that will be installed as part of the project. The installation details will then be included with the SWPPP.
  - Vehicle Entrances and Exits Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
  - Material Delivery, Storage and Use Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
  - Stockpile Management Identify the location of both on-site and off-site stockpiles. Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
  - · Waste Disposal Discuss methods of waste disposal that will be used for this project.
  - Spill Prevention and Control Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.)
  - Concrete Residuals and Washout Wastes Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
  - Litter Management Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
  - Vehicle and Equipment Fueling Identify equipment fueling locations for this project and what BMPs will be used to ensure containment and spill prevention.
  - Vehicle and Equipment Cleaning and Maintenance Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
  - Dewatering Activities Identify the controls which will be used during dewatering operations to ensure sediments will not leave the construction site.
  - Polymer Flocculants and Treatment Chemicals Identify the use and dosage of treatment chemicals and provide the Resident Engineer with Material Safety Data Sheets. Describe procedures on how the chemicals will be used and identify who will be responsible for the use and application of these chemicals. The selected individual must be trained on the established procedures.
  - · Additional measures indicated in the plan.

### III. Maintenance:

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

### IV. Inspections:

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

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

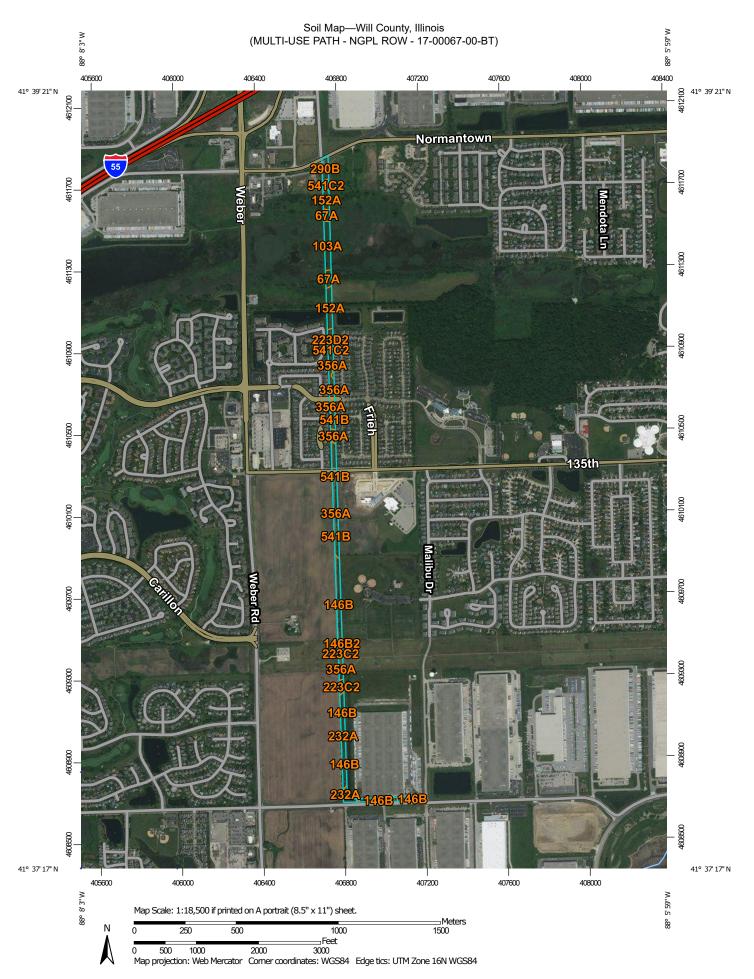
If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer shall notify the appropriate IEPA Field Operations Section office by email at: <a href="mailto:epa.swnoncomp@illinois.gov">epa.swnoncomp@illinois.gov</a>,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

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

### V. Failure to Comply:

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

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## Soil Map—Will County, Illinois (MULTI-USE PATH - NGPL ROW - 17-00067-00-BT)

### MAP LEGEND

### Special Line Features Streams and Canals Very Stony Spot Stony Spot Spoil Area Wet Spot Other Water Features **Fransportation** W Soil Map Unit Polygons Area of Interest (AOI) Soil Map Unit Points Soil Map Unit Lines Special Point Features **Borrow Pit** Clay Spot Area of Interest (AOI) Blowout Soils

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at

Please rely on the bar scale on each map sheet for map measurements. Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

distance and area. A projection that preserves area, such as the Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Will County, Illinois Soil Survey Area:

Survey Area Data: Version 14, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger. Date(s) aerial images were photographed: Feb 10, 2016—Oct 8,

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



Closed Depression



**Gravelly Spot** 

**Gravel Pit** 







Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot Sandy Spot Severely Eroded Spot

Slide or Slip Sodic Spot

Sinkhole



Marsh or swamp

Lava Flow

Landfill

Mine or Quarry



### **Map Unit Legend**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
67A	Harpster silty clay loam, 0 to 2 percent slopes	1.0	4.9%
103A	Houghton muck, 0 to 2 percent slopes	1.7	8.3%
146B	Elliott silt loam, 2 to 4 percent slopes	5.6	27.4%
146B2	Elliott silty clay loam, 2 to 4 percent slopes, eroded	0.0	0.2%
152A	Drummer silty clay loam, 0 to 2 percent slopes	2.1	10.0%
223C2	Varna silt loam, 4 to 6 percent slopes, eroded	0.8	3.8%
223D2	Varna silt loam, 6 to 12 percent slopes, eroded	0.7	3.3%
232A	Ashkum silty clay loam, 0 to 2 percent slopes	1.0	4.8%
290B	Warsaw silt loam, 2 to 4 percent slopes	0.9	4.2%
356A	Elpaso silty clay loam, 0 to 2 percent slopes	1.5	7.5%
541B	Graymont silt loam, 2 to 5 percent slopes	3.8	18.4%
541C2	Graymont silt loam, 5 to 10 percent slopes, eroded	1.5	7.2%
Totals for Area of Interest	·	20.5	100.0%

### 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.

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

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<sub>mb</sub> = 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<sub>L</sub> and BPI<sub>P</sub> 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.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Add the following to Section 109 of the Standard Specifications.

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

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

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

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

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

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

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

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

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

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### CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

Effective: June 1, 2010 Revised: November 1, 2014

The reduction of emissions of particulate matter (PM) for off-road equipment shall be accomplished by installing retrofit emission control devices. The term "equipment" refers to diesel fuel powered devices rated at 50 hp and above, to be used on the jobsite in excess of seven calendar days over the course of the construction period on the jobsite (including rental equipment).

Contractor and subcontractor diesel powered off-road equipment assigned to the contract shall be retrofitted using the phased in approach shown below. Equipment that is of a model year older than the year given for that equipment's respective horsepower range shall be retrofitted:

Effective Dates	Horsepower Range	Model Year
June 1, 2010 1/	600-749	2002
	750 and up	2006
June 1, 2011 <sup>2/</sup>	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006
June 1, 2012 2/	50-99	2004
	100-299	2003
	300-599	2001
	600-749	2002
_	750 and up	2006

<sup>1/</sup> Effective dates apply to Contractor diesel powered off-road equipment assigned to the contract.

The retrofit emission control devices shall achieve a minimum PM emission reduction of 50 percent and shall be:

- a) Included on the U.S. Environmental Protection Agency (USEPA) Verified Retrofit Technology List (<a href="http://www.epa.gov/cleandiesel/verification/verif-list.htm">http://www.epa.gov/cleandiesel/verification/verif-list.htm</a>), or verified by the California Air Resources Board (CARB) (<a href="http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm">http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm</a>); or
- b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit

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

device manufacturer that the emission control device provides a minimum PM emission reduction of 50 percent.

Note: Large cranes (Crawler mounted cranes) which are responsible for critical lift operations are exempt from installing retrofit emission control devices if such devices adversely affect equipment operation.

Diesel powered off-road equipment with engine ratings of 50 hp and above, which are unable to be retrofitted with verified emission control devices or if performance certifications are not available which will achieve a minimum 50 percent PM reduction, may be granted a waiver by the Department if documentation is provided showing good faith efforts were made by the Contractor to retrofit the equipment.

Construction shall not proceed until the Contractor submits a certified list of the diesel powered off-road equipment that will be used, and as necessary, retrofitted with emission control devices. The list(s) shall include (1) the equipment number, type, make, Contractor/rental company name; and (2) the emission control devices make, model, USEPA or CARB verification number, or performance certification from the retrofit device manufacturer. Equipment reported as fitted with emissions control devices shall be made available to the Engineer for visual inspection of the device installation, prior to being used on the jobsite.

The Contractor shall submit an updated list of retrofitted off-road construction equipment as retrofitted equipment changes or comes on to the jobsite. The addition or deletion of any diesel powered equipment shall be included on the updated list.

If any diesel powered off-road equipment is found to be in non-compliance with any portion of this special provision, the Engineer will issue the Contractor a diesel retrofit deficiency deduction.

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

### **Diesel Retrofit Deficiency Deduction**

When the Engineer determines that a diesel retrofit deficiency exists, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

The deficiency will be based on lack of diesel retrofit emissions control.

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected.

Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

### **DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)**

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

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

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

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

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

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

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

good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 17.00 % 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.

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

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

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

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

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

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

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

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

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

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

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

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

## **DISPOSAL FEES (BDE)**

Effective: November 1, 2018

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

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

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

- a. Name, classification, date, daily hours, total hours, rate, and extension for each laborer and foreman. Payrolls shall be submitted to substantiate actual wages paid if so requested by the Engineer.
- b. Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.
- c. Quantities of materials, prices and extensions.
- d. Transportation of materials.
- e. Cost of property damage, liability and workmen's compensation insurance premiums, unemployment insurance contributions, and social security tax.
- (8) Work Performed by an Approved Subcontractor. When extra work is performed by an approved subcontractor, the Contractor shall receive, as administrative costs, an amount equal to five percent of the total approved costs of such work with the minimum payment being \$100.

(9) All statements of the cost of force account work shall be furnished to the Engineer not later than 60 days after receipt of the Central Bureau of Construction form "Extra Work Daily Report". If the statement is not received within the specified time frame, all demands for payment for the extra work are waived and the Department is released from any and all such demands. It is the responsibility of the Contractor to ensure that all statements are received within the specified time regardless of the manner or method of delivery."

## **EMULSIFIED ASPHALTS (BDE)**

Effective: August 1, 2019

Revise Article 1032.06 of the Standard Specifications to read:

"1032.06 Emulsified Asphalts. Emulsified asphalts will be accepted according to the current Bureau of Materials Policy Memorandum, "Emulsified Asphalt Acceptance Procedure". These materials shall be homogeneous and shall show no separation of asphalt after thorough mixing, within 30 days after delivery, provided separation has not been caused by freezing. They shall coat the aggregate being used in the work to the satisfaction of the Engineer and shall be according to the following requirements.

- (a) Anionic Emulsified Asphalt. Anionic emulsified asphalts RS-1, RS-2, HFRS-2, SS-1h, and SS-1 shall be according to AASHTO M 140, except as follows.
  - (1) The cement mixing test will be waived when the emulsion is being used as a tack coat.
  - (2) The Solubility in Trichloroethylene test according to AASHTO T 44 may be run in lieu of Ash Content and shall meet a minimum of 97.5 percent.
- (b) Cationic Emulsified Asphalt. Cationic emulsified asphalts CRS-1, CRS-2, CSS-1h, and CSS-1 shall be according to AASHTO M 208, except as follows.
  - (1) The cement mixing test will be waived when the emulsion is being used as a tack coat.
  - (2) The Solubility in Trichloroethylene test according to AASHTO T 44 may be run in lieu of Ash Content and shall meet a minimum of 97.5 percent.
- (c) High Float Emulsion. High float emulsions HFE-90, HFE-150, and HFE-300 are medium setting and shall be according to the following table.

Test	HFE-90	HFE-150	HFE-300
Viscosity, Saybolt Furol, at 122 °F (50 °C),			
(AASHTO T 59), SFS <sup>1/</sup>	50 min.	50 min.	50 min.
Sieve Test, No. 20 (850 µm), retained on			
sieve, (AASHTO T 59), %	0.10 max.	0.10 max.	0.10 max.
Storage Stability Test, 1 day,			
(AASHTO T 59), %	1 max.	1 max.	1 max.
Coating Test (All Grades),			
(AASHTO T 59), 3 minutes	stone coated thoroughly		
Distillation Test, (AASHTO T 59):			
Residue from distillation test to			
500 °F (260 °C), %	65 min.	65 min.	65 min.
Oil distillate by volume, %	7 max.	7 max.	7 max.

Characteristics of residue from distillation test to 500 °F (260 °C): Penetration at 77 °F (25 °C), (AASHTO T 49), 100 g,			
5 sec, dmm	90-150	150-300	300 min.
Float Test at 140 °F (60 °C),			
(AASHTO T 50), sec.	1200 min.	1200 min.	1200 min.

- 1/ The emulsion shall be pumpable.
- (d) Penetrating Emulsified Prime. Penetrating Emulsified Prime (PEP) shall be according to AASHTO T 59, except as follows.

Test	Result
Viscosity, Saybolt Furol, at 77 °F (25 °C), SFS	75 max.
Sieve test, retained on No. 20 (850 µm) sieve, %	0.10 max.
Distillation to 500 °F (260 °C) residue, %	38 min.
Oil distillate by volume, %	4 max.

The PEP shall be tested according to the current Bureau of Materials Illinois Laboratory Test Procedure (ILTP), "Sand Penetration Test of Penetrating Emulsified Prime (PEP)". The time of penetration shall be equal to or less than that of MC-30. The depth of penetration shall be equal to or greater than that of MC-30.

- (e) Delete this subparagraph.
- (f) Polymer Modified Emulsified Asphalt. Polymer modified emulsified asphalts, e.g. SS-1hP, CSS-1hP, CRS-2P (formerly CRSP), CQS-1hP (formerly CSS-1h Latex Modified) and HFRS-2P (formerly HFP) shall be according to AASHTO M 316, except as follows.
  - (1) The cement mixing test will be waived when the polymer modified emulsion is being used as a tack coat.
  - (2) CQS-1hP (formerly CSS-1h Latex Modified) emulsion for micro-surfacing treatments shall use latex as the modifier.
  - (3) Upon examination of the storage stability test cylinder after standing undisturbed for 24 hours, the surface shall show minimal to no white, milky colored substance and shall be a homogenous brown color throughout.
  - (4) The distillation for all polymer modified emulsions shall be performed according to AASHTO T 59, except the temperature shall be  $374 \pm 9$  °F ( $190 \pm 5$  °C) to be held for a period of 15 minutes and measured using an ASTM 16F (16C) thermometer.
  - (5) The specified temperature for the Elastic Recovery test for all polymer modified emulsions shall be  $50.0 \pm 1.0$  °F ( $10.0 \pm 0.5$  °C).

- (6) The Solubility in Trichloroethylene test according to AASHTO T 44 may be run in lieu of Ash Content and shall meet a minimum of 97.5 percent.
- (g) Non-Tracking Emulsified Asphalt. Non-tracking emulsified asphalt NTEA (formerly SS-1vh) shall be according to the following.

Test	Requirement
Saybolt Viscosity at 77 °F (25 °C),	
(AASHTO T 59), SFS	20-100
Storage Stability Test, 24 hr, (AASHTO T 59), %	1 max.
Residue by Distillation, 500 ± 10 °F (260 ± 5 °C), or	
Residue by Evaporation, 325 ± 5 °F (163 ± 3 °C),	
(AASHTO T 59), %	50 min.
Sieve Test, No. 20 (850 μm), (AASHTO T 59), %	0.3 max.
Tests on Residue from Evaporat	ion
Penetration at 77 °F (25 °C), 100 g, 5 sec,	
(AASHTO T 49), dmm	40 max.
Softening Point, (AASHTO T 53), °F (°C)	135 (57) min.
Ash Content, (AASHTO T 111), % 1/	1 max.

<sup>1/</sup> The Solubility in Trichloroethylene test according to AASHTO T 44 may be run in lieu of Ash Content and shall meet a minimum of 97.5 percent

The different grades are, in general, used for the following.

Grade	Use
SS-1, SS-1h, RS-1, RS-2, CSS-1, CRS-1, CRS-2, CSS-1h, HFE-90, SS-1hP, CSS-1hP, NTEA (formerly SS-1vh)	Tack Coat
PEP	Prime Coat
RS-2, HFE-90, HFE-150, HFE-300, CRS-2P (formerly CRSP), HFRS-2P (formerly HFP), CRS-2, HFRS-2	Bituminous Surface Treatment
CQS-1hP (formerly CSS-1h Latex Modified)	Micro-Surfacing Slurry Sealing Cape Seal"

## **EQUIPMENT PARKING AND STORAGE (BDE)**

Effective: November 1, 2017

Replace the first paragraph of Article 701.11 of the Standard Specifications with the following.

"701.11 Equipment Parking and Storage. During working hours, all vehicles and/or nonoperating equipment which are parked, two hours or less, shall be parked at least 8 ft (2.5 m) from the open traffic lane. For other periods of time during working and for all nonworking hours, all vehicles, materials, and equipment shall be parked or stored as follows.

- (a) When the project has adequate right-of-way, vehicles, materials, and equipment shall be located a minimum of 30 ft (9 m) from the pavement.
- (b) When adequate right-of-way does not exist, vehicles, materials, and equipment shall be located a minimum of 15 ft (4.5 m) from the edge of any pavement open to traffic.
- (c) Behind temporary concrete barrier, vehicles, materials, and equipment shall be located a minimum of 24 in. (600 mm) behind free standing barrier or a minimum of 6 in. (150 mm) behind barrier that is either pinned or restrained according to Article 704.04. The 24 in. or 6 in. measurement shall be from the base of the non-traffic side of the barrier.
- (d) Behind other man-made or natural barriers meeting the approval of the Engineer."

#### GEOTECHNICAL FABRIC FOR PIPE UNDERDRAINS AND FRENCH DRAINS (BDE)

Effective: November 1, 2019

Revise Article 1080.01(a) of the Standard Specifications to read:

- "(a) Fabric Materials. Fabric materials shall be as follows.
  - (1) Knitted Fabric. Knitted fabric envelope shall be Type A according to ASTM D 6707 and be a continuous one piece knitted polymeric material that fits over the pipe underdrain like a sleeve. It shall be free from any chemical treatment or coating that might significantly reduce porosity and permittivity.
  - (2) Woven or Nonwoven Fabric. The fabric shall be Class 3 according to AASHTO M 288 and consist of woven yarns or nonwoven filaments of polyolefins or polyesters. Woven slit film geotextiles (i.e. geotextiles made from yarns of a flat, tape like character) shall not be permitted. The yarns or filaments shall be dimensionally stable (i.e. maintain their relative position with respect to each other) and resistant to delamination. The yarns or filaments shall be free from any chemical treatment or coating that might significantly reduce porosity and permittivity.
  - (3) Physical Properties. The physical properties for knitted, woven, and nonwoven fabrics shall be according to the following.

PHYSICAL PROPERTIES				
	Knitted 1/	Nonwoven 2/		
Grab Strength, lb (N) ASTM D 4632 3/		180 (800) min.	112 (500) min.	
Elongation/Grab Strain, % ASTM D 4632 3/		49 max.	50 min.	
Trapezoidal Tear Strength, lb (N) ASTM D 4533 3/		67 (300) min.	40 (180) min.	
Puncture Strength, lb (N) ASTM D 6241 3/	180 (800) min.	370 (1650) min.	222 (990) min.	
Apparent Opening Size, Sieve No. (mm) ASTM D 4751 4/	30 (0.60) max. 40 (0.425) max.		40 (0.425) max.	
Permittivity, sec <sup>-1</sup> ASTM D 4491	1.0 min.			
Ultraviolet Stability, % retained strength after 500 hours of exposure ASTM D 4355		50 min.	50 min.	

- 1/ Manufacturer's certification to meet test requirements.
- 2/ NTPEP results or manufacturer's certification to meet test requirements.

- 3/ Values represent the minimum average roll value (MARV) in the weaker principle direction [machine direction (MD) or cross-machine direction (XD)].
- 4/ Values represent the maximum average roll value."

Revise Article 1080.05 of the Standard Specifications to read:

"1080.05 Geotechnical Fabric for French Drains and Pipe Underdrains, Type 2. Geotechnical fabric for french drains and pipe underdrains, Type 2 shall be Class 3 according to AASHTO M 288 and consist of woven yarns or nonwoven filaments of polyolefins or polyesters. Woven slit film geotextiles (i.e. geotextiles made from yarns of a flat, tape-like character) shall not be permitted. The yarns or filaments shall be dimensionally stable (i.e. maintain their relative position with respect to each other) and resistant to delamination. The yarns or filaments shall be free from any chemical treatment or coating that might significantly reduce porosity and permittivity.

The fabric shall be according to the following.

PHYSICAL PROPERTIES 1/				
	Woven Nonwov			
Grab Strength, lb (N) ASTM D 4632 <sup>2/</sup>	180 (800) min. 112 (500) r			
Elongation/Grab Strain, % ASTM D 4632 2/	49 max. 50 min.			
Trapezoidal Tear Strength, lb (N) ASTM D 4533 2/	67 (300) min. 40 (180) m			
Puncture Strength, lb (N) ASTM D 6241 <sup>2/</sup>	370 (1650) min. 222 (990) r			
Apparent Opening Size, Sieve No. (mm) ASTM D 4751 3/	60 (0.25) max.			
Permittivity, sec <sup>-1</sup> ASTM D 4491	0.2 min.			
Ultraviolet Stability % retained strength after 500 hours of exposure - ASTM D 4355	50 min.			

- 1/ NTPEP results to meet test requirements. Manufacturer shall have public release status and current reports on laboratory results in Test Data of NTPEP's DataMine.
- 2/ Values represent the minimum average roll value (MARV) in the weaker principle direction [machine direction (MD) or cross-machine direction (XD)].
- 3/ Values represent the maximum average roll value."

# **MOBILIZATION (BDE)**

Effective: April 1, 2020

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

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

## PORTLAND CEMENT CONCRETE (BDE)

Effective: November 1, 2017

Revise the Air Content % of Class PP Concrete in Table 1 Classes of Concrete and Mix Design Criteria in Article 1020.04 of the Standard Specifications to read:

"TABLE 1. CLASSES OF CONCRETE AND MIX DESIGN CRITERIA			
Class of Conc.	Use	Air Content %	
PP	Pavement Patching Bridge Deck Patching (10)		
	PP-1 PP-2 PP-3 PP-4 PP-5	4.0 - 8.0"	

Revise Note (4) at the end of Table 1 Classes of Concrete and Mix Design Criteria in Article 1020.04 of the Standard Specifications to read:

"(4) For all classes of concrete, the maximum slump may be increased to 7 in (175 mm) when a high range water-reducing admixture is used. For Class SC, the maximum slump may be increased to 8 in. (200 mm). For Class PS, the maximum slump may be increased to 8 1/2 in. (215 mm) if the high range water-reducing admixture is the polycarboxylate type."

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

Effective: July 1, 2020

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

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

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

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

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

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

#### REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE)

Effective: January 1, 2019 Revised: January 1, 2020

Revise Section 669 of the Standard Specifications to read:

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

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

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

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

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

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

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

- Qualification for each individual performing regulated substances monitoring shall require a minimum of one-year of experience in similar activities as those required for the project.
- (b) Underground Storage Tank Removal. Qualification for underground storage tank (UST) removal work shall require licensing and certification with the Office of the State Fire Marshall (OSFM) and possession of all permits required to perform the work. A copy of the permit shall be provided to the Engineer prior to tank removal.

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

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

#### **CONSTRUCTION REQUIREMENTS**

- **Regulated Substances Monitoring.** Regulated substances monitoring includes environmental observation and field screening during regulated substances management activities at the contract specific work areas. As part of the regulated substances monitoring, the monitoring personnel shall perform and document the applicable duties listed on form BDE 2732 "Regulated Substances Monitoring Daily Record (RSMDR)".
  - (a) Environmental Observation. Prior to beginning excavation, the Contractor shall mark the limits of the contract specific work areas. Once work begins, the monitoring personnel shall be present on-site continuously during the excavation and loading of material.
  - (b) Field Screening. Field screening shall be performed during the excavation and loading of material from the contract specific work areas, except for material classified according to Article 669.05(b)(1) or 669.05(c) where field screening is not required.

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

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

- (a) Soil Analytical Results Exceed Most Stringent MAC. When the soil analytical results indicate detected levels exceed the most stringent maximum allowable concentration (MAC) for chemical constituents in soil established pursuant to Subpart F of 35 III. Adm. Code 1100.605, the soil shall be managed as follows:
  - (1) When analytical results indicate inorganic chemical constituents exceed the most stringent MAC, but still considered within area background levels by the Engineer, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable. If the soils cannot be utilized within the right-of-way, they shall be managed and disposed of at a landfill as a non-special waste.
  - (2) When analytical results indicate inorganic chemical constituents exceed the most stringent MAC but do not exceed the MAC for a Metropolitan Statistical Area (MSA) County identified in 35 III. Admin. Code 742 Appendix A. Table G, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of at a clean construction and demolition debris (CCDD) facility or an uncontaminated soil fill operation (USFO) within an MSA County provided the pH of the soil is within the range of 6.25 9.0, inclusive.
  - (3) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, or the MAC within the Chicago corporate limits, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site at a CCDD facility or an USFO within an MSA County excluding Chicago or within the Chicago corporate limits provided the pH of the soil is within the range of 6.25 9.0, inclusive.
  - (4) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site at a CCDD facility or an USFO within an MSA County excluding Chicago provided the pH of the soil is within the range of 6.25 9.0, inclusive.
  - (5) When the Engineer determines soil cannot be managed according to Articles 669.05(a)(1) through (a)(4) above and the materials do not contain special waste or hazardous waste, as determined by the Engineer, the soil shall be managed and disposed of at a landfill as a non-special waste.
  - (6) When analytical results indicate soil is hazardous by characteristic or listing pursuant to 35 III. Admin. Code 721, contains radiological constituents, or the Engineer otherwise determines the soil cannot be managed according to Articles 669.05(a)(1)

through (a)(5) above, the soil shall be managed and disposed of off-site as a special waste or hazardous waste as applicable.

- (b) Soil Analytical Results Do Not Exceed Most Stringent MAC. When the soil analytical results indicate that detected levels do not exceed the most stringent MAC, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site according to Article 202.03. However, the excavated soil cannot be taken to a CCDD facility or an USFO for any of the following reasons.
  - (1) The pH of the soil is less than 6.25 or greater than 9.0.
  - (2) The soil exhibited PID or FID readings in excess of background levels.
- (c) Soil Analytical Results Exceed Most Stringent MAC but Do Not Exceed Tiered Approach to Corrective Action Objectives (TACO) Residential. When the soil analytical results indicate that detected levels exceed the most stringent MAC but do not exceed TACO Tier 1 Soil Remediation Objectives for Residential Properties pursuant to 35 III. Admin. Code 742 Appendix B Table A, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site according to Article 202.03. However, the excavated soil cannot be taken to a CCDD facility or an USFO.
- (d) Groundwater. When groundwater analytical results indicate the detected levels are above Appendix B, Table E of 35 III. Admin. Code 742, the most stringent Tier 1 Groundwater Remediation Objectives for Groundwater Component of the Groundwater Ingestion Route for Class 1 groundwater, the groundwater shall be managed off-site as a special waste or hazardous waste as applicable. Special waste groundwater shall be containerized and trucked to an off-site treatment facility, or may be discharged to a sanitary sewer or combined sewer when permitted by the local sewer authority. Groundwater discharged to a sanitary sewer or combined sewer shall be pre-treated to remove particulates and measured with a calibrated flow meter to comply with applicable discharge limits. A copy of the permit shall be provided to the Engineer prior to discharging groundwater to the sanitary sewer or combined sewer.

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

One backfill plug shall be placed down gradient to the area of groundwater contamination. Backfill plugs shall be installed at intervals not to exceed 50 ft (15 m). Backfill plugs are to be 4 ft (1.2 m) long, measured parallel to the trench, full trench width and depth. Backfill plugs shall not have any fine aggregate bedding or backfill, but shall be entirely cohesive

soil or any class of concrete. The Contractor shall provide test data that the material has a permeability of less than 10<sup>-7</sup> cm/sec according to ASTM D 5084, Method A or per another test method approved by the Engineer.

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

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

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

The Contractor shall provide the Engineer with all transport-related documentation within two days of transport or receipt of said document(s). For management of special or hazardous waste, the Contractor shall provide the Engineer with documentation that the Contractor is operating with a valid Illinois special waste transporter permit at least two weeks before transporting the first load of contaminated material.

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

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

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

- **669.06 Non-Special Waste Certification.** An authorized representative of the Department shall sign and date all non-special waste certifications. The Contractor shall be responsible for providing the Engineer with the required information that will allow the Engineer to certify the waste is not a special waste.
  - (a) Definition. A waste is considered a non-special waste as long as it is not:
    - (1) a potentially infectious medical waste;
    - (2) a hazardous waste as defined in 35 III. Admin. Code 721;
    - (3) an industrial process waste or pollution control waste that contains liquids, as determined using the paint filter test set forth in subdivision (3)(A) of subsection (m) of 35 III. Admin. Code 811.107;
    - (4) a regulated asbestos-containing waste material, as defined under the National Emission Standards for Hazardous Air Pollutants in 40 CFR Part 61.141;
    - (5) a material containing polychlorinated biphenyls (PCB's) regulated pursuant to 40 CFR Part 761;
    - (6) a material subject to the waste analysis and recordkeeping requirements of 35 III. Admin. Code 728.107 under land disposal restrictions of 35 III. Admin. Code 728;
    - (7) a waste material generated by processing recyclable metals by shredding and required to be managed as a special waste under Section 22.29 of the Environmental Protection Act; or
    - (8) an empty portable device or container in which a special or hazardous waste has been stored, transported, treated, disposed of, or otherwise handled.
  - (b) Certification Information. All information used to determine the waste is not a special waste shall be attached to the certification. The information shall include but not be limited to:
    - (1) the means by which the generator has determined the waste is not a hazardous waste;
    - (2) the means by which the generator has determined the waste is not a liquid;
    - (3) if the waste undergoes testing, the analytic results obtained from testing, signed and dated by the person responsible for completing the analysis;
    - (4) if the waste does not undergo testing, an explanation as to why no testing is needed;

- (5) a description of the process generating the waste; and
- (6) relevant material safety data sheets.

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

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

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

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

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

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

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

Act (TSCA), and other applicable State or local regulations and requirements, including 35 III. Admin. Code Part 722, Standards Applicable to Generators of Hazardous Waste.

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

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

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

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

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

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

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

In the event the Department is deemed not to be the "owner" or "operator" of the UST, the OSFM removal permit shall reflect who was the past "owner" or "operator" of the UST. If the "owner" or "operator" cannot be determined from past UST registration documents from OSFM, then the OSFM removal permit will state the "owner" or "operator" of the UST is the Department. The Department's Office of Chief Counsel (OCC) will review all UST removal permits prior to submitting any removal permit to the OSFM. If the Department is not the "owner" or "operator" of the UST then it will not register the UST or pay any registration fee.

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

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

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

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

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

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

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

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

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

- **669.09 Regulated Substances Final Construction Report.** Not later than 90 days after completing this work, the Contractor shall submit a "Regulated Substances Final Construction Report (RSFCR)" to the Engineer using form BDE 2733 and required attachments. The form shall be signed by an Illinois licensed Professional Engineer or Professional Geologist.
- **669.10 Method of Measurement.** Non-special waste, special waste, and hazardous waste soil will be measured for payment according to Article 202.07(b) when performing earth excavation, Article 502.12(b) when excavating for structures, or by computing the volume of the trench using the maximum trench width permitted and the actual depth of the trench.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

# SILT FENCE, INLET FILTERS, GROUND STABILIZATION AND RIPRAP FILTER FABRIC (BDE)

Effective: November 1, 2019

Revised: April 1, 2020

to read:

Revise Article 280.02(m) and add Article 280.02(n) so the Standard Specifications read:

- Revise the last sentence of the first paragraph in Article 280.04(c) of the Standard Specifications

"The protection shall be constructed with hay or straw bales, silt filter fence, above grade inlet filters (fitted and non-fitted), or inlet filters.

Revise the first sentence of the second paragraph in Article 280.04(c) of the Standard Specifications to read:

"When above grade inlet filters (fitted and non-fitted) are specified, they shall be of sufficient size to completely span and enclose the inlet structure."

Revise Article 1080.02 of the Standard Specifications to read:

"1080.02 Geotextile Fabric. The fabric for silt filter fence shall consist of woven fabric meeting the requirements of AASHTO M 288 for unsupported silt fence.

The fabric for ground stabilization shall consist of woven yarns or nonwoven filaments of polyolefins or polyesters. Woven fabrics shall be Class 2 and nonwoven fabrics shall be Class 1 according to AASHTO M 288.

The physical properties for silt fence and ground stabilization fabrics shall be according to the following.

PHYSICAL PROPERTIES					
	Silt Fence Woven 1/  Silt Fence Woven 1/  Woven 2/  Ground Stabilization Woven 2/  Nonwove				
Grab Strength, lb (N) <sup>3/</sup> ASTM D 4632	123 (550) MD 101 (450) XD	247 (1100) min. <sup>4/</sup>	202 (900) min. <sup>4/</sup>		
Elongation/Grab Strain, % ASTM D 4632 4/	49 max.	49 max.	50 min.		
Trapezoidal Tear Strength, lb (N) ASTM D 4533 4/		90 (400) min.	79 (350) min.		

Puncture Strength, lb (N) ASTM D 6241 4/		494 (2200) min.	433 (1925) min.
Apparent Opening Size, Sieve No. (mm) ASTM D 4751 5/	30 (0.60) max.	40 (0.43) max.	40 (0.43) max.
Permittivity, sec <sup>-1</sup> ASTM D 4491	0.05 min.		
Ultraviolet Stability, % retained strength after 500 hours of exposure ASTM D 4355	70 min. 50 min.		50 min.

- 1/ NTPEP results or manufacturer's certification to meet test requirements.
- 2/ NTPEP results to meet test requirements. Manufacturer shall have public release status and current reports on laboratory results in Test Data of NTPEP's DataMine.
- 3/ MD = Machine direction. XD = Cross-machine direction.
- 4/ Values represent the minimum average roll value (MARV) in the weaker principle direction, MD or XD.
- 5/ Values represent the maximum average roll value."

Revise Article 1080.03 of the Standard Specifications to read:

"1080.03 Filter Fabric. The filter fabric shall consist of woven yarns or nonwoven filaments of polyolefins or polyesters. Woven fabrics shall be Class 3 for riprap gradations RR 4 and RR 5, and Class 2 for RR 6 and RR 7 according to AASHTO M 288. Woven slit film geotextiles (i.e. geotextiles made from yarns of a flat, tape-like character) shall not be permitted. Nonwoven fabrics shall be Class 2 for riprap gradations RR 4 and RR 5, and Class 1 for RR 6 and RR 7 according to AASHTO M 288. After forming, the fabric shall be processed so that the yarns or filaments retain their relative positions with respect to each other. The fabric shall be new and undamaged.

The filter fabric shall be manufactured in widths of not less than 6 ft (2 m). Sheets of fabric may be sewn together with thread of a material meeting the chemical requirements given for the yarns or filaments to form fabric widths as required. The sheets of filter fabric shall be sewn together at the point of manufacture or another approved location.

The filter fabric shall be according to the following.

PHYSICAL PROPERTIES 1/					
	Gradation Nos. Gradation Nos.			on Nos.	
	RR 4	& RR 5	RR 6 & RR 7		
	Woven	Nonwoven	Woven	Nonwoven	
Grab Strength, lb (N)	180 (800)	157 (700)	247 (1100)	202 (900)	
ASTM D 4632 2/	min.	min.	min.	min.	
Elongation/Grab Strain, % ASTM D 4632 2/	49 max. 50 min.		49 max.	50 min.	
Trapezoidal Tear Strength, lb (N)	67 (300) 56 (250) 90 (400)			79 (350)	
ASTM D 4533 2/	min.	min.	min.	min.	
Puncture Strength, lb (N)	370 (1650) 309 (1375) 494 (2200) 433 (1				
ASTM D 6241 2/	min. min. min. min.				
Ultraviolet Stability, % retained strength after 500 hours of exposure - ASTM D 4355	50 min.				

- 1/ NTPEP results to meet test requirements. Manufacturer shall have public release status and current reports on laboratory results in Test Data of NTPEP's DataMine.
- 2/ Values represent the minimum average roll value (MARV) in the weaker principle direction [machine direction (MD) or cross-machine direction (XD)].

As determined by the Engineer, the filter fabric shall meet the requirements noted in the following after an onsite investigation of the soil to be protected.

Soil by Weight (Mass) Passing	Apparent Opening Size,	Permittivity, sec <sup>-1</sup>
the No. 200 sieve (75 µm), %	Sieve No. (mm) - ASTM D 4751 <sup>1/</sup>	ASTM D 4491
49 max.	60 (0.25) max.	0.2 min.
50 min.	70 (0.22) max.	0.1 min.

1/ Values represent the maximum average roll value."

Revise Article 1081.15(h)(3)a of the Standard Specifications to read:

"a. Inner Filter Fabric Bag. The inner filter fabric bag shall be constructed of woven yarns or nonwoven filaments made of polyolefins or polyesters with a minimum silt and debris capacity of 2.0 cu ft (0.06 cu m). Woven fabric shall be Class 3 and nonwoven fabric shall be Class 2 according to AASHTO M 288. The fabric bag shall be according to the following.

PHYSICAL PROPERTIES				
	Woven	Nonwoven		
Grab Strength, lb (N) ASTM D 4632 1/	180 (800) min.	157 (700) min.		
Elongation/Grab Strain, % ASTM D 4632 1/	49 max.	50 min.		
Trapezoidal Tear Strength, lb (N) ASTM D 4533 1/	67 (300) min.	56 (250) min.		
Puncture Strength, lb (N) ASTM D 6241 1/	370 (1650) min.	309 (1375) min.		
Apparent Opening Size, Sieve No. (mm) ASTM D 4751 2/	60 (0.25) max.			
Permittivity, sec <sup>-1</sup> ASTM D 4491	2.0 min.			
Ultraviolet Stability, % retained strength after 500 hours of exposure – ASTM D 4355	70 min.			

- 1/ Values represent the minimum average roll value (MARV) in the weaker principle direction [machine direction (MD) or cross-machine direction (XD)].
- 2/ Values represent the maximum average roll value."

Revise Article 1081.15(i)(1) of the Standard Specifications to read:

- "(i) Urethane Foam/Geotextile. Urethane foam/geotextile shall be triangular shaped having a minimum height of 10 in. (250 mm) in the center with equal sides and a minimum 20 in. (500 mm) base. The triangular shaped inner material shall be a low density urethane foam. The outer geotextile fabric cover shall consist of woven yarns or nonwoven filaments made of polyolefins or polyesters placed around the inner material and shall extend beyond both sides of the triangle a minimum of 18 in. (450 mm). Woven filter fabric shall be Class 3 and nonwoven filter fabric shall be Class 2 according to AASHTO M 288.
  - (1) The geotextile shall meet the following properties.

PHYSICAL PROPERTIES			
	Woven	Nonwoven	
Grab Strength, lb (N) ASTM D 4632 1/	180 (800) min.	157 (700) min.	
Elongation/Grab Strain, % ASTM D 4632 1/	49 max.	50 min.	
Trapezoidal Tear Strength, lb (N) ASTM D 4533 1/	67 (300) min.	56 (250) min.	
Puncture Strength, lb (N) ASTM D 6241 1/	370 (1650) min.	309 (1375) min.	

Apparent Opening Size, Sieve No. (mm) ASTM D 4751 2/	30 (0.60) max.
Permittivity, sec <sup>-1</sup> ASTM D 4491	2.0 min.
Ultraviolet Stability, % retained strength after 500 hours of exposure – ASTM D 4355	70 min.

- 1/ Values represent the minimum average roll value (MARV) in the weaker principle direction [machine direction (MD) or cross-machine direction (XD)].
- 2/ Values represent the maximum average roll value."

Add the following to Article 1081.15(i) of the Standard Specifications.

"(3) Certification. The manufacturer shall furnish a certificate with each shipment of urethane foam/geotextile assemblies stating the amount of product furnished and that the material complies with these requirements."

Revise the title and first sentence of Article 1081.15(j) of the Standards Specifications to read:

"(j) Above Grade Inlet Filters (Fitted). Above grade inlet filters (fitted) shall consist of a rigid polyethylene frame covered with a fitted geotextile filter fabric."

Revise Article 1081.15(j)(2) of the Standard Specifications to read:

(2) Fitted Geotextile Filter Fabric. The fitted geotextile filter fabric shall consist of woven yarns or nonwoven filaments made of polyolefins or polyesters. Woven filter fabric shall be Class 3 and nonwoven filter fabric shall be Class 2 according to AASHTO M 288. The filter shall be fabricated to provide a direct fit to the frame. The top of the filter shall integrate a coarse screen with a minimum apparent opening size of 1/2 in. (13 mm) to allow large volumes of water to pass through in the event of heavy flows. The filter shall have integrated anti-buoyancy pockets capable of holding a minimum of 3.0 cu ft (0.08 cu m) of stabilization material. Each filter shall have a label with the following information sewn to or otherwise permanently adhered to the outside: manufacturer's name, product name, and lot, model, or serial number. The fitted geotextile filter fabric shall be according to the table in Article 1081.15(h)(3)a above."

Add Article 1081.15(k) to the Standard Specifications to read:

- "(k) Above Grade Inlet Filters (Non-Fitted). Above grade inlet filters (non-fitted) shall consist of a geotextile fabric surrounding a metal frame. The frame shall consist of either a) a circular cage formed of welded wire mesh, or b) a collapsible aluminum frame, as described below.
  - (1) Frame Construction.

- a) Welded Wire Mesh Frame. The frame shall consist of 6 in. x 6 in. (150 mm x 150 mm) welded wire mesh formed of #10 gauge (3.42 mm) steel conforming to ASTM A 185. The mesh shall be 30 in. (750 mm) tall and formed into a 42 in. (1.05 m) minimum diameter cylinder.
- b) Collapsible Aluminum Frame. The collapsible aluminum frame shall consist of grade 6036 aluminum. The frame shall have anchor lugs that attach it to the inlet grate, which shall resist movement from water and debris. The collapsible joints of the frame shall have a locking device to secure the vertical members in place, which shall prevent the frame from collapsing while under load from water and debris.
- (2) Geotextile Fabric. The geotextile fabric shall consist of woven yarns or nonwoven filaments made of polyolefins or polyesters. The woven filter fabric shall be a Class 3 and the nonwoven filter fabric shall be a Class 2 according to AASHTO M 288. The geotextile fabric shall be according to the table in Article 1081.15(h)(3)a above.
- (3) Geotechnical Fabric Attachment to the Frame.
  - a) Welded Wire Mesh Frame. The woven or nonwoven geotextile fabric shall be wrapped 3 in. (75 mm) over the top member of a 6 in. x 6 in. (150 mm x 150 mm) welded wire mesh frame and secured with fastening rings constructed of wire conforming to ASTM A 641, A 809, A 370, and A 938 at 6 in. (150 mm) on center. The fastening rings shall penetrate both layers of geotextile and securely close around the steel mesh. The geotextile shall be secured to the sides of the welded wire mesh with fastening rings at a spacing of 1 per sq ft (11 per sq m) and securely close around a steel member.
  - b) Collapsible Aluminum Frame. The woven or nonwoven fabric shall be secured to the aluminum frame along the top and bottom of the frame perimeter with strips of aluminum secured to the perimeter member, such that the anchoring system provides a uniformly distributed stress throughout the geotechnical fabric.
- (4) Certification. The manufacturer shall furnish a certificate with each shipment of above grade inlet filter assemblies stating the amount of product furnished and that the material complies with these requirements."

## 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%"

## TRAFFIC CONTROL DEVICES - CONES (BDE)

Effective: January 1, 2019

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

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

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

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

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

## WARM MIX ASPHALT (BDE)

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

<u>Description.</u> This work shall consist of designing, producing and constructing Warm Mix Asphalt (WMA) in lieu of Hot Mix Asphalt (HMA) at the Contractor's option. Work shall be according to Sections 406, 407, 408, 1030, and 1102 of the Standard Specifications, except as modified herein. In addition, any references to HMA in the Standard Specifications, or the special provisions shall be construed to include WMA.

WMA is an asphalt mixture which can be produced at temperatures lower than allowed for HMA utilizing approved WMA technologies. WMA technologies are defined as the use of additives or processes which allow a reduction in the temperatures at which HMA mixes are produced and placed. WMA is produced by the use of additives, a water foaming process, or combination of both. Additives include minerals, chemicals or organics incorporated into the asphalt binder stream in a dedicated delivery system. The process of foaming injects water into the asphalt binder stream, just prior to incorporation of the asphalt binder with the aggregate.

Approved WMA technologies may also be used in HMA provided all the requirements specified herein, with the exception of temperature, are met. However, asphalt mixtures produced at temperatures in excess of 275 °F (135 °C) will not be considered WMA when determining the grade reduction of the virgin asphalt binder grade.

### Equipment.

Revise the first paragraph of Article 1102.01 of the Standard Specifications to read:

"1102.01 Hot-Mix Asphalt Plant. The hot-mix asphalt (HMA) plant shall be the batch-type, continuous-type, or dryer drum plant. The plants shall be evaluated for prequalification rating and approval to produce HMA according to the current Bureau of Materials and Physical Research Policy Memorandum, "Approval of Hot-Mix Asphalt Plants and Equipment". Once approved, the Contractor shall notify the Bureau of Materials and Physical Research to obtain approval of all plant modifications. The plants shall not be used to produce mixtures concurrently for more than one project or for private work unless permission is granted in writing by the Engineer. The plant units shall be so designed, coordinated and operated that they will function properly and produce HMA having uniform temperatures and compositions within the tolerances specified. The plant units shall meet the following requirements."

Add the following to Article 1102.01(a) of the Standard Specifications.

- "(11) Equipment for Warm Mix Technologies.
  - a. Foaming. Metering equipment for foamed asphalt shall have an accuracy of ± 2 percent of the actual water metered. The foaming control system shall be electronically interfaced with the asphalt binder meter.

b. Additives. Additives shall be introduced into the plant according to the supplier's recommendations and shall be approved by the Engineer. The system for introducing the WMA additive shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes."

## Mix Design Verification.

Add the following to Article 1030.04 of the Standard Specifications.

- "(e) Warm Mix Technologies.
  - (1) Foaming. WMA mix design verification will not be required when foaming technology is used alone (without WMA additives). However, the foaming technology shall only be used on HMA designs previously approved by the Department.
  - (2) Additives. WMA mix designs utilizing additives shall be submitted to the Engineer for mix design verification."

## Construction Requirements.

Revise the second paragraph of Article 406.06(b)(1) of the Standard Specifications to read:

"The HMA shall be delivered at a temperature of 250 to 350 °F (120 to 175 °C). WMA shall be delivered at a minimum temperature of 215 °F (102 °C)."

## Basis of Payment.

This work will be paid at the contract unit price bid for the HMA pay items involved. Anti-strip will not be paid for separately, but shall be considered as included in the cost of the work.

## WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012 Revised: April 2, 2015

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

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

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

## WORK ZONE TRAFFIC CONTROL DEVICES (BDE)

Effective: March 2, 2020

Add the following to Article 701.03 of the Standard Specifications:

"(q) Temporary Sign Supports ......1106.02"

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

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

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

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

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

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

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

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

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions (impact

attenuators), truck mounted attenuators, and other devices not meeting the definitions of Category 1 or 2. Category 3 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 3 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2029. Category 3 devices shall be crash tested for Test Level 3 or the test level specified.

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

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

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

- "(g) Truck Mounted/Trailer Mounted Attenuators. The attenuator shall be approved for use at Test Level 3. Test Level 2 may be used for normal posted speeds less than or equal to 45 mph.
- (k) Temporary Water Filled Barrier. The water filled barrier shall be a lightweight plastic shell designed to accept water ballast and be on the Department's qualified product list.
  - Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings.
- (I) Movable Traffic Barrier. The movable traffic barrier shall be on the Department's qualified product list.

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

## WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within  $\ 50$  working days.

# REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

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

#### **ATTACHMENTS**

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

### I. GENERAL

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

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

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

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

- Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor

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

#### II. NONDISCRIMINATION

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

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

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

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

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

- 1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:

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

for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

- 2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

### 6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- **7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.
- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

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

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
  - a. The records kept by the contractor shall document the following:
- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
  - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
  - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391.

The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-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 \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or 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). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

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

#### 1. Minimum wages

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

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each

classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH–1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
  - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
  - (ii) The classification is utilized in the area by the construction industry; and  $% \left( 1\right) =\left( 1\right) \left( 1\right)$
  - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
  - (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a

separate account assets for the meeting of obligations under the plan or program.

#### 2. Withholding

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

#### 3. Payrolls and basic records

- a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
  - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
  - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
  - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
  - (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
  - (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

## 4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

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

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

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

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

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

b. Trainees (programs of the USDOL).

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

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

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

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

- c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- d. Apprentices and Trainees (programs of the U.S. DOT).

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

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- 7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- **8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- 9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

#### 10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

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

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

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

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

- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.
- **4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

### VI. SUBLETTING OR ASSIGNING THE CONTRACT

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

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.
- 5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

#### **VII. SAFETY: ACCIDENT PREVENTION**

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

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<a href="https://www.epls.gov/">https://www.epls.gov/</a>), which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

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

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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) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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

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

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of

Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<a href="https://www.epls.gov/">https://www.epls.gov/</a>), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

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

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

# XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

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

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of

Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

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

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

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
- a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.
- 5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.
- 6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

## Contract Provision - Cargo Preference Requirements

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

- "(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.
- (2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
- (3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract."

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

# MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision shall be the minimum paid by contractors and subcontractors to laborers and mechanics.