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Letting January 17, 2020

Notice to Bidders, Specifications and Proposal



Contract No. 97710 ST. CLAIR County Section 17-00038-00-BT (Swansea) Route FAU 9293 (Boul Avenue) Project LI09-139 () District 8 Construction Funds

Prepared by

Illinois Department of Transportation

NOTICE TO BIDDERS

- 1. TIME AND PLACE OF OPENING BIDS. Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 10:00 a.m. January 17, 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. 97710 ST. CLAIR County Section 17-00038-00-BT (Swansea) Project LI09-139 () Route FAU 9293 (Boul Avenue) District 8 Construction Funds

Construction of a multi-use path on Boul Avenue from west of IL 159 to Morgan Street in Swansea.

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

By Order of the Illinois Department of Transportation

Omer Osman, 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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35		Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	
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BDE SPECIAL PROVISIONS

The following special provisions indicated by an "X" are applicable to this contract. An * indicates a new or revised special provision for the letting.

	<u>File</u> Name	<u>Pg.</u>		Special Provision Title	Effective	Revised
	80099			Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2014
	80274	60	Χ	Aggregate Subgrade Improvement	April 1, 2012	April 1, 2016
	80192	63	Х	Automated Flagger Assistance Device	Jan. 1, 2008	
	80173			Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
*	80246			Bituminous Surface Treatment with Fog Seal	Jan. 1, 2020	
	80241			Bridge Demolition Debris	July 1, 2009	
	50261			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	April 1, 2010
	50531			Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
*	80425			Cape Seal	Jan. 1, 2020	
	80384	65	Х	Compensable Delay Costs	June 2, 2017	April 1, 2019
	80198			Completion Date (via calendar days)	April 1, 2008	
	80199			Completion Date (via calendar days) Plus Working Days	April 1, 2008	
	80293			Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	July 1, 2016
	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	69	Х	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
	80387			Contrast Preformed Plastic Pavement Marking	Nov. 1, 2017	
	80029	72	Х	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Mar. 2, 2019
	80402	82	Х	Disposal Fees	Nov. 1, 2018	
	80378			Dowel Bar Inserter	Jan. 1, 2017	Jan. 1, 2018
	80405			Elastomeric Bearings	Jan. 1, 2019	
*	80421	0.4		Electric Service Installation	Jan. 1, 2020	
4	80415	84	X	Emulsified Asphalts	Aug. 1, 2019	
^	80423	0.7	\ \ \	Engineer's Field Office Laboratory	Jan. 1, 2020	
	80388	87	Х	Equipment Parking and Storage	Nov. 1, 2017	A 4 0047
	80229			Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
	80417			Geotechnical Fabric for Pipe Underdrains and French Drains	Nov. 1, 2019	
	80420			Geotextile Retaining Walls	Nov. 1, 2019	Nov. 1, 2017
*	80304			Grooving for Recessed Pavement Markings	Nov. 1, 2012	Nov. 1, 2017
	80422 80416	88		High Tension Cable Median Barrier Reflectors	Jan. 1, 2020	Nov. 1, 2010
	80398	00	Х	Hot-Mix Asphalt – Binder and Surface Course	July 2, 2019	Nov. 1, 2019
*	80406			Hot-Mix Asphalt – Longitudinal Joint Sealant Hot-Mix Asphalt – Mixture Design Verification and Production	Aug. 1, 2018 Jan. 1, 2019	Nov. 1, 2019 Jan. 2, 2020
	80347			(Modified for I-FIT Data Collection)	Nov. 1, 2019	July 2, 2019
				Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits – Jobsite Sampling	,	•
	80383 80411			Hot-Mix Asphalt – Quality Control for Performance	April 1, 2017	July 2, 2019
		05		Luminaires, LED Manhalas, Valva Vaulta, and Elet Slah Tona	April 1, 2019	Mar. 1, 2019
	80393	95	X	Manholes, Valve Vaults, and Flat Slab Tops Material Transfer Device	Jan. 1, 2018	•
	80045				June 15, 1999	Aug. 1, 2014
*	80418			Mechanically Stabilized Earth Retaining Walls Micro-Surfacing and Slurry Sealing	Nov. 1, 2019	
	80424 80165			Moisture Cured Urethane Paint System	Jan. 1, 2020 Nov. 1, 2006	Jan. 1, 2010
	80412			Obstruction Warning Luminaires, LED	Aug. 1, 2006	Jan. 1, 2010
	80349			Pavement Marking Blackout Tape	Nov. 1, 2014	April 1, 2016
	80371			Pavement Marking Blackout Tape	July 1, 2016	April 1, 2010
	80389	97	Х	Portland Cement Concrete	Nov. 1, 2017	
		31				Na., 4, 0040
	80359			Portland Cement Concrete Bridge Deck Curing	April 1, 2015	Nov. 1, 2019

	<u>File</u> Name	<u>Pg.</u>		Special Provision Title	Effective	Revised
	80300			Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	April 1, 2016
	80328	98	Х	Progress Payments	Nov. 2, 2013	
	34261	99	Х	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
	80157			Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	,
*	80306	101	Х	Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	Jan. 2, 2020
*	80407	111	Х	Removal and Disposal of Regulated Substances	Jan. 1, 2019	Jan. 1, 2020
	80419	122	Χ	Silt Fence, Ground Stabilization and Riprap Filter Fabric	Nov. 1, 2019	
	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	125	Х	Subcontractor and DBE Payment Reporting	April 2, 2018	
	80391	80391 126 X 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	127	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
	80288	128	Χ	Warm Mix Asphalt	Jan. 1, 2012	April 1, 2016
	80302	130	Χ	Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
	80414			Wood Fence Sight Screen	Aug. 1, 2019	
	80071	131	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)	Effective	Revised
<u>Name</u>				
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	April 1, 2017

SPECIAL PROVISIONS

Boul Avenue Multi-Use Path and Trailhead Park Multi-Use Path

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", Adopted April 1, 2016, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", the "Manual of Test Procedures for Materials", in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of the Boul Avenue Multi-Use Path and Trailhead Park Multi-Use Path, Section 17-00038-00-BT, and, in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

LOCATION OF PROJECT

This project is located along Boul Avenue in Swansea, IL. The project begins at the intersection of Boul Avenue and Morgan Street and continues southeast for approximately 1900 feet along Boul Avenue. The Trailhead Park Multi-Use Path will connect into the Boul Avenue Multi-Use Path and run up the existing MetroLink embankment where it will connect into the existing MetroBikeLink.

DESCRIPTION OF WORK

The proposed project consists of the construction of a hot-mix asphalt shared-use path, concrete sidewalk, ADA ramps, concrete driveways, earth excavation, embankment, pipe culverts, storm sewer, concrete curb and gutter, pavement markings, signage, solar-powered flashing beacons and all necessary ancillary work necessary to complete the project as detailed in the plans.

The Contractor shall be responsible for furnishing all labor, equipment and materials necessary to satisfactorily complete all work in accordance with the plans and specifications.

SITE INSPECTION

The Contractor shall be responsible for an on-site inspection prior to submitting a bid on this project. Upon receipt of a bid, it shall be assumed that the Contractor is fully familiar with the construction site.

Prior to commencement of construction activities, the Contractor shall document the existing condition of all sidewalk, driveways, buildings, infrastructure to remain, side streets, landscaping and other items within or adjacent to the limits of construction with color photographs and submit said pictures to the Engineer for review. Construction shall not commence until the content and clarity of said pictures is reviewed by the Engineer and found acceptable. Cost of this work shall be included in the project.

SHOP DRAWINGS

The Contractor shall submit shop drawings for the following items according to Articles 1042.03(b) and 105.04 of the Standard Specifications:

- All drainage structures including concrete culverts, inlets, manholes, and castings
- Solar-Powered Flashing Beacon Assembly (Complete)
- Fold Down Bollards
- Others items as specified herein

Submit shop drawings for review and approval to:

Thouvenot, Wade & Moerchen, Inc.
Attn: Jeff Reis, P.E., PTOE
4940 Old Collinsville Road
Swansea, IL 62226
jreis@twm-inc.com

SAFETY AND PROTECTION

Contractor shall be responsible for initiating, maintaining and supervising all safety and precautions and programs in connection with the Work including following MetroLink's Standard Operating Procedure and Norfolk Southern's Operating Procedure. Contractor shall take all necessary precautions for the safety of, and shall provide necessary protection to prevent damage, injury or loss to:

- 1. All employees on the Work and other persons and organizations who may be affected thereby;
- 2. All the Work and materials and equipment to be incorporated therein, whether in storage on or off site; and
- 3. Other property at the site adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and underground facilities not designated for removal, relocation or replacement in the course of construction.

Contractor shall comply with all applicable Laws and Regulations of any public body having jurisdiction for the safety of persons and property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of underground facilities and utility owners when prosecution of the Work may affect them and shall cooperate with them in the protection, removal, relocation and replacement of their property. All damage, injury or loss to any property referred to in paragraph 2 or 3 caused, directly or indirectly, in whole or in part, by Contractor, any subcontractor, Supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the work or for anyone whose acts either of them may be liable, shall be remedied by Contractor (Except damage or loss attributable to the fault of drawings or Specifications or to the acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor). Contractor's duties and responsibilities for the safety and protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor that the Work is acceptable.

Contractor shall designate a responsible representative at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent, unless otherwise designated in writing by Contractor to Owner. The Contractor shall be responsible for enforcing all O.S.H.A. Safety and Health

Standards (29 CFR 1926/1910), pertaining to the construction industry, as established by the U.S. Dept. of Labor, Occupational Safety and Health Administration 2207.

In EMERGENCIES affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, Contractor, without special instructions or authorization from Engineer or Owner, is obligated to act to prevent threatened damage injury or loss. Contractor shall give Engineer prompt, written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents is required because of action taken in response to an emergency, a Work Directive Change or Change Order will be issued to document the consequences of the changes or variations.

METROLINK CONSTRUCTION REQUIREMENTS

Work performed adjacent to Metro tracks shall be done in accordance with the details in the plans, Metro's Standard Operating Procedure 101.17 Policy and Procedure for Work Performed on Metro R.O.W. and as directed by the Engineer. The following requirements must be met by the Contractor.

- A Job Hazard Analysis (JHA) will be required for work within the Metro right-of-way which has a chance at causing harm or delays to the Metro alignment.
- Metro does not need separate submittals to show equipment on project. The equipment should be shown on the JHA for work and the JHA should discuss whether work will impact the operating clearance 20' as well as possible impact on the catenary lines.
- No debris shall be allowed to fall onto the tracks or traction power system.
- All work within the Metro operating right-of-way (20' from CL of either track) must be performed under flag protection. Flaggers shall be provided by the Contractor. Flagging kits are available for use at the 29th Street Yard in East St. Louis. The flagging kits will need to be returned to Metro each day of use. See Flaggers (MetroLink) for additional information.
- Requests for energizing and de-energizing of Metro's line, when needed, will be handled by the Contractor. Metro will commence De-energizing after the last evening train has passed through. The line must be re-energized in time for the first morning train out. The working window available will only be from approximately 1:00 a.m. to 3:30 a.m. each week night the line is de-energized. The working window available will only be from approximately 1:00 a.m. to 4:30 a.m. each weekend night the line is de-energized. Metro will attempt to provide track power downs after 9:00 p.m. on an as needed basis. Additionally, Metro is willing to provide single track operations at specific locations on an as needed basis. Any days with major sporting events or St. Louis-wide city events such as Race for the Cure, etc. will not be available. Upon approval of a JHA, the Contractor shall work with Metro to coordinate the days and times that would be available. Contractor to consult with Metro for available options.
- All Contractor employees are required to attend a 2-hour orientation, and if required, a 2-hour flagger training class at Metro's Facility. The classes are held approximately 2 times per month at the Moose Lodge in Swansea, Illinois. The classroom holds about 20 people so Metro must be notified when a large group will be attending the orientation. Contact Metro for dates of scheduled classes.

Note that Metro will designate an employee to be available at the job site as necessary to facilitate the Contractor's access to maximize windows of productive time. Please initiate contact with:

Mr. George Gress, P.E. One Metropolitan Square St. Louis, MO 63102

Phone No.: (314) 982-1400 Ext. 1810 Email: ghgress@metrostlouis.org

See **Appendix A** for Metro Reference Documents for additional information and requirements. These documents are outlined below:

SOP #101.17 – Work Performed on MetroLink Right of Way SOP #101.17 Exhibits

Exhibit A – Work Permit

Exhibit B - Metro Permit Fee Schedule

Exhibit D – Indemnification and Insurance

SOP #101.23 – Permit Numbers and Track Allocation

Project Safety Requirements for Work on or Adjacent to an Active Railroad

These Standard Operating Procedure documents can also be found at the following website:

http://www.metrostlouis.org/BusinessCommunity/EconomicDevelopment/RealEstate.aspx.

These requirements override any and all provisions of the contract documents that may conflict with these provisions.

TRAFFIC CONTROL PLAN

The Contractor shall furnish, install, maintain, relocate and remove all traffic control devices used for the purpose of regulating, warning or directing the traffic during construction of this project as noted in the Special Provisions and as directed by the Engineer.

Traffic control shall be according to the applicable sections of the "Standard Specifications for Road and Bridge Construction", the applicable guidelines contained in the "National Manual on Uniform Traffic Control Devices for Streets and Highways", "Illinois Supplement to the National Manual of Uniform Traffic Control Devices", these special provisions, and any special details and Highway Standards contained herein and in the plans. No modifications of these requirements will be allowed without prior written approval of the Engineer.

At the pre-construction meeting, the Contractor shall furnish the name of the individual in his direct employ who is to be responsible for the actual installation and maintenance of the traffic control for this project. If the actual installation and maintenance are to be accomplished by a Sub-contractor, consent shall be requested of the Engineer at the time of the pre-construction meeting according to Article 108.01 of the Standard Specifications. This shall not relieve the Contractor of the foregoing requirement for a responsible individual in his direct employ. The Contractor will provide the Owner the name of its representative who will be responsible for the administration of the Traffic Control Plan.

Special attention is called to Section 701 and Articles 107.09 and 107.14 of the Standard Specifications and the following Highway Standards: 701001, 701006, 701301, 701306, 701501, 701801, and 701901.

The Highway Standards referenced in the plans and specifications will not be paid for separately, but included in the various items of work and no additional compensation will be allowed.

In addition, the following special provision(s) will also govern traffic control for this project:

SCHOOL YEAR RESTRICTIONS
PEAK HOUR RESTRICTIONS
TRAFFIC CONTROL AND PROTECTION, (SPECIAL)
BARRICADES OR DRUMS
CONSTRUCTION AND MAINTENANCE SIGN SUPPORTS
CHANGEABLE MESSAGE SIGN
AUTOMATED FLAGGER ASSISTANCE DEVICE
WORK ZONE TRAFFIC CONTROL SURVEILLANCE
FLAGGERS IN WORK ZONES
EQUIPMENT PARKING AND STORAGE
TRAFFIC CONTROL DEVICES – CONES
RAILROAD FLAGGER

All lanes of Boul Avenue shall remain open at all times, except daytime lane closures using flaggers will be allowed in accordance with applicable Highway Standards.

The existing sidewalk near High Mount School and crosswalk at the 4-way stop of Morgan Street and Boul Avenue will be temporarily closed to pedestrian traffic when necessary during construction. Temporary modifications, in kind of existing conditions, near these locations can be utilized as necessary to allow access to the school until the proposed crossing can be opened.

The cost of furnishing, placing, maintaining and removing signs and other traffic control items shown on the applicable Highway Standards, and those not covered by a pay item in these Special Provisions shall be included in the cost of the various traffic control pay items included in the contract.

All warning signs shall be 48" fluorescent orange.

If at any time signs are in place but are not applicable, they shall be turned from the view of the motorist or covered as directed by the Engineer.

SCHOOL YEAR RESTRICTIONS

Given the impacts to school traffic, work shall be completed along Boul Avenue while school is not in session, approximately June 1, 2020 to August 14, 2020. Contractor shall verify exact dates before starting construction activities. Work outside the Boul Avenue right-of-way may commence while school is in session as long as there are no lane closures along Boul Avenue.

PEAK HOUR RESTRICTIONS

The Contractor shall have all lanes open to traffic during peak hours in each direction along Boul Avenue. The Contractor shall not be permitted to conduct any type of operation that would impede the flow of traffic

during peak hours or while school is in session. The Contractor shall be permitted to work through the weekends, except for those holiday weekends specified in Article 107.09.

Peak hours are defined as:

Boul Avenue: 6:00 a.m. to 9:00 a.m. and 2:30 p.m. to 6:00 p.m., Monday through Friday, for both eastbound traffic and westbound traffic.

TRAFFIC CONTROL AND PROTECTION, (SPECIAL)

This work shall include the furnishing, installing, maintaining, relocating, and removing all traffic control devices used for the purpose of regulating, warning or directing the traffic during the construction of this project. This work shall be done in accordance with Article 107.14 and applicable portions of Section 701 of the Standard Specifications, applicable Highway Standards, the Special Provisions and as specified herein.

Traffic control devices shall include all temporary traffic control and regulatory signs as described herein, and their supports, temporary pavement markings, barricades with sand bags, plastic drums, channelizing devices, warning lights, arrow boards if necessary, flaggers, or any other device used for the purpose of regulating, warning, or guiding traffic through the construction zone.

The Contractor shall be responsible for the proper location, installation, and arrangement of all traffic control devices as shown on the plans or as directed by the Engineer. Special attention shall be given to advance warning signs during construction operations in order to keep lane assignment consistent with barricade placement and stage construction at all times. The Contractor shall cover or remove all traffic control devices that are inconsistent with lane assignment patterns.

The Contractor, when directed by the Engineer, shall remove all traffic control devices which were furnished, installed and maintained by him under this contract, and such devices shall remain in place until specific authorization for relocation or removal is received from the Engineer.

The Contractor shall contact the Engineer at least 72 hours in advance of beginning work to allow for coordination between the Traffic Control Plan and the various items of work required.

When traveling in lanes open to public traffic, the Contractor's vehicles shall always move with and not against the flow of traffic. These vehicles shall enter or leave work areas in a manner that will not be hazardous to or interfere with traffic and shall not park or stop except within designated work areas. Personal vehicles shall not park within the right-of-way except in specific areas designated for parking.

Any drop off from pavement open to traffic which is greater than three inches, but less than thirty-six inches, within eight feet of the pavement edge shall be protected by Type I or Type II barricades equipped with monodirectional steady burn lights at 50-foot center-to-center spacing. If the drop off within three feet of the pavement edge exceeds eighteen inches, for a duration longer than 48 hours the Contractor shall use temporary traffic barrier unless approved by the Resident Engineer. Other potential hazards located within the project limits shall be protected by Type I or Type II barricades with flashing lights or if the hazard exceeds 100' in length steady burn bi-directional lights will be required. Barricades that must be placed in excavated areas shall have leg extensions installed such that the top of the barricade is in compliance with the height requirements of Standard 701901. Vertical panels or other delineating devices may be substituted for Type I or Type II barricades with the approval of the Engineer.

This item shall be paid for at the contract unit price per L SUM for TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

The Contractor should note that traffic control Highway Standards 701306, 701501, and 701801 shall be considered included in the contract.

BARRICADES OR DRUMS

Prior to commencing construction, sufficient barricades or drums conforming to Standard 701901 and the following requirements shall be on the job site ready for use in the stage construction of this project:

Type I or Type II barricades or drums used in channelizing traffic and protection of hazards shall be equipped with one Type C steady burning light meeting the requirements the Standard Specifications.

Type I or Type II barricades used in channelization shall be stabilized in a manner allowed by Article 701.05.

This item shall be considered included in all other traffic control pay items, with no further compensation nor remuneration being made.

CONSTRUCTION AND MAINTENANCE SIGN SUPPORTS

This work shall be done in accordance with Article 701.14 of the Standard Specification for Road and Bridge Construction and Highways Standard 701901 except as herein modified.

All construction signs mounted on permanent support for use in temporary control having an area of 10 square feet or more shall be mounted on two 4 in x 4 in or two 4 in x 6 in wood posts.

Type A metal post (two for each sign) conforming to Article 1006.29 of the Standard Specifications for Road and Bridge Construction may be used in lieu of wood posts. Type A metal posts used for these signs may be unfinished.

This work shall not be paid for separately; but shall be considered included in the cost of the traffic control items in this contract.

CHANGEABLE MESSAGE SIGN

This work shall be done in accordance with Article 701.15 of the Standard Specification for Road and Bridge Construction.

The Contractor will place a changeable message sign at either end of Boul Avenue two-weeks in advance of lane closures to warn motorists of upcoming lane closures. The signs will remain throughout the timeframe in which lane closures are necessary. The exact location and placement of signs shall be as approved in the field by the Engineer.

Each changeable message sign shall be measured and paid for per CALENDAR DAY for CHANGEABLE MESSAGE SIGN.

ACCESS TO ENTRANCES

The Contractor shall provide and maintain access to all existing entrances within the project limits during construction according to the Special Provisions and Article 107.09 of the Standard Specifications.

The Contractor shall furnish his schedule for the following week's work to the Engineer and to the Village Administrator each Wednesday. Handbill notices approved by the Engineer shall be delivered to each residence, business, and school located within the work zone, at least 48 hours prior to commencing work that affects access (vehicular and pedestrian) to these properties. Notices shall explain the proposed work, the duration of the inconvenience, parking arrangements, and request the resident's forbearance of the inconvenience. All complaints should be directed to the Contractor. Residents may contact the Village if their concerns are not resolved satisfactorily by the Contractor.

This item shall not be paid for separately, but shall be included in the cost of TRAFFIC CONTROL AND PROTECTION, (SPECIAL) and no additional compensation or remuneration will be allowed.

JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS (J.U.L.I.E.)

This work shall be done in accordance with Article 107.31 of the Standards Specifications except as modified herein:

Because a minimum of 48 (forty-eight) hours advance notice is required for notification to utilities, the Contractor will be required to give the Village 72 (seventy-two) hours' notice, in writing, for a specific area prior to beginning any excavation.

Locations of proposed signposts, bollards, etc., shall be staked by the Engineer and then notice provided as above.

If any of the location markers placed by a utility company in conformance with this procedure are destroyed by Contractor operations, the Contractor shall immediately notify the utility owner and bear the cost of remarking the facilities at his own cost and expense. Compliance with this special provision shall be considered included in the cost of the contract and no additional compensation will be allowed for any costs incurred.

LOCATING UNDERGROUND UTILITIES

The Contractor will be required to hire a pre-qualified electrical contractor to locate any state-owned facilities, if any. The following are known pre-qualified electrical contractors:

Electrico, Inc. Wissehr Electric Pyramid Electric Gerstner Electric This work will be paid for at the contract unit price per L SUM for LOCATING UNDERGROUND UTILITIES and no additional compensation will be allowed.

COOPERATION WITH UTILITIES

The following companies have utility facilities within the limits of this project:

AT&T
Ameren IP
Illinois American Water Company
Charter Communications
Fidelity Communications
MCI Communications
Clearwave Communications
Windstream
ADB Companies
Village of Swansea

In addition to the requirements of Article 105.07 of the Standard Specifications, the Contractor shall coordinate his operations with the proposed utility adjustments to minimize delays in construction of the project.

The Contractor's attention is directed to the Status of Utilities contained elsewhere herein for the various relocations and adjustments. The Contractor will be responsible for coordination with all utilities, in writing or via email, after award of contract to verify the depth, and/or all relocations or adjustments have or will be accomplished prior to the expected construction start date. The Contractor shall notify the Engineer of these communications and furnish copies of the written notification submitted to the utilities. The Contractor shall coordinate his planned activities to allow for any inconvenience or delay caused by any utility adjustments which is expected to be on-going at the start of construction. It shall also be the responsibility of the Contractor to invite all utilities to the pre-construction meeting when the date is established.

Compliance with this special provision shall be in accordance with Article 105.07 of the Standard Specifications, and no additional compensation or remuneration will be allowed for any delays, inconvenience or damage sustained by the Contractor due to any interference from utility appurtenances or the operation of moving them, or on account of any special construction methods required in prosecuting the proposed work due to the existence of said appurtenances either in their present or relocated positions.

STATUS OF UTILITIES TO BE ADJUSTED

Name and Address of Utility	Type of Utility	Location/Expected Adjustment
AT&T 1420 Frontage Road O'Fallon, IL 62269 618-624-4004	Telephone	Unknown
Ameren IP 1050 West Boulevard Belleville, IL 62221 800-755-5000	Gas & Electric	Power pole and guy wire to be relocated
Illinois American Water Co. 100 North Water Works Drive Belleville, IL 62223 800-422-2782	Water	Unknown
Charter Communications 1638 Carlyle Avenue Belleville, IL 62221 866-874-2389	Cable T.V.	Unknown
Fidelity Communications 64 North Clark Street Sullivan, MO 63080 800-392-8070	Telephone	Unknown
MCI Communications 888-624-5622	Telephone	No conflicts anticipated
Clearwave Communications 2 North Vine Street Harrisburg, IL 62946 618-294-8000	Telephone	Unknown
Windstream 102 East Shafer Street Forsyth, IL 62535 800-347-1991	Telephone	No conflicts anticipated
ADB Companies 18777 US Highway 66 Pacific, MO 63069 314-426-5200	Telephone	Unknown
Village of Swansea 1444 Boul Avenue Swansea, IL 62226 618-234-0044	Sewer	No conflicts anticipated

The above represents the best information available and is only included for the convenience of the bidder. The applicable provisions of Articles 105.07 and 107.20 of the Standard Specifications shall apply. If any utility adjustment or removal has not been completed when required by the Contractor's operations, the Contractor should notify the Engineer in writing. A request for an extension of time will be considered to the extent the Contractor's operations were affected.

Whenever a question arises regarding the existence of location of a buried utility, call the toll free JULIE telephone number, 1-800-892-0123, before starting excavation. Allow 48 hours for other than emergency assistance.

CONSTRUCTION LAYOUT

Construction Layout will be furnished by the Owner. The Owner will be responsible to place construction stakes, for the items described below under the Responsibility of the Owner, for this project one time. Adequate reference points to the centerline of survey and benchmarks are shown within the plans. Any additional control points set by the Owner will be identified in the field to the Contractor.

The Owner will provide field forces, equipment, and material to set necessary stakes for this project, which will be needed to establish offset stakes, reference points, and other horizontal or vertical controls, including supplementary benchmarks, necessary to secure a correct layout of work.

The Contractor will be responsible for having the finished work conform to the lines, grades, elevations, and dimensions called for in the plans.

Should the Contractor find it necessary to have or provide additional staking, beyond the items described below under the Responsibility of the Owner, a written request shall be submitted to the Engineer for approval. If approval is granted, additional staking will be done by the Owner.

The Contractor shall exercise care in the preservation of the stakes and benchmarks and shall have them reset when any are damaged, lost, displaced, removed, or otherwise obliterated at no cost to the Owner, Engineer or Owner's Representatives.

Responsibility of the Owner:

- (a.) Will provide adequate horizontal and vertical control to the Contractor.
- (b.) Will stake, with lath, the proposed temporary construction easement lines and proposed right of way lines.
- (c.) Will provide centerline alignment points, with ties, at the beginning and the ending of the project. Centerline alignment points shall consist of an iron pin with cap.
- (d.) Will stake, with lath, the erosion barrier at 100-foot intervals and at bend points.
- (e.) Will provide rough centerline of path stakes or offset stakes, with lath only, at 50-foot intervals in tangents and at 25-foot intervals in curves. Stakes shall include cut or fill information to the proposed finished grade.
- (f.) Will stake the proposed storm sewer structures or pipe culverts and pipe end sections. Staking shall consist of one (1) center or end of structure and two (2) offset stakes per structure. Offset stakes shall include cut or fill information to the proposed invert elevation. End Section staking consists of providing one (1) center of end section staking and one (1) offset stake with elevation hub showing the cut or fill required for the flowline elevation.
- (g.) Will stake, with lath, the centerline of ditch. Staking shall consist of one (1) centerline or one (1) offset stake.
- (h.) Will stake the final pavement for the bike path. Staking shall consist of one (1) offset stake at 50-foot intervals in tangents and at 25-foot intervals in curves. Stakes shall include cut or fill information to the proposed finished grade.

- (i.) Will make random checks of the Contractor's staking to determine if the work is in conformance with the plans. Sufficient time, as determined by the Engineer, will be allowed to complete these checks and shall be allowed for by the Contractor.
- (j.) Will make random checks of the Contractor's staking to determine if the work is in conformance with the plans. Sufficient time, as determined by the Engineer, will be allowed to complete these checks and shall be allowed for by the Contractor.
- (k.) It is not the responsibility of the Owner or Owner's Representative, except as provided herein, to check the correctness of the Contractor's stakes. See item (d) below.

Responsibility of the Contractor:

- (a.) The Contractor shall establish from the given points and benchmarks all the control points necessary to construct items not described above. It is the Contractor's responsibility to tie in centerline control points in order to preserve them during construction operations.
- (b.) If the Contractor discovers a discrepancy, he/she shall inform the Engineer to check and determine their nature and make whatever revisions are necessary in the plans, including the re-cross sectioning of the area involved.
- (c.) During a random check of the Contractor's staking by the Engineer any errors to the Contractor's staking apparent shall be immediately called to the Contractor's attention and he/she shall make the necessary correction before the stakes are used for construction purposes at the Contractor's expense. Any inspection or checking of the Contractor's staking by the Engineer and the acceptance of all or any part of it shall not relieve the Contractor of his/her responsibility to secure the proper dimensions, grades and elevations of the work.
- (d.) All work shall be according to normally accepted self-checking surveying practices. Field notes shall be kept in standard survey field notebooks and the books shall become property of the Owner at the completion of the project. All notes shall be neat, orderly and in accepted form.
- (e.) The Contractor shall provide written requests for all staking to be provided by the Owner. A minimum 48-hour advance notice will be required prior to the commencement of all requested staking activities.

Any staking performed by the Contractor shall be done at his/her own expense and no compensation will be allowed.

Any additional staking not described above or re-staking shall be done at the expense of the Contractor. The Contractor, at his/her own expense, may employ the Owner's Sub-Consultant to perform any additional staking or re-staking.

DISPOSAL OF SURPLUS MATERIALS

All surplus materials, including but not limited to the removal of concrete, aggregate, sidewalks, etc., which cannot be used for embankment and which are deemed by the Engineer to have no salvageable value shall be removed from the site by the Contractor and disposed of in accordance with the requirements of all regulatory agencies. Surplus material that is suitable for embankment may be segregated and incorporated as backfill or embankment within the project limits with the approval of the Engineer. The cost of this work shall be considered included in the cost of the individual removal pay items, and no additional payment will be allowed. The Contractor will be responsible for obtaining all necessary permits as required by law.

TREE REMOVAL (6 TO 15 UNITS DIAMETER) TREE REMOVAL (OVER 15 UNITS DIAMETER)

This work shall be in accordance with Section 201 of the Standard Specifications.

A provisional quantity for this item of work is included for the purposes of bidding. The Contractor will be paid for the actual quantity removed.

This work will be paid for at the contract unit price per UNIT for TREE REMOVAL (6 to 15 UNITS DIAMETER) OR TREE REMOVAL (OVER 15 UNITS DIAMTER), as measured by the Engineer in the field. No additional compensation will be allowed for removal of any vegetation, bushes, logs or trees/stumps of less than 6 inches in diameter.

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

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

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

ISGS Site 3598-98 – ERB Turf Equipment, Inc. 1500 Boul Avenue, Swansea, St. Clair County, Illinois

Station 6+25 to Station 17+5, 75 feet LT, to Station 54+30 60 feet LT (FAU 9293). The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters: VOCs, SVOCs and metals.

Work Zones

Three distinct OSHA HAZWOPER work zones (exclusion, decontamination, and support) shall apply to projects adjacent to or within sites with documented leaking underground storage tank (LUST) incidents, or sites under management in accordance with the requirements of the Site Remediation Program (SRP), Resource Conservation and Recovery Act (RCRA), or Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or as deemed necessary. For this project, the work zones apply for the following ISGS PESA Sites: **None**

Additional information on the above sites collected during the Phase I Engineering process is available through the District's Environmental Studies Unit (DESU).

TRENCH BACKFILL

This work shall be completed in accordance with Section 208 of the Standard Specifications with the following exceptions: 1) CA-6 shall be used for backfilling within 2 feet of any paved surface; and 2) all trench backfill within 2 feet of a paved surface shall be mechanically compacted.

This work will be paid for at the contract unit price per CU YD for TRENCH BACKFILL and no additional compensation will be allowed.

SEEDING, CLASS 1A

At all locations where the ground has been disturbed or filled and no other surface restoration is indicated on the plans, the Contractor shall restore the area by Class 1A seeding as shown in the plans. This work shall be done according to Section 250 of the Standard Specifications.

The Contractor shall be responsible for the maintenance of the seeded areas until adequate grass cover is achieved. All washouts shall be filled and re-seeded. Any areas that do not attain some grass cover 30 days after seeding shall also be re-seeded. The cost of maintenance of the seeded areas shall be considered included in this item of work.

The amount of Seeding, Class 1A shown in the contract has been estimated. The Contractor will be paid for the amount actually seeded, at the contract unit price bid per ACRE, as directed by the Engineer.

The cost for performing this work will be paid at the contract unit price per ACRE for SEEDING, CLASS 1A.

AGGREGATE FOR TEMPORARY ACCESS

The Contractor shall provide and maintain access to all existing entrances within the project limits during the construction of the Boul Avenue Multi-Use Path according to Article 107.09 of the Standard Specifications. This work shall also be completed in accordance with Section 402 of the Standard Specifications. This item shall only be used on those occasions when the Contractor is directed by the Engineer. Said surfacing may not be required at all or may be required on multiple occasions.

The material for aggregate for temporary access shall conform to the requirements for CA-6. The aggregate may be placed by tailgating and blading. Compaction shall be provided to the satisfaction of the Engineer. Included with this item of work shall be any interim maintenance that may be required and as directed by the Engineer. At such time as the aggregate is no longer needed, the Contractor shall suitably remove and dispose of the material beyond the limits of construction.

All labor, materials, and equipment necessary to install, maintain, remove, and suitably dispose of the temporary aggregate surface shall be paid for at the contract unit price per TON for AGGREGATE FOR TEMPORARY ACCESS and no additional compensation will be allowed.

DETECTABLE WARNINGS

This work shall consist of the constructing of detectable warning surfaces in curb ramps and other locations shown on the plans according to Article 424.09 of the Standard Specifications and applicable Highway Standards, and as modified herein:

Materials shall be applied <u>polyurethane</u> detectable warning mat, using exterior grade tactile warning surface, incorporating truncated domes. Color shall be red. Panel sections shall be of equal size and dimensions with no fragments unless approved by the Engineer.

Section 17-00038-00-BT Boul Avenue Multi-Use Path and Trailhead Park Multi-Use Path Village of Swansea St. Clair County

Detectable warning panels shall be protected when applying curing compound to the adjoining concrete sidewalk. Any overspray on the panels shall be cleaned immediately to the satisfaction of the Engineer.

Joints between panels and around the perimeter of the panels shall be caulked with a self-leveling (pour grade), or nonsag (gun) grade urethane sealant. The color of the sealant shall be limestone, unless otherwise approved by the Engineer.

The subgrade shall be well-drained and properly compacted. Forms shall be positioned for proper grade, slope, and uniform slab thickness.

Detectable warning panels shall be placed as shown in the drawings and shall have visual contrast with the adjoining concrete surface. Adequate drainage shall be provided to prevent the accumulation of water and debris at the bottom of the ramp.

Panels shall be installed immediately in fresh concrete and adjusted to grade to ensure 100% surface contact with square edges of panels butted tightly together. The base of the truncated domes shall be set flush with the adjoining concrete surface. The maximum tolerance between panels and the adjoining surface is 1/16 inch. Immediately after placement, the panels shall be checked for slope, elevation and proper grade. The concrete around the panels shall be edged with 1/8-inch radius edger and finished according to the contract specifications.

This work shall be paid for at the contract unit price per SQUARE FOOT for DETECTABLE WARNINGS as specified herein.

BOLLARDS

This work consists of all labor, materials and equipment necessary to install pipe bollards as detailed in the plans.

This work shall be paid for at the contract unit price per EACH for BOLLARDS, which includes the steel pipe, concrete fill, concrete foundation, expansion joint material and paint and no additional compensation will be allowed.

WOOD FENCE TO BE REMOVED AND RE-ERECTED

This work shall consist of all labor, materials and equipment necessary for the removal, temporary storage and reinstallation of the fence at locations noted in the plans and per the direction of the Engineer. After removal, the Contractor shall store the fence and posts in a secure location. If the Engineer determines during removal operations and/or storage the fence has been damaged, the Contractor shall replace the damaged elements at no additional cost.

This work shall be measured and paid for at the contract unit price per FOOT for WOOD FENCE TO BE REMOVED AND RE-ERECTED and no additional compensation will be allowed.

REMOVE WOOD POST

This work shall consist of all labor, materials and equipment necessary for the removal of the wood posts at locations noted in the plans and per the direction of the Engineer. All existing posts shall be removed entirely, leaving no remnants at or below the ground surface. Voids left from the post removal shall be backfilled to the satisfaction of the Engineer.

This work shall be measured and paid for at the contract unit price per EACH for REMOVE WOOD POST and no additional compensation will be allowed.

GATE REMOVAL

This work shall consist of all labor, materials and equipment necessary to remove the existing gate at the High Mount School entrance. The Contractor shall completely remove the existing posts and concrete foundations and backfill any voids left in the ground to the satisfaction of the Engineer.

All removed components of the existing gate shall be disposed of in accordance with Article 202.03 of the Standard Specifications.

This work shall be paid for at the unit price per EACH for GATE REMOVAL, which shall include removal and disposal of the gate and all components, and properly backfilling of any voids left after the removal of the gate posts.

SOLAR-POWERED FLASHING BEACON ASSEMBLY (COMPLETE)

This item shall be constructed to include all items necessary to install a flashing beacon at the locations shown in the plans. A partial list of estimated items and quantities for installation of this item has been included on the Miscellaneous Detail Pedestrian Crossing in the plans. This list is for informational purposes only and is not necessarily all inclusive. The Engineer is not responsible for any errors or omissions with the items and quantities listed. All work shall be in accordance with applicable portions of Division 800 of the Standards Specifications. All labor, equipment, and materials necessary to construct the crossing to the satisfaction of the Engineer and in accordance with IDOT specifications shall be included with the bid price.

Basis of payment shall be at the contract unit price per EACH for SOLAR-POWERED FLASHING BEACON ASSEMBLY (COMPLETE) which shall include all labor, equipment and materials for a complete installation and no additional compensation will be allowed.

COMBINATION CONCRETE CURB AND SIDEWALK 4 INCH (SPECIAL)

This work consists of all labor, materials and equipment necessary to construct the proposed median pedestrian crossing, including the curb and gutter, to limits and lines as detailed in the plans. This work shall be done according to Section 606 of the Standard Specifications.

This work shall be paid for at the contract unit price per SQ FT for COMBINATION CONCRETE CURB AND SIDEWALK 4 INCH (SPECIAL) and no additional compensation will be given.

POTHOLING

If the utility companies fail to adequately locate their facilities, the Engineer will authorize the Contractor to pothole mainline facilities (excluding service lines) in order to prevent damages to the utilities.

This work will be paid for at the contract unit price per EACH for POTHOLING and shall include all necessary materials, equipment and labor and no additional cost will be granted to the Contractor for this work.

MEDIAN REMOVAL (SPECIAL)

This work consists of all labor, materials and equipment necessary to remove the existing solid median on Boul Avenue to limits and lines shown in the plans.

Also included with this item of work is the removal of 1 foot of existing pavement on either side of the existing solid median.

This work shall be paid for at the contract unit price per SQ FT for MEDIAN REMOVAL (SPECIAL) and no additional compensation will be given.

SIDEWALK REMOVAL (SPECIAL)

This work consists of all labor, materials and equipment necessary to remove the existing hot-mix asphalt sidewalk and hot-mix asphalt bike trail to limits and lines shown in the plans.

Also included with this item of work is the removal of existing curb and 2 feet of existing hot-mix asphalt pavement located directly in front of the existing ADA ramp at Station 0+00.00.

This work shall be paid for at the contract unit price per SQ FT for SIDEWALK REMOVAL (SPECIAL) and no additional compensation will be given.

INLETS, SPECIAL

This item shall be constructed in accordance with Section 602 of the Standard Specifications and the details shown in the contract plans.

Once the inlets have been installed, the Contractor shall protect the inlets from vehicles or equipment driving on the lid and/or structure. Any damaged inlets will not be accepted and shall be replaced/repaired to the satisfaction of the Engineer by the Contractor at no additional cost to the contract.

This work will be paid for at the contract unit price per EACH for INLETS, SPECIAL, which will include the precast inlet, access frame and grate, Class SI Concrete, steel reinforcement, protection during construction, repairs to inlets damaged during construction and any other necessary items to construct the inlets as detailed in the plans.

CHAIN LINK FENCE REMOVAL

This work shall consist of all labor and equipment necessary for the removal and disposal of the existing chain link fence as shown on the plans at approximate Sta. 106+44 or as directed by the Engineer. All posts and concrete foundations shall be removed completely from the ground. All salvageable material shall become the property of the Contractor, and the value of all salvageable material shall be reflected in the unit bid price. See MISCELLANEOUS DETAIL METROLINK GROUNDING REQUIREMENTS and FENCE GROUNDING special provision for additional requirements.

This work shall be paid for at the contract unit price per FOOT for CHAIN LINK FENCE REMOVAL, which shall include the removal and disposal of the fence, gates, posts, concrete foundations, and other fencing material.

FENCE GROUNDING

All chain link fence within the limits of construction shall be grounded. Fence located within 15' of a MetroLink track shall be grounded as shown in the plan detail. All other chain link fence shall be grounded in accordance with applicable Highway Standards.

This work will not be measured for payment and shall be included in the cost of the applicable fence pay items, and no additional compensation will be allowed.

RELOCATE SIGN PANEL AND POST

This item of work shall consist of furnishing all labor, material and equipment necessary to remove the existing traffic signs (i.e. stop signs, speed signs, etc.) and posts at locations shown in the plans, stockpile these signs at a location determined by the Contractor and reinstall these signs as directed by the Engineer. This work shall be in accordance with the applicable portions of Section 720 and 730 of the Standard Specifications and with the Illinois Manual on Uniform Traffic Control.

Any damage to existing signs shall be the responsibility of the Contractor.

This work will be paid for at the contract unit price per EACH for RELOCATE SIGN PANEL AND POST and no additional compensation will be allowed.

SUBMITTAL OF EEO/LABOR DOCUMENTATION

Effective: April 2016

This work shall be done in accordance with Check Sheets No. 1, 3 and 5 of the IDOT Supplemental Specifications and Recurring Special Provisions and the "Weekly DBE Trucking Reports (BDE)" Special Provision, except as here-in modified.

PAYROLL AND STATEMENT OF COMPLIANCE:

Certified payroll, (FORM SBE 48 OR AN APPROVED FACSIMILE) and the Statement of Compliance, (FORM SBE 348) shall be submitted by two methods:

- 1. By Mail (United States Postal Service): The ORIGINAL of the certified payroll and the Statement of Compliance for the Prime Contractor and each Subcontractor shall be submitted by mail to the Regional Engineer for District 8.
- 2. Electronically: Scan both the ORIGINAL of the certified payroll and the Statement of Compliance to the same PDF file and email to the District at the email address designated by the District EEO Officer.

SBE 48 and SBE 348 forms shall be submitted weekly and will be considered late if received after midnight seven (7) business days after the payroll ending date.

WEEKLY DBE TRUCKING REPORT:

The Weekly DBE Trucking Report, (FORM SBE 723) shall be submitted electronically. Scan the form to a PDF file and email to the District at the email address designated by the District EEO Officer.

SBE 723 forms shall be submitted weekly and will be considered late if received after midnight ten (10) business days following the reporting period.

MONTHLY LABOR SUMMARY & MONTHLY CONTRACT ACTIVITY REPORTS:

The Monthly Labor Summary Report (MLSR) shall be submitted by one of two methods:

- For contractors having IDOT contracts valued in the aggregate at \$250,000 or less, the report may be typed or clearly handwritten using Form D8 Pl0148. Submit the ORIGINAL report by mail to the Regional Engineer for District Eight. Contractors also have the option of using the method #2 outlined below.
- 2. For contractors having IDOT contracts valued in the aggregate at more than \$250,000, the report must be submitted in a specific "Fixed Length Comma Delimited ASCII Text File Format". This file shall be submitted by e-mail using specific file formatting criteria provided by the District EEO Officer. Contractors must submit a sample text file to District 8 for review at least fourteen (14) days prior to the start of construction.

The Monthly Contract Activity Report (MCAR) may be typed or clearly handwritten using Form D8 PI0149.

The Monthly Labor Summary Report and the Monthly Contract Activity Report shall be submitted concurrently. If the method of transmittal is method #1 above then both the MLSR and the MCAR shall be mailed together in the same envelope. If the method of transmittal is method #2 above then the MCAR shall be scanned to a .pdf file and attached to the email containing the MLSR .txt file.

The MLSR and MCAR must be submitted for each consecutive month, for the duration of the project, and will be considered late if received after midnight ten (10) calendar days following the reporting period.

REQUEST FOR APPROVAL OF SUBCONTRACTOR:

The ORIGINAL and one copy of the Request for Approval of Subcontractor (FORM BC 260A) shall be submitted to the District at the IDOT Preconstruction Conference.

SUBSTANCE ABUSE PREVENTION PROGRAM CERTIFICATION:

The ORIGINAL and one copy of the Substance Abuse Prevention Program Certification (FORM BC 261) shall be submitted to the District at the IDOT Preconstruction Conference.

The Contractor is required to follow submittal procedures as provided by the EEO Officer at the preconstruction conference and to follow all revisions to those procedures as issued thereafter.

If a report is rejected, it is the contractor's responsibility to make required adjustments and/or corrections and resubmit the report. Reports not submitted and accepted within the established timeframes will be considered late.

Disclosure of this information is necessary to accomplish the statutory purpose as outlined under 23CFR part 230 and 41CFR part 60.4 and the Illinois Human Rights Act. Disclosure of this information is REQUIRED. Failure to comply with this special provision may result in the withholding of payments to the contractor, and/or cancellation, termination, or suspension of the contract in whole or part.

This Special Provision must be included in each subcontract agreement.

ALL HARD COPY FORMS TO BE SUBMITTED TO:

Region 5 Engineer
Illinois Department of Transportation
ATTN: EEO/LABOR OFFICE
1.102 Eastport Plaza Drive
Collinsville, IL 62234-6198

Compliance with this Special Provision shall be included in the cost of the contract and no additional compensation will be allowed for any costs incurred.



Boul Avenue Trail and Trailhead Park Trail

Storm Water Pollution Prevention Plan

·						
Section <u>17-00038-00-BT</u>	Project No.	LI09(139)				
County St. Clair	Contract No.	97710				
This plan has been prepared to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit No. ILR10 (Permit ILR10), issued by the Illinois Environmental Protection Agency (IEPA) for storm water discharges from construction site activities.						
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.						
Michael Leopold		Marie				
Print Name	A	Sjonature ,				
Mayor 8/5/2019						
Title		Date /				
Village of Swansea						
Agency						

Marked Rte.

NA

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

I. Site Description:

Route

A. Provide a description of the project location (include latitude and longitude, Section, Town, and Range):

The project is located in Swansea, IL and the Boul Avenue trail begins at the intersection of Boul Avenue and Morgan Street and continues southeast for about 1900 feet on the north side and parallel with Boul Avenue where the trail ties into the existing MetroBikeLink Trail. The proposed trailhead park trail is located on a parcel of land between an existing creek to the South and West, a commercial property to the East, and the Metro BikeLink Trail and MetroLink tracks to the North. This land is currently vacant and will be used for a future park.

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

Project consists of constructing a 10' wide HMA shared-use path. Activities include earthwork, culverts, HMA pavement, curb and gutter, and other miscellaneous items to complete the work.

C. Provide the estimated duration of this project:

2.5 months

D. The total area of the construction site is estimated to be 2.5 acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is 2.5 acres.

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

0.25

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

79B - Menfro silt loam, 2 to 5% slopes

79C3 - Menfro silt clay loam, 5 to 10% slopes, severely eroded

962f2 - Sylvan-Bold silt loams, 18 to 35% slopes, eroded

962G - Sylvan-Bold silt loams, 35 to 60% slopes

2079D - Menfro-Urban land complex, 8 to 15% slopes

2477B - Winfield-Urban land complex, 2 to 8% slopes

3333A - Wakeland silt loam 0 to 2% slopes, frequently flooded

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

NA

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

No exceptionally erosive areas should result from the construction of this project. Potential erosive areas include discharge points from proposed pipe culverts.

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

Soil disturbing activities include construction and storm sewer installation. All side slopes are generally 1:3, except for areas where ROW is limited, slopes are increased to a maximum of 1:2.5.

- 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:

This project will drain into various systems owned by St. Clair County Highway Dept. and the Village of Swansea.

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

NA

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 IDNR. The location of the receiving waters can be found on the erosion and sediment control plans:

Unnamed tributary to Richland Creek. Richland Creek is a tributary of the Kaskaskia River. The Kaskaskia River is a tributary of the Mississippi River.

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

For any storm water discharges from construction activities within 50-feet of Waters of the US (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 United States, or b) How additional erosion and sediment controls will be provided within that area.

NA

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.

	303(4) Lie	ted receiving	waters for	cuenondod	colide	turbidity	or ciltation
1 1	303(0) LIS	tea receivina	waters for	suspended	SOHOS.	turbialty.	or sutation

The name(s) of the listed water body, and identification of all pollutants causing impairment:

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 project site to the 303(d) water body:

		Applicable Federal, Tribal, State or Local Progra	ams				
	\boxtimes	Floodplain The project will cross Swansea Creek via the existing triple 10-foot diameter culverts located at the future part entrance.					
		Historic Preservation					
		Receiving waters with Total Maximum Daily Lo siltation	ad (TMDL) for sediment, total suspended solids, turbidity o			
		TMDL (fill out this section if checked above)					
		The name(s) of the listed water body:					
	Provide a description of the erosion and sediment control strategy that will be incorporated into the site de that is consistent with the assumptions and requirements of the TMDL:						
	If a specific numeric waste load allocation has been established that would apply to the project's disc provide a description of the necessary steps to meet that allocation:						
		Threatened and Endangered Species/Illinois Na	atural	Areas (INAI)/Nature Preserves			
		Other					
		Wetland					
	The	following pollutants of concern will be associated	d with	this construction project:			
	\boxtimes	Antifreeze / Coolants Concrete	\boxtimes	Solid Waste Debris Solvents			
	\boxtimes	Concrete Curing Compounds	\boxtimes	Waste water from cleaning construction equipment			
		Concrete Truck Waste Fertilizers / Pesticides		Other (specify) Other (specify)			
	\boxtimes	Paints		Other (specify) Other (specify)			
		Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids)		Other (specify)			
	\boxtimes	Soil Sediment		Other (specify)			
on	trols	:					

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

II. C

Ρ.

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in 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:

- Erosion and Sediment Controls: At a minimum, controls must be coordinated, installed and maintained to:
 - 1. Minimize the amount of soil exposed during construction activity;
 - 2. Minimize the disturbance of steep slopes:
 - Maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible;
 - Minimize soil compaction and, unless infeasible, preserve topsoil.
- 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:

\boxtimes	Erosion Control Blanket / Mulching	Temporary Turf (Seeding, Class 7)
	Geotextiles	Temporary Mulching
\boxtimes	Permanent Seeding	Vegetated Buffer Strips
\boxtimes	Preservation of Mature Vegetation	Other (specify)
	Protection of Trees	Other (specify)
	Sodding	Other (specify)
\boxtimes	Temporary Erosion Control Seeding	Other (specify)

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

Temporary Erosion Control Seeding will be placed as needed during construction. This stabilization practice shall be implemented according to the current edition of the Standard Specifications for Road and Bridge Construction and all current applicable IDOT Highway Standards.

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

After construction activities are completed, permanent seeding and mulching will be placed. These stabilization practices shall be implemented according to the current edition of the Standard Specifications for Road and Bridge Construction and all current applicable IDOT Highway Standards.

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.

The following structural practices will be used for this project:

	Aggregate Ditch		Stabilized Construction Exits
	Concrete Revetment Mats		Stabilized Trench Flow
	Dust Suppression		Slope Mattress
	Dewatering Filtering		Slope Walls
	Gabions	\boxtimes	Temporary Ditch Check
	In-Stream or Wetland Work		Temporary Pipe Slope Drain
	Level Spreaders		Temporary Sediment Basin
	Paved Ditch		Temporary Stream Crossing
	Permanent Check Dams		Turf Reinforcement Mats
\boxtimes	Perimeter Erosion Barrier		Other (specify)
	Permanent Sediment Basin		Other (specify)
	Retaining Walls		Other (specify)
\boxtimes	Riprap		Other (specify)
	Rock Outlet Protection		Other (specify)
	Sediment Trap		Other (specify)
\boxtimes	Storm Drain Inlet Protection		Other (specify)

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

Perimeter Erosion Barrier will be placed before construction activities begin to prevent erosion from going off site. Inlet and pipe protection will be installed during construction as inlets are constructed.

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

Riprap will be installed at the outlet of the storm sewer after final grading is complete.

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D.	I PAS	tment	Chan	nicale
L.	IICa		CHICH	IICAIS

Will polymer flocculants or treatment chemicals be utilized on this project: ☐ Yes ☒ No
If yes above, identify where and how polymer flocculants or treatment chemicals will be utilized on this project

- E. **Permanent (i.e., Post-Construction) Storm Water Management Controls:** Provided below is a description of measures that will be installed during the construction process to control volume and pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.
- 1. Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

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

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

Description of permanent storm water management controls:

Riprap placed at the outfall of the storm sewer along Boul Avenue.

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 Illinois Environmental Protection Agency's Illinois Urban Manual. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans, site permits, storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI, to be authorized to discharge under the Permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

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

All erosion control procedures shall conform to the following:

- 1. All criteria contained in this document.
- 2. The drainage and erosion control plans (included in the construction plans).
- 3. All applicable sections of the current Standard Specifications for Road and Bridge Construction.
- 4. All applicable current IDOT District 8 Highway Standards
- 5. All applicable local, state, and federal laws.
- 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 timeframe
 - Mass clearing and grubbing/roadside clearing dates
 - Deployment of Erosion Control Practices
 - Deployment of Sediment Control Practices (including stabilized construction entrances/exits)
 - 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 operations
 - Timeframe for other significant long-term operations or activities that may plan non-storm water discharges such 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.

All erosion control measures shall be maintained as outlined in Section II of this document. All maintenance of erosion control measures shall be executed according to the current Standard Specifications for Road and Bridge Construction.

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: epa.swnoncomp@illinois.gov, 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 noncompliance 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.



Contractor Certification Statement

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

Route	Boul Avenue and Trailhead Park Trail	Marked Rte.	NA			
Section	17-00038-00-BT	Project No.	LI09(139)			
County	St. Clair	Contract No.	97710			
This certification statement is a part of SWPPP for the project described above, in accordance with the General NPDES Permit No. ILR10 issued by the Illinois Environmental Protection Agency. I certify under penalty of law that I understand the terms of the Permit No. ILR 10 that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification. In addition, I have read and understand all of the information and requirements stated in SWPPP for the above mentioned project; I have received copies of all appropriate maintenance procedures; and, I have provided all documentation required to be in compliance with the Permit ILR10 and SWPPP and will provide timely updates to these documents as necessary.						
⊠ Cont	ractor					
☐ Sub-	Contractor					
3 99000 5						
	Print Name		Signature			
	Title		Date			
	Name of Firm	7	Telephone			
	Street Address	-	City/State/ZIP			
Items which this Contractor/subcontractor will be responsible for as required in Section II.G. of SWPPP:						
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State of Illinois Department of Transportation Bureau of Local Roads and Streets

SPECIAL PROVISION FOR INSURANCE

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

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

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

general liability insurance policy in accordance with Article 107.27:

Village of Swansea

The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.

APPENDIX A

Metro Reference Documents

SOP #101.17 - Work Performed on MetroLink Right of Way

SOP #101.17 Exhibits

Exhibit A – Work Permit

Exhibit B – Metro Permit Fee Schedule

Exhibit D – Indemnification and Insurance

SOP #101.23 - Permit Numbers and Track Allocation

Project Safety Requirements for Work on or Adjacent to an Active Railroad



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Classifications: OCC -- Rail Dispatchers -- Maintenance of Way -- Contractors

Other Departments: Real Estate - Operation - Safety - Risk Management - Engineering & New

Systems Development

Issued by:

Chief of MetroLink Operations

Supersedes: SOP 101.17 dated November 12, 2007

I. PURPOSE AND SCOPE

The purpose of the following requirements is to maintain a safe environment and efficient transit system for MetroLink customers, employees and Contractors when work is being performed on the MetroLink Right-of-Way (ROW).

The following procedures must be followed and all requirements fulfilled before permission will be granted to any individual or group requesting access to the MetroLink Right-of-Way (ROW) to perform work. This includes all work on, under, above, or adjacent to the MetroLink Right-of-Way that has the potential to impact train operations. MetroLink Right-of-Way is defined as Metro owned property along MetroLink's Light Rail System, including main line tracks, yard track, shop tracks, and stations. Work performed on the Right-Of-Way outside of the alignment or area where trains operate that **will not** impact train operations, e.g. park and ride lots etc., is excluded from the scope detailed in the following procedures.

This procedure is applicable to Contractors and Metro Employees.

MetroLink Land Maps defining Metro property lines and a MetroLink Alignment Schematic are available from the Maintenance Of Way (MOW) Department upon request.

IL ATTACHMENTS/EXHIBITS

EXHIBIT A: MetroLink - Contractor Right-of-Way Temporary Work Permit

EXHIBIT B: Metro Permit Fee Schedule

EXHIBIT C: MetroLink Alignment Schematic (available upon request)

EXHIBIT D: Indemnification Agreement and Required Insurance Coverage

EXHIBIT E: Metro Personnel Right of Way Work Permit (For Metro Employees Only)

EXHIBIT F: MetroLink Rail Systems Department Employee Safety Standards (available upon request)

EXHIBIT G: Operations Rule Book (available upon request)



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III. DEFINITIONS

Flag Person is a Tier 2 qualified Contractor or Metro Employee that is assigned as a dedicated flagger to protect work crews, personnel, and equipment working on or near the tracks to ensure safe passage of trains as described in SOP 103.04.

Fouling a Track means placement of an individual, material or equipment in such proximity to the track that the individual, material or equipment could be struck by a moving train or on-track equipment, or in any case is within 8' 6" from the centerline of nearest track.

Lookout is a Tier 2 qualified Metro employee who is qualified to provide warning to ROW workers of approaching trains or on-track equipment. Lookout should be equipped with the necessary equipment to warn ROW workers of approaching trains, as well as flagging equipment to be used if it is necessary to warn approaching trains. The Lookout's sole duty is to look for approaching trains or on-track equipment and provide advanced warning to employees before arrival of the trains or on-track equipment.

No Clearance Zone areas along the MetroLink Right of Way where there **is not** 8' 6" clearance from centerline of nearest track to nearest fixed object, e.g. wall, fence, bridge, steep embankment. Within these areas it **is not** possible for personnel to safely clear from fouling train movement. These areas are designated with reflective **No Clearance** signs on the right-of-way and by markings on the MetroLink Alignment Schematic.

Operating Right-of-Way (ROW) is the area within twenty (20) feet of the centerline of any track on the main line or yard.

Pilot is a Tier 3 qualified Metro employee assigned to facilitate track car or on-track equipment movement when the operator or driver is not qualified on the physical characteristics or rules of the portion of the alignment over which movement is to be made. The pilot will be responsible for the safe movement of on-track equipment for the work crew to which they are assigned.

Right-of-Way (ROW) is land, property and interests therein, acquired by the Agency.

Train Detection is a procedure by which a worker acquires ROW access safely by seeing approaching trains and leaving the track before the train arrives at the location at which they are working and which may be used only under certain conditions authorized by OCC.

IV GENERAL REQUIREMENTS FOR ACCESS TO METROLINK RIGHT-OF-WAY

To access the MetroLink ROW all Contractor and Metro Employees must have a minimum of Tier 1
Safety Training and each work group must be accompanied by at least one person that is Tier 2
qualified to serve as a flag person or lookout.

For unforeseen work for short durations, MetroLink Operations may authorize unqualified persons access to the ROW if accompanied by a qualified Metro Lookout.



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2. The work crew must have in their possession a copy of an approved work permit describing the work being performed. Contractor must also meet all additional requirements for ROW access described within this SOP and the referenced documents. Prior to the start of any proposed work the Contractor must submit a MetroLink - Contractor Right-of-Way Temporary Work Permit, and Metro Employees must submit a Metro Personnel Right of Way Work Permit. If Metro requires a detailed work plan, that plan must be approved prior to permit submittal. Once the work plan is approved, the permit can be submitted.

For unforeseen work for short durations, MetroLink Operations can authorize access to the ROW without an approved work permit.

Work permits are not required for LRV equipment maintenance performed on the mainline or in the yard & shops.

- 3. Operators of track cars or on-track equipment must be Tier 3 qualified, unless a qualified Metro Pilot accompanies them. In that situation, the Operator must be at a minimum, Tier 1 qualified.
- 4. A Metro Tier 3 qualified pilot must accompany Contractor track cars. The pilot is responsible to ensure the Contractor's track car and on-track equipment is operated in compliance with Metro operating and safety rules. The contractor requirement for the Metro pilot can be waived by Metro, if it has been determined that the Contractor's operator has sufficient experience with Metro operating and safety rules.

V. ROW SAFETY TRAINING QUALIFICATIONS

The following table summarizes the required ROW Safety Training necessary before any Contractor or Metro Employee will be allowed to perform any work on the ROW. Annual recertification is required for Tier 1, 2 &3 Training.

Work or Duties	Training Required
Any work within MetroLink Right-of-Way	Tier 1
Flagging to protect work crews, personnel and equipment in the Right-of-Way	Tier 1, and Tier 2
Operating a track car on MetroLink	Tier 1, Tier 2, and Tier 3

If Metro employees are not qualified at a minimum Tier 2 (Flagging and Radio Use), they must be escorted by another employee qualified to Tier 2.

The Safety Department will maintain a list of ROW Safety Trained qualified persons and their level of qualification (e.g. Tier 1, 2, or 3). An updated list will be kept on file in the Rail Dispatcher's Office. Dates, times and locations of Training class can be obtained by contacting Metro Safety Dept. or MetroLink Operations.

VI. METRO REQUIREMENTS FOR CONTRACTOR

1. Contractor must, if requested by Metro, submit a detailed work plan to MetroLink Operations to be



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reviewed and approved by MetroLink Operations, Maintenance of Way, and Safety. After acceptance of the work plan, Contractor will obtain, through the procedure defined in this SOP, an approved **EXHIBIT A: MetroLink - Contractor Right-of-Way Temporary Work Permit** before any work can be performed and they must have their Metro approved Permit available at all times on the work site.

- 2. Contractor may be required to reimburse Metro for all expenses as defined in EXHIBIT B: Metro Permit Fee Schedule. **Metro reserves the right to waive fees at its sole discretion.**
- 3. Method of payment from Contractor to Metro will be determined by Metro. All Metro expenses for a particular Contractor shall then be accumulated under the associated permit number.
- 4. Contractor will complete annual required ROW Safety Training as described in **Section V ROW SAFETY TRAINING QUALIFICATIONS**. Annual recertification is required for Tier 1,2 &3 Training.
- 5. Contractors will immediately stop any work that deviates from their approved Right-of-Way Temporary Work Permit or detailed work plan submitted. Metro should be contacted and must approve any alternate work procedures.
- 6. Contractor work activities can be terminated immediately by MetroLink Operations, Maintenance of Way or Safety, at any time without notice. Typical conditions under which this may occur include, but are not limited to:
 - a) Failure to comply with any of the requirements identified in this SOP or other documents referred to within.
 - b) Safety related reasons.
 - c) Operations schedule-related reasons.
 - d) If work in progress deviates from the written work proposal approved by the Metro.
 - e) Flag person(s) not available.
 - f) Contractors' work interferes with the constant, continuous use of the tracks, property and facilities of MetroLink system, its employees, its customers or other Contractors working within the right-of-way.
 - g) Accidents, injuries, near misses, or vehicle damage.
 - h) Metro rule violations
- 7. All on track equipment (including Hi-Rail Vehicles) must meet Federal Register 49 CFR, Part 214 standards, related to Roadway Maintenance Machine Safety. Contractor will be required to submit a list of qualified operators and which Roadway Maintenance Machines that they are qualified to operate on Metro. The Contractor will provide, for Metro approval, documentation of their training and qualification process.
- Contractor must satisfy all safety requirements including, but not limited to, those found in Exhibit F: METROLINK RAIL SYSTEMS DEPARTMENT EMPLOYEE SAFETY STANDARDS dated January 1996 and Exhibit G: MetroLink Operations Rule Book. Copies are available upon request from the MOW Department.
- Under no circumstances will Contractor access tracks with vehicles, equipment, or machinery, without explicit written permission of Metro. Each individual working on the ROW is responsible to



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supply their own personal protective equipment, including a reflective safety vest, hard hat, safety glasses, and work shoes with less than ½ inch heels (open toe or heel shoes are prohibited).

- 10. These requirements should be followed for excavations:
 - Excavations to either side of tracks must be at least twenty feet from the centerline of track.
 - Excavation under, between or within the track structure or the removal of ballast is prohibited unless approved by Metro.
 - Under-track cable installations must be directionally bored using the following procedures.
 - A minimum depth of 8 feet below top of ties shall be maintained at all times or 8 feet below flow line of ditch, whichever is greater, must be maintained to top of conduit(s).
 - Conduit schedule Fiberglass Reinforced Epoxy (FRE) or equivalent is required.
 - Excavations within 5 feet of either side of buried MetroLink signal, power, and communication cables must be performed by hand digging and with MOW personnel present at the dig site.
 - When cable work is being performed parallel to MetroLink right-of-way, cables shall be laid at the same depth as MetroLink cables. The location of the cables shall be between MetroLink cables and the property line, not towards the track.
 - If cable locates are required the Missouri One Call System, Inc. locate procedure for Missouri and Julie, Inc. procedures for Illinois must be followed.

Note: Any deviation from these requirements will only be allowed with written consent from Metro.

- Over-track crossings will be considered on a case-by-case basis. All over-track crossings must comply with both National Electric Safety Code (NESC) clearances and any MetroLink requirements imposed.
- 12. Contractor shall only enter MetroLink Right-of-Way with an approved Work Permit, unless otherwise approved by MetroLink Operations.
- 13. Work performed by a Contractor on MetroLink Right-of-Way within 20 feet of the centerline of a main line or yard track will require a Temporary Restriction to be issued on the Daily Operating Clearance.
- 14. If the Contractor is performing work outside of 20 feet of the center line of any main line or yard, and it is possible for equipment e.g. boom, or hoisted equipment etc, to foul the operating ROW or has potential of making contact with the catenary, a temporary restriction will be required.
- 15. The temporary restriction will require a dedicated flag person to provide flag protection for the work crew(s). Speed Restriction Signs will need to be posted to identify the work zone to approaching trains. Refer to SOP 103.04 for more information on flagging requirements.
- 16. In the event that the Contractor disturbs, or modifies Metro's property in any manner, the Contractor must restore the property to the same condition it was in before the Contractor performed work. Such restoration must be to the satisfaction of the Superintendent of Operations and the Superintendent of Rail ROW Maintenance. Contractor will be billed for all work required to restore property to original condition.



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- 17. Contractor must comply with all applicable federal, state, and local laws, regulations, and standards affecting their work.
- 18. As a limitation to any rights or licenses that may be granted to the Contractor, Metro reserves the right to use and maintain its entire property. This includes Metro's right to construct, maintain, repair, renew, use, operate, change, modify, or relocate railroad tracks, roadways, station platforms, signal, communication, fiber optics, power, or other wire lines, pipelines and other facilities upon, along or across any or all parts of its property. All or any of the above mentioned use and maintenance may be done at any time or times by Metro without liability to the Contractor or to any other party for compensation or damages.
- 19. The Contractor is required to comply with Metro's Exhibit D "Insurance Specifications for MetroLink Contractors"
- 20. Metro reserves the right to fully investigate all Contractor accidents, injuries, near misses, or vehicle damage and the Contractor and its employees agree to comply and assist Metro in all aspects of these investigations. This includes, but is not limited to, drug and alcohol testing, employee interviews, written reports, and requests for documentation.

Contractor employees who work on the MetroLink ROW will be required to comply with the Metro Drug and Alcohol Policy

VII. CONTRACTORS PROCEDURE TO ACCESS METROLINK R.O.W.

1. Contractor will request a Right-of-Way Work Permit packet of information from:

Control Center Manager
MetroLink Operations
700 South Ewing
St. Louis, MO 63103
314-982-1400 X2851
rowworkpermits@metrostlouis.org
Fax 314-335-3429

- 2. MetroLink Operations will distribute SOP 101.17 with Exhibits A, B, and D to the Contractor. Contractor may request Exhibits C, F, and G. Exhibit E is for Metro employee use only.
- 3. Contractor then submits their Permit Application Fee and MetroLink Contractor Right-of-Way Temporary Work Permit (Exhibit A). All other required documents should be submitted a minimum of 14 days prior to their proposed start date. This may include a detailed work plan and project drawings, indemnification agreement and required insurance coverage as described in the Description of Insurance Specifications (Exhibit D).
- MetroLink Operations distributes Permit and detailed work plan if required, to Real Estate, Risk <u>Management and Safety Departments for approval and facilitates a pre-project planning meeting</u> <u>with Contractor(s)</u>



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- 5. MetroLink Operations contacts Contractor with approval, permit number and necessary requirements for Tier 1-3 safety training. Permit numbers are assigned by MetroLink Operations as described in SOP 101.23.
- 6. Contractor completes required safety training:
 - Tier 1 Training: Persons working on or next to the MetroLink Right-of-Way.
 - Tier 2 Training: Flagging and Radio Use.
 - Tier 3 Training: Track Car Operation and Operating Rules

Notes:

- Contractors are required to be trained at a minimum of Tier 1 to enter ROW. All work
 performed by the Contractor on the operating ROW must be protected by a qualified flag
 person. An unqualified Contractor may be authorized to enter the alignment by Operations
 if escorted by a Metro Lookout.
- 2. Operators of track cars or on-track equipment on the MetroLink light rail system must be qualified to Tier 3, unless they are to be piloted by a qualified Metro Pilot (in this case, the Operator will be Tier 1 qualified at a minimum). A Metro Tier 3 qualified Pilot is required to direct the operation of Contractor's track cars and on-track equipment, unless otherwise approved by Metro.
- 7. Contractor track cars must be piloted by a Metro Pilot qualified to Tier 3 of safety training. The pilot will communicate with OCC and control the movement of track cars or group of track cars assigned to a single work crew. The Metro Pilot will be responsible for the safe movement of the on track equipment or track cars. The Metro Pilot requirement may be waived by Metro if it is determined that the operator has sufficient training and experience on the MetroLink alignment to safely operate track cars and on-track equipment, and the Operator is Tier 3 qualified.
- 8. Contractor submits Right-of-Way Temporary Work Permit (Exhibit A) with permit number no later than **Wednesday 12 Noon**, prior to the week the work will be accomplished. Permit must be resubmitted every week during the length of the proposed project.

Note: If there is a Metro recognized holiday on Thursday, the work permits are due on Tuesday 12 Noon.

Note: If the project proposal changes significantly, a new MetroLink Right-of-Way Temporary Work Permit (Exhibit A) must be submitted. A new Permit Number will be assigned after the Permit is approved.

 Contractor or a Metro Designee is required to attend weekly Track Allocation meeting scheduled for Thursday with MetroLink Operations and Maintenance of Way to respond to questions regarding proposed work. The Contractor's Metro Designee may represent the Contractor at this meeting if previously arranged.



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Note: When the week includes a Metro recognized holiday on Thursday, the Track Allocation Planning meeting is scheduled for Wednesday.

All work requests are subject to Metro Approval

Note: Scheduling of work activities is subject to availability of Maintenance of Way, Operations and Safety personnel, as well as the effect it will have on customer service based on the impact the proposed work has on service quality and train schedules.

Restriction Times

Generally, work requiring a temporary restriction will be allowed to start at 7:30 AM daily. Some work will be restricted to the after revenue service hours approximately 1:30 AM to 3:30 AM.

- 10. Metro Project Manager or MetroLink Operations will provide the Contractor with a copy of their approved temporary permit (Exhibit A), which must be available on the project site at all times during work activities to confirm permission to occupy MetroLink Right-of-Way.
- 11. Contractor must contact OCC and request permission prior to accessing the ROW. OCC has authority over all activity along the ROW at all times.
- 12. Once work is complete, and the work area is cleared of materials, equipment, tools, and personnel, the Contractor must contact OCC to confirm that they are clear of the ROW.
- 13. Metro provides Contractor an invoice for appropriate fees upon completion of the work or on a monthly basis as necessary.
- 14. Contractor submits payments to the Metro Accounts Receivable.

VIII. METRO EMPLOYEE REQUIREMENTS AND PROCEDURE FOR ACCESS TO RIGHT-OF-WAY

This procedure is to be used by all Metro Departments to receive temporary permit access to Metro Right-of-Way.

- 1. Submit completed Exhibit E: Metro Personnel Right-of-Way Work Permit to MetroLink Operations.
- 2. Permits reviewed and approved at weekly Track Allocation meeting by MetroLink Operations and Maintenance of Way.
- 3. MetroLink Operations publishes the Final Track Allocation for the following week and all revisions.
- For unforeseen work such as emergencies or to perform minor corrections or routine inspections, OCC can authorize a Tier 2 Qualified Metro Employee to access the track without an approved permit.



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5. Work performed by an employee on the Operating ROW within 20 feet of the center line of an in service main line or yard track will require a Temporary Restriction be issued on the Daily Operating Clearance. Exceptions to the temporary restriction requirement for employees can be granted under the conditions listed in Item 6.

The temporary restriction requires a dedicated flag person be utilized to provide flag protection of the work crew(s). Speed Restriction Signs may need to be posted to identify the work zone to approaching trains. Refer to SOP 103.04 for more information on flagging requirements.

- 6. Work performed by <u>Tier 2 qualified Metro employee</u> does not require the issuance of a Temporary Restriction if one of the following <u>Train Detection schemes is used:</u>
- a. Worker(s) Use Train Detection to Clear Operating ROW 15 seconds Prior to Arrival of Train Train approach warning shall be given in sufficient time to allow worker(s) to move to and occupy a prearranged place of safety outside of the Operating ROW (more than twenty (20) feet from the centerline of any track on the main line) not less than 15 seconds before a train moving at maximum authorized speed can pass the location of the worker(s).

The following four conditions must be met:

- 1. Where worker(s) are performing minor corrections or routine inspections.
- 2. Where no power tools or equipment are being used in hearing range of the worker(s).
- 3. Where worker(s) are performing tasks that allows them to be attentive to train movement.
- 4. Where the ability of the worker(s) to hear and see approaching trains is not impaired by background noise, lights, precipitation, fog, passing trains or other obstructions or physical conditions.

If all four conditions cannot be met, a Lookout must be assigned to provide the worker(s) warning of approaching trains.

Trains can pass the location of the worker(s) at maximum authorized speed if worker(s) have cleared outside the Operating ROW.

b. Worker(s) Use Train Detection to Clear From Fouling a Track 15 seconds Prior to Arrival of Train. Train approach warning shall be given in sufficient time to allow worker(s) to move to and occupy a prearranged place of safety so that employee(s) or equipment are not fouling any in-service track (more than 8' 6" from the centerline of nearest in-service track) not less than 15 seconds before a train moving at maximum authorized speed can pass the location of the worker(s).

The following four conditions must be met:



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- 1. Where worker(s) are performing minor corrections or routine inspections.
- 2. Where no power tools or equipment are being used in hearing range of the worker(s).
- 3. Where worker(s) are performing tasks that allows them to be attentive to train movement.
- 4. Where the ability of the worker(s) to hear and see approaching trains is not impaired by background noise, lights, precipitation, fog, passing trains or other obstructions or physical conditions.

If all four conditions cannot be met, a Lookout must be assigned to provide the worker(s) warning of approaching trains.

Trains must pass the location of the worker(s) at <u>restricted speed</u> if worker(s) have cleared so that they are not fouling the track, but have not cleared off of the Operating ROW. OCC must contact a minimum of the next two approaching trains on the affected track before authorizing work or movement in this area. If work is for an extended time period, OCC will notify approaching trains as necessary to protect the workers.

Working in a No Clearance Zone.

WARNING

Areas marked as NO CLEARANCE do not provide sufficient space for worker(s) to move to and occupy a prearranged place of safety so that employee(s) or equipment are not fouling any in-service track (more than 8' 6" from the centerline of nearest in-service track) not less than 15 seconds before a train moving at maximum authorized speed can pass the location of the worker(s).

No Clearance Zone is an area along the Operating ROW where there is not 8' 6" clearance from centerline of nearest track to nearest fixed object, e.g. wall, fence, bridge, steep embankment. Within these areas it is not possible for personnel to safely clear from fouling train movement. These areas are designated with reflective "No Clearance" signs on the Operating ROW and by markings on the MetroLink Alignment Schematic.

To access a No Clearance Zone, a temporary restriction must be issued for <u>BOTH</u> tracks.

For unforeseen or emergency situations, OCC can authorize entry into No Clearance Zones for short durations without the issuance of a temporary restriction, but the following steps must be taken:

- 1. Train operation must be temporarily stopped on the track(s) in the area where the worker(s) will be located.
- 2. Normal Train operation in the affected area cannot resume until OCC is advised by the worker(s) that they are no longer fouling the track on which the train will operate.
- 3. Trains must pass the worker(s) at restricted speed, if personnel remain within the Operating ROW.

Date



Exhibit A

Pe	m	it	#.

MetroLink Contractor - Right of Way Temporary Work Permit

This permit must be submitted by 12 P.M. (noon) on Wednesday prior to the work week requested email to: rowworkpermits@metrostlouis.org (If unable to email) Fax to: 314-335-3429 MetroLink Operations Control Center Manager 314-982-1400 x2851 Company: Requester: Email Address: Cell: Fax: Office: (In Lieu of Email Address) Contractor's Metro Contact: Description of work to be performed and equipment and tools to be used: If within 20ft a Metro Qualified Will personnel or equipment be within 20ft. Self No Metro Flag Person will be required from center of nearest track at anytime? Will work or equipment be within 10ft. of the Will any excavating be performed No No Yes (by hand or machine)? closest overhead catenary wire at anytime? If excavating is being performed Is the work described above being performed No Dig Number must be provided under a METRO contract? Finish Date: Dates Work Performed: Start Date: Finish Time: Enter Time in 24hr. Format: Start Time: From MP: To MP Work Location by MP: Track 2 Both Off Yard Track 1 Track Track Track to be Accessed: Westbound Eastbound Tracks understand that before entering the MetroLink Right-of-Way, and prior to the start of any work, permission must be obtained from Operations Control Center (OCC) via a Metro issued portable radio on the appropriate Operations channel for my work location. I understand all workers and equipment must remain 20ft. or more from the center of the nearest track at all times, if at anytime 20ft. cannot be maintained a restriction is required and the Contractor is responsibile for having a MetroLink Certified Flagperson present with speed boards in place. If Metro radio fails OCC should be reached by phone at 314-289-6870. Metro Maintenance of Way Use Only Tier Training Completed? Yes Initial: M/L Operations Insurance Approved? Dig Number: : Initial: Signal: Cable Locate Required? Yes Initial: No Dig Number: Comm: Cable Locate Required? Yes No Dig Number: Initial: **Traction Power** Power Down Required? Dig Number : Initial: No Rail Fac. Maint: Flagperson Scheduled? Yes BLANK Initial: Track: Work is Approved? No Metrolink Operations' Use Only **Track Out of Service** Restriction Speed Signs Ewing Yd. Track #1 Track # 2 29th St. Yd. No No Operations: **Moving Crew** Single Track No No Yes

Operation Authorization Signature

EXHIBIT B - Metro Permit Fee Schedule

Construction Access Permit Fees

A Construction Access Permit is required prior to outside parties commencing any underground, overhead, or surface work on the Metro's Light Rail System. Permit fees are based on the permit applicant's scope of work and Metro's labor and indirect costs. The fees listed are not comprehensive and Metro may apply other fees associated with the temporary access permit to Metro Right-of-Way as appropriate. Metro reserves the right to waive these fees as appropriate when in the best interest of the agency.

1. Permit Application Fee

\$125.00

The Permit Application Fee is **non-refundable** and covers Metro's administrative costs associated with processing the Temporary Work Permit, which includes review of work plans, proof of insurance, and track allocation in accordance with SOP 101.17, Policy and Procedure for Work Performed on MetroLink Right-of-Way and SOP 101.23, Permit Numbers and Track Allocation. This fee is incurred on a project basis and will only be incurred once on a project regardless of duration.

2. MetroLink Safety Training

All Contractor employees that will perform work on the MetroLink Right-of-Way will be required to receive safety training from Metro. Training Sessions are regularly scheduled at a minimum of 2 times per month. Regularly scheduled training sessions are offered to contractor employees at no cost. If a contractor requires specially scheduled training classes, the following fees will apply. Fees are per class. There is a maximum of (15) fifteen students per class. Typical duration of class is also indicated below.

Tier 1	(1.5 hrs)	\$150.00
Tier 2	(2.0 hrs)	\$250.00
Tier 3	(2.0 hrs)	\$250.00

3. Power Up/Power Down Fee

\$500.00

The Power Up/Power Down Fee is a daily fee, which covers the Agency's labor and non-labor costs for sectionalizing, de-energizing, and restoring the MetroLink Traction Power System to normal state. The Agency shall determine this requirement per SOP 104.01, Catenary Lockout Procedure.

4. Flagging Hourly Rate

The Flagging Service Fee is an hourly rate per flag person, which covers the Agency's labor and non-labor costs for providing flag person(s) along the MetroLink Right-of-Way.

Straight Time (Monday – Friday 7:00am – 3:30pm)	\$35.00/hr
Overtime Rate	\$50.00/hr

5. Lookout Hourly Rate

The Lookout Service Fee is an hourly rate per lookout, which covers the Agency's labor and non-labor costs for providing lookout(s) along the MetroLink Right-of-Way.

Straight Time (Monday - Friday 7:00am - 3:30pm)	\$35.00/hr
Overtime Rate	\$50.00/hr

6. Pilot Hourly Rate

The Pilot Service Fee is an hourly rate per pilot, which covers the Agency's labor and non-labor costs for providing pilots(s) to escort contractor track cars or work equipment.

Straight Time (Monday - Friday 7:00am - 3:30pm)	\$35.00/hr
Overtime Rate	\$50.00/hr

7. Bus Bridge Hourly Rate

The Bus Bridge Fee is an hourly rate, which covers the Agency's labor and non-labor costs for utilizing buses for customer transport during work on the MetroLink Right-of-Way. This fee will be determined on a case-by-case basis.

April, 2002 EXHIBIT D

INDEMNIFICATION AGREEMENT and REQUIRED INSURANCE COVERAGE¹

SECTION 1. - INDEMNIFICATION

In accordance with the Agency's "Right-of-Entry" requirements and in exchange for the authorization to perform work on or near the MetroLink right-of-way, contractor agrees, to the fullest extent permitted by applicable law, to indemnify, defend and hold harmless the Agency and its commissioners, officers, officials, agents, and employees from and against any and all claims, suits, actions, judgments, fines, penalties, loss, damage, costs, or expense (including but not limited to attorneys' fees), whether direct or indirect, due to bodily or personal injury, death, sickness or property damage (including loss of use thereof) arising out Contractor's activities.

In the event a third party makes a claim or files a lawsuit against the Agency for injury or death to persons, for damage to property, or for costs associated with loss of business, caused in any way by the contractor's activities, the contractor shall defend such claims or suits, on behalf of the Agency at contractor's sole cost and expense.

Contractor further agrees to repair any damage or disturbance to Agency property caused by the contractor's activities or caused, in whole or in part, by its subcontractors, employees or agents. Such repairs must be completed in a manner approved by and within a time-frame defined by the Agency.

SECTION 2. - **INSURANCE REQUIREMENTS**

The contractor shall procure and maintain for the duration of its work on, under, or over the MetroLink right-of-way, a policy or policies of insurance for the protection of both the contractor and the Agency and its commissioners, officers, officials, agents, and employees. The Agency requires certification of insurance coverage from all contractors and subcontractors prior to commencing work on, under, or over the MetroLink right-of-way. Please carefully review the requirements outlined below.

IT IS RECOMMENDED THAT THE CONTRACTOR CONFER WITH ITS INSURANCE BROKER OR AGENT PRIOR TO SUBMITTING THE "METROLINK RIGHT-OF-WAY WORK REQUEST" TO DETERMINE THE AVAILABILITY AND APPLICABLE COST, IF ANY, OF CERTIFICATES, ENDORSEMENTS, COVERAGES, AND LIMITS REQUIRED.

SECTION 3 - MINIMUM SCOPE AND EXTENT OF COVERAGE

A. GENERAL LIABILITY

Commercial General Liability, ISO coverage form number CG 00 01 ("occurrence" basis or ISO equivalent.

If ISO equivalent or manuscript general liability coverage forms are used, minimum coverage will be as follows: Premises/Operations; Independent Contractors; Products/Completed Operations;

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¹ These insurance specifications are applicable only to contractors engaged by parties other than the Agency. For specifications applicable to Agency construction contract or maintenance contracts that require access to the track or ML ROW, please consult the Department of Risk Management.

EXHIBIT D - ML ROW INS REQUIREMENTS

Personal Injury; Broad From Property Damage including Completed Operations; Broad Form Contractual Liability Coverage to include Contractor's obligations under <u>INDEMNIFICATION</u> above.

B. AUTOMOBILE LIABILITY

Business Automobile Liability Insurance, ISO Coverage form number CA 00 01 covering automobile liability, code I "ANY AUTO".

C. WORKERS' COMPENSATION and EMPLOYER'S LIABILITY

Statutory Workers' Compensation Insurance for all states and jurisdictions where Contractor has work locations, a Broad form Ali States Endorsement for incidental contact, standard Employer's Liability Insurance, and coverage for U.S. Longshoremen's and Harbor Workers Act and FELA, where applicable.

D. RAILROAD PROTECTIVE LIABILITY

Railroad Protective Liability Insurance covering the work to be performed under this contract by the successful contractor if such work is to be performed on or adjacent to the Metro Link right-of-way. The policy form should be ISO CG 00 35 (06/90) or other equivalent RIMA/AASFITO approved form including coverage for "Physical Damage to Property" and coverage for pollution arising out of fuels or lubricants brought to the job site (i.e., ISO Form CG 28 31). If a Lloyd's or other similar "Claims Made" policy form is used, the Extended Claims Made Date shall be a minimum of two years past the expiration date of the policy.

Alternative: In many instances, it is possible for an organization to address this exposure by an endorsement to its commercial general liability policy if it is not in the construction business per se or if it does not customarily work in proximity of a railroad right-of-way. The applicable endorsement is CG 24 17 — Contractual Liability — Railroads. A copy of the endorsement must be attached to the required Certificate of Insurance.

SECTION 4. - MINIMUM LIMITS OF INSURANCE

A. GENERAL LIABILITY

\$2,000,000 combined single limit per occurrence for bodily injury, personal injury, and property damage.

\$2,000,000 annual aggregate.

B. <u>AUTOMOBILE LIABILITY</u>

\$2,000,000 combined single limit per accident for bodily injury and property damage.

General Liability and Automobile Liability insurance may be arranged under individual policies for the full limits required or by a combination of underlying policies with the balance provided by a form following Excess or Umbrella Liability policy.

C. WORKERS' COMPENSATION/EMPLOYER'S LIABILITY

Workers' Compensation limits as required by applicable State Statutes (generally unlimited) and minimum of \$500,000 limit per accident for Employer's Liability.

EXHIBIT D - ML ROW INS REQUIREMENTS

D. RAILROAD PROTECTIVE LIABILITY

\$2,000,000 combined single limit per occurrence for bodily injury, personal injury, and property damage.

\$6,000,000 annual aggregate (or \$2,000,000 if the aggregate applies only to claims and legal expenses which arise out of the activities under this contract).

SECTION 5. - DEDUCTIBLES AND SELF-INSURED RETENTIONS

All deductibles, co-payment clauses, and self-insured retentions must be declared to and approved by the **Agency**. The **Agency** reserves the right to request the reduction or elimination of unacceptable deductibles or self-insured retentions as they would apply to the **Agency**, its commissioners, officers, officials, agents, and employees. Alternatively, the **Agency** may request the **contractor** to procure a bond guaranteeing payment of losses and related investigations, claims administration, and defense expenses.

SECTION 6. - OTHER INSURANCE PROVISIONS & REQUIREMENTS

The respective insurance policies and coverage as outlined below must contain, or be endorsed to contain, the following conditions or provisions:

A. GENERAL LIABILITY

The Agency and its commissioners, officers, officials, agents, and employees shall be endorsed as additional insureds by ISO form CG 20 26 - ADDITIONAL INSURED - DESIGNATED PERSON OR ORGANIZATION. As additional insureds, they shall be covered as to work performed by or on behalf of the contractor or as to liability which arises out of contractor's activities on, over, or under the MetroLink right-of-way.

B. GENERAL LIABILITY & AUTOMOBILE LIABILITY

Contractor's insurance coverage shall be primary with respect to the Agency, its commissioners, officers, officials, agents, and employees. Insurance or self-insurance programs maintained by the Agency shall be excess of the contractor's insurance and shall not contribute with it.

Contractor's failure to comply with the terms and conditions of these insurance policies shall not affect or abridge coverage for the **Agency** or for any of its commissioners, officers, officials, agents, or employees.

C. WORKERS' COMPENSATION and EMPLOYER'S LIABILITY

The contractor and contractor's workers' compensation insurer shall agree to waive all rights of subrogation against the Agency, its commissioners, officers, officials, agents, or employees for claims, losses, or expenses which arise out of contractor's activities on, over, or under the MetroLink right-of-way.

D. RAILROAD PROTECTIVE LIABILITY

The Agency, its commissioners, officers, officials, agents, and employees are to be covered as <u>named insureds</u> or as <u>additional named insureds</u> with respect to work performed by or on behalf of the contractor or as to liability which arises out of contractor's activities on, over, or under the MetroLink right-of-way.

Contractor's failure to comply with the terms and conditions of these insurance policies shall not affect or abridge coverage for the Agency, its commissioners, officers, officials, agents, or employees.

EXHIBIT D - ML ROW INS REQUIREMENTS

E. ALL COVERAGES

Each insurance policy required by the MetroLink right-of-way license shall contain a stipulation, endorsed if necessary, that the Agency's Director of Risk Management will receive a 30-day advance notice of any policy cancellation other than cancellation for non-payment of premium. Ten (10) days advance notice is required for policy cancellation due to non-payment of premium.

SECTION 7. - **INSURER QUALIFICATIONS/ACCEPTABILITY**

Insurance required hereunder shall be issued by an A.M. Best "A" rated, Class VII insurance company approved to conduct insurance business in the state(s) of Missouri and/or Illinois.

SECTION 8. - VERIFICATION OF INSURANCE COVERAGE

Prior to commencing work on, over, or under the MetroLink right-of-way, the contractor shall furnish the **Agency** with <u>CERTIFICATE(S)</u> OF <u>INSURANCE</u> and with any applicable original endorsements evidencing the required insurance coverage. The insurance certificates and endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf.

All certificates and endorsements received by the Agency are subject to review and approval by the Agency's Director of Risk Management. The Agency reserves the rights to require complete, certified copies of all required policies at any time.

If the work on, over or under the MetroLink right-of-way will exceed one (1) year — or, if any of contractor's applicable insurance coverage expire prior to completion of the work — the contractor will provide a renewal or replacement certificate before continuing work on, over, or under the MetroLink right-of-way.



700 South Ewing Street • Saint Louis, Missouri 63103-2902

Operating	Procedure	SOP#	Date:	Page 1 of 3	
Operations Department		101.23 April 8, 2009		REVISION	
Title: PERMIT NUMBERS AND TRACK ALL OCATION					

Classifications: OCC - Rail Dispatcher - Contractors

Other Departments: Real Estate - MOW - Operations - Safety Risk Management

Issued by:

Chief of MetroLink Operations

Supersedes: SOP 101.23 dated November 12, 2007

I. OBJECTIVE

The purpose of this procedure is to document the process for issuing permit numbers and track allocation planning in an effort to maintain a safe environment and efficient transit system for MetroLink customers, employees, and contractors when work is being performed on the MetroLink operating right-of-way.

The scope of this procedure is limited to Metro's internal procedures for issuing permit numbers, track allocation planning and the daily operating clearance. Refer to SOP 101.17 for procedures and requirements regarding applications for a temporary work permit for contractors and Metro departments.

II. ASSIGNING PERMIT NUMBERS

MetroLink Operations assigns all permit numbers for work within the operating Right-of-Way and communicates this number to the contractor following the logic in the example below.

Current Year	Date the Permit	"C" Identifies a Contractor Permit	Sequential Order of
	Goes into Affect	or a "M" Identifies a Metro Permit	the Weekly Permits
07	0326	С	002

The example permit number 07-0326-C002 refers to the 2nd Contractor Permit for the week of 3/26/07.

III. PROCEDURE FOR TRACK ALLOCATION PLANNING

 MetroLink Operations receives Right-of-Way Temporary Work Permit (SOP 101.17 Exhibit B) and/or Metro Personnel Right-of Way Work Permit (SOP 101.17 Exhibit E) no later than Wednesday 12 Noon, prior to the week the work will be accomplished. Permits that are not turned in on time will no longer be approved unless authorized by the Chief of MetroLink Operations. Permit must be submitted every week during the length of the proposed project. Permit numbers will be assigned after the track allocation meeting, and will appear on the form after signatures are received.



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Operating Procedure		SOP#	Date;	Page 2 of 3
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Note: If there is a Metro recognized holiday on Thursday, the work permits are due on **Tuesday, 12 Noon**.

- 2. MetroLink Operations develops a detailed Track Allocation Worksheet for review in weekly Track Allocation Planning meeting.
- 3. All requestors or designees are required to attend weekly Track Allocation meeting with MetroLink Operations, Maintenance of Way (MOW), and Safety to respond to questions regarding proposed work. The Metro Technical Representative or Project Manager is ultimately responsible for all Metro Contracts and Contractors working on our property. Permit can be rejected if requestor or designee does not attend.

Note: Scheduling of Right-of-Way activities is subject to availability of MOW, Operations and Safety personnel and customer service considerations based on the impact the proposed work has on service quality and train schedules.

Work within the right-of-way requiring temporary restrictions generally start at 7:30 AM daily. Some work will be restricted to the after revenue service hours approximately 1:30 AM to 3:30 AM.

4. Track Allocation planning meetings are held every Thursday at Ewing Facility to schedule work within the Right-of-Way for the following week.

Note: When the week includes a Metro recognized holiday on Thursday, the Track Allocation Planning meeting is scheduled for Wednesday.

- 5. All permits are reviewed and must be approved by MetroLink Operations and MOW at the weekly Track Allocation meeting prior to work being performed.
- 6. MetroLink Operations maintains approved work permit(s) and current track allocation in a weekly track allocation folder maintained in the Operations Control Center (OCC).
 - The approved work permits and track allocations are maintained on file for 1 year.
 - MetroLink Operations maintains an electronic copy of approved work permits on the file server for a minimum of 3 years.
- 7. MetroLink Operations issues approved Track Allocation sheet to affected parties.
- 8. MetroLink Operations provides contractors a copy of approved temporary permit (SOP 101.17, Exhibit B), which must be available on the project site to confirm permission to occupy the Right-of-Way.

IV. DAILY CLEARANCE UPDATES FOR RESTRICTION CHANGES

1. Work requiring temporary restrictions will be indicated on the MetroLink Operating Clearance. Operations will issue the MetroLink Operating Clearance daily.



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Operating	Procedure	SOP#	Date:	Page 3 of 3	
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- Title: PERMIT NUMBERS AND TRACK ALLOCATION
- 2. Limits of work are typically shown between mileposts. Every effort should be made to minimize the length of these work areas and to plan weekly work activities in advance.
- 3. If it is not possible to identify a small work area within the limits of the approved work permit, larger limits can be identified with specific work locations communicated daily to the OCC.
- 4. All changes must be within the limits on the approved work permit. OCC will not authorize work outside the limits of the approved work permit.
- 5. ALL DAILY CHANGES NEED TO BE COMMUNICATED VIA EMAIL TO OCC AT THE END OF THE WORK SHIFT, BUT NO LATER THAN 2:00 AM OF ANY DAY OF SCHEDULED WORK PRIOR TO REVENUE SERVICE.
- 6. All correspondence needs to be sent to: dailyclearanceupdates@metrostlouis.org
- 7. The e-mail should contain the current restriction number, Contractor or Metro Manager Name, updated location (by mileposts), time and track number.
- 8. OCC reserves the right to terminate work activities if the actions do not match what is on the Daily Clearance.
- 9. Requestors must have their Flagperson contact OCC **via Motorola Radio** for permission to access right-of-way prior to any activity conducted. OCC has authority over all activity along the MetroLink right-of-way at all times.

PROJECT SAFETY REQUIREMENTS FOR WORK ON OR ADJACENT TO AN ACTIVE RAILROAD

PART 1 GENERAL

1.01 DESCRIPTION

A. This section includes specifications for temporary controls to be exercised by the Contractor during activities along the active MetroLink line, including safety operations, maintenance of Metro traffic, identification of employees and, protection of work and adjacent property.

1.02 GENERAL

A. Applicable requirements of Section 011100, Summary of Work

1.03 RELATED SECTIONS

- A. Section 007200 General Conditions
- B. Section 011100, Summary of Work
- C. SOP 101.17, Policy and Procedure for Work Performed on MetroLink R.O.W.
- D. SOP 103.04, Temporary Restrictions Flagpersons Duties

1.04 SECTION INCLUDES

- A. Safety of Operations
- B. Maintenance of Railroad Traffic
- C. On Track Storage of Materials
- Erection, Demolition, or Other Rigging Operations Over or Adjacent to the ML Operating Rightof-Way

1.05 SAFETY OF OPERATIONS

- A. Responsibility: The work covered by this Contract will involve safety of persons and property on an operating railroad; therefore, unusual skill and experience is required of the Contractor to safely do this work.
- B. Contractor shall comply with, and shall require his subcontractors to comply with, all applicable local, state and federal safety and health regulations in the performance of the Work. Each Contractor shall enforce proper safe working practices by its own employees and the employees of its subcontractors.
- C. It is the duty and responsibility of the Contractor to provide for the instruction and training of each of its employees in the safe performance of the Work, and it is the duty of the Contractor to ensure its subcontractors' employees are properly instructed in the safe performance of the Work. It is the further duty and responsibility of the Contractor and subcontractor to provide tools and equipment that comply with all applicable local, state and federal safety standards.
- D. Before the start of work, all Contractor and Subcontractor employees shall receive on site safety orientation and MetroLink System Safety (MLSS) training. This training will be conducted by a Metro employee, and will not exceed three hours. No Contractor employees may work on the Operating Right-of-Way until they have successfully completed the MLSS. MLSS must be completed annually. MLSS is offered at Metro facilities twice each month.
- E. Flagpersons: To ensure the safety of Metro operations, qualified flag persons will be required whenever work will be conducted on the Operating Right-of-Way. No work can be performed on

the Operating Right-of-Way without qualified flaggers. Flaggers must have a current certification card on their person whenever flagging. Flag certification must be renewed annually. The Contractor shall be responsible for allocating and coordinating the flag persons required for work.

No Contractor shall work within the Operating Right-of-Way without a flag person(s). Flag training is offered at Metro facilities twice each month.

- F. All Operators of high-rail vehicles must successfully complete Metro Track Access class, and have a current Track Access certification card on their person when operating these vehicles. Track Access certification must be renewed annually. Track Access training is offered twice each month at Metro facilities.*
- G. No work shall be performed on the Operating Right-of-Way unless a work permit has been submitted to the Metro Project Manager and approved by MetroLink Operations. The Work Permit must be submitted by Wednesdays at 12:00 noon for all work to be performed the following week beginning on Monday. The Contractor must attend the Track Allocation meeting each Thursday at the Ewing Yard with MetroLink Operations to discuss the work permit. Work Permits are only valid for one week (Monday through Sunday) of work.
- H. Electric Traction Power: The Contract requires the Contractor to work under live wires. The Contractor is hereby advised that certain types of equipment will not be permitted to work under the live wires. No extras will be allowed because of equipment restrictions. The Contractor shall submit to the Metro Project Manager a listing of all equipment to be used on the Contract prior to starting work. All equipment will be field inspected and approved by Metro Safety personnel.
- I. In order that the Work/Operations will be completed with the greatest degree of safety, the Contractor and Subcontractors are expected in their operations to follow, at a minimum, these safety practices:
 - To comply with all laws, ordinances, regulations and best practices of Metro, OSHA, NEC, and all other federal, state and local government agencies having jurisdiction over this project.
 - 2. To cooperate with and comply with any recommendations made by Metro Safety Department.
 - 3. Pre-job planning relative to controls for all safety and health hazards is required. This planning shall be in the form of a Job Safety Analysis (JSA), which must be submitted to the Metro Safety Department before the start of work. (Forms and instructions are available from the Metro Safety Department.)
 - 4. Maintain excellent housekeeping throughout all areas of involvement, on a daily basis, minimum, in order to prevent work hindrance, slowdown and hazards.
 - 5. Report all accidents/incidents on the Operating Right-of-Way to OCC IMMEDIATELY, and using the appropriate forms, submit a thorough and detailed investigation of each accident/incident to OCC.
 - 6. Require employee participation in toolbox safety meetings, special training sessions, and the New Employee Orientation Program.
 - 7. Require supervisors to correct all unsafe acts and conditions immediately.
 - 8. Require supervisors to conduct or participate in the required weekly toolbox meetings in cooperation with the safety representative.
 - Require supervisors to be familiar with the requirements of the fire protection, severe weather, evacuation, and other emergency plans. Further, supervisors must be prepared to have employees react as necessary in response to an alert or other implementation of these plans.

10. All Contractor employees are required to wear hard hats, safety shoes or boots, full cover clothing and reflective safety vests when working on the Operating ROW, and carry track lights when working from dusk to dawn, or when visibility is restricted.

Employees must wear prescribed safety apparel and personal protective equipment where required and must not wear loose, dangling, or ill-fitting clothes, jewelry or objects. Employees who work under conditions where the length of their hair may obstruct their vision or hearing or result in entanglement with tools, appliances, or machinery, or impair or impede safety in any way, must wear the necessary apparel to ensure their safety, or adjust the length.

Employees working on or near energized circuits, or de-energized capacitive circuits must remove metallic rings, bracelets, jewelry, watches, or any other such object before beginning work.

11. Consider all tracks as in-service operating tracks and be on the alert for trains operating in either direction at all times. Stay off of tracks that are not out of service. Work facing the direction from which trains in regular operation will approach. Contractor's workforce shall indicate to the train operator that they are aware of the approaching train. No work shall be done in the track area when the visibility is poor.

Before crossing any tracks, STOP, and look for trains approaching in either direction. Do not cross tracks unless you have time to walk slowly, and do not take chances. Do not step on the head of the rail.

- 12. Because of the potential safety hazard to the general public, its employees and its equipment in these types of operations, Metro reserves the absolute right to restrict access to its property. Any person will be removed and barred from Metro property if, in the sole opinion of the Metro Project Manager or Metro Safety Department, that person constitutes a safety risk. This includes, but is not limited to, working or flagging on the Operating Right-of-Way prior to completing the required Metro training classes.
- 13. When standing beside the tracks, be sure that clothing cannot catch on any part of a moving train. Loose clothing is dangerous.
- 14. Do not step on track behind stopped rail cars, particularly those arriving at stations, or stopped in the Yard due to the possibility of the cars being reversed.
- 15. Contractor employed Supervisors, Foremen and Flagpersons shall be responsible for the safety, safety instructions and safe performance of all employees under their immediate supervision. They must see that all persons working under their supervision receive warnings of approaching trains and other equipment in time to reach a safe place. Immediate supervisors must instruct inexperienced employees of safe methods in performing their duties.
- 16. Before permitting workers to be on the track, the Foreman or Flagperson will have an understanding with all of the employees as to where they will go when necessary to clear for an approaching train.
- 17. Do not attempt to carry heavy material across tracks without permission of the Metro Project Manager or Operation Control Center.
- 18. Until it has been ascertained that proper protection has been afforded, hoisting equipment shall not be swung into position where trains on an adjacent track might strike it. While trains are passing on an adjacent track, hoisting equipment or other equipment that could foul the track must be stopped.

- 19. The Metro Project Manager shall have the right to restrict the operation of fouling or ontrack equipment when, in the Metro Project Manager's opinion, the equipment is not in satisfactory condition to be safely operated. The Metro Project Manager shall also have the right to prohibit the operation of any fouling or on-track equipment by any Contractor employed operator who, in the Metro Project Manager's opinion, is not qualified to operate said equipment in a safe manner.
- 20. Keep hands and feet clear of track power switches. Do not step on track switches, switch equipment or frogs.
- 21. If a safety situation arises requiring an immediate power shutdown, notify the Metro Controller located at the Ewing Operation Control Center by radio or by phone at (314) 289-6870 and the Metro Project Manager.

22. Handling Work Near Overhead Wires

- a. All overhead wires, including the catenary, are to be considered live at all times.
- b. Insulating covering of wire should not be depended upon for protection against electric shock.
- c. No employee shall do any work near high voltage wires or apparatus where it is possible for any part of the employees body or tools and material with which the employee is working to come within ten (10) feet of such wires, unless a Metro Electric Traction Power Maintenance employee is assigned to observe the safety of the operation. Identify and adhere to Metro's red-tag power-off procedure if a power shut down is required. (Refer to Metro Standard Operating Procedure SOP 104.01). If it is necessary that the catenary be de-energized, Red Tag Authorization is required.
- d. The use of metal ladders on the right-of-way is forbidden.
- e. In electrical environments, all ladders must be properly insulated and dry so as to avoid electrical conduction.
- f. Ladders must be inspected for soundness and completeness before use.
- g. Leaning ladders must be securely placed at the top and held from moving at the bottom before they are used.
- h. Only one person may occupy a ladder at a time. No one shall stand or kneel on steps above the indicated limit nor shall anyone stand or kneel on the topmost step.
- i. When equipment is used in electrified territory, or in the vicinity of any overhead wires, the Contractor must exercise special care to safeguard all persons in the area. Special attention must be given in the vicinity of overhead bridges and other structures where the wires may be depressed. If, in the opinion of the Metro Project Manager, the required clearances cannot be maintained, or hazards are involved, the Contractor must request a Metro Electric Traction Power Maintenance employee.
- j. No conducting (metallic) measuring tapes shall be used on the Project.
- k. No work above the catenary shall be performed unless the Metro Project Manager has specifically authorized it.
- 23. The safety and continuity of operations of trains of Metro shall be of the first importance. They shall at all times be protected and the Contractor shall arrange its work accordingly. Whenever the work may affect the safety of movement of trains, the method of doing such work, together with the proposed sequence of operations and time schedules for it shall be submitted to the Metro Project Manager.

- 24. Excavation under the tracks or the removal of ballast is prohibited. Under track cable installations must be bored. When any work adjacent to the tracks involves excavation, and the excavation extends below the bottom of the crossties, or where the excavation may affect the stability of the railroad embankment and/or structure, the Contractor shall adequately brace such excavation. Prior to starting any such excavation, detailed drawings of the proposed bracing methods shall be prepared.
- 25. The responsibility for cooperation in the maintenance of railroad traffic will be entirely upon the Contractor and no claims may be made against Metro for delay or any other interference that may have caused the Contractor's operations to be delayed in connection with any work under this Contract.
- 26. An operating track is fouled for operating safety purposes when any object is brought closer than twenty (20) feet horizontally from the centerline of the nearest in-service track. Equipment shall be considered, as fouling the tracks when working in such a position that failure of the equipment, with or without load, will obstruct the track.
- 27. With respect to work on or near the active Operating Right-of-Way, Metro's Operation Control Center has complete authority to stop work if necessary.
- 28. While concrete breaking or cutting is being done, suitable barriers must be erected to protect passengers, passersby, Metro employees and others from flying debris, dust and rubble. All Contractor employees must wear safety eyeglasses, face shield and hearing protection when working in the construction area while concrete breaking or cutting is being done. When masonry saw cutting is done, a water wash down must be run simultaneously.
- 29. Gas or electric cutting, burning, or welding must be done in accordance with the guidelines of NFPA 51B Fire Prevention in Use of Cutting and Welding Processes. Spark shields and a fire watch must be posted when burning. A supply of water must be readily available. A welding permit from local authorities must be secured.

1.06 CONTRACTOR'S SAFETY PROGRAM

The Contractor shall, prior to commencing Work on the site, submit to the Metro Project Manager for review and approval, three copies of a detailed Safety and Health Plan. This plan shall meet and exceed all applicable OSHA, ANSI, NFPA, Metro, etc., standards and regulations.

- A. The program shall include copies of the appropriate forms the Contractor will use for Safety Inspections, toolbox talks, Competent Person Inspections, Safety Violation Notices, and other appropriate submittals relating to safety on this project.
- B. A signed copy of the Safety Program shall be kept on site and available at all times. The Contractor shall submit, on behalf of any subcontractors prior to the subcontractor commencing Work on the site, the subcontractor's written endorsement and acceptance of the Contractor's safety procedures and program.
- C. The Contractor's written procedures and program shall address, but not be limited to, the following items affecting employee safety:
 - 1. Administration of safety program
 - 2. Chemical and fuel handling
 - 3. Work in confined spaces
 - 4. Demolition work (if applicable)
 - 5. Drug and alcohol usage
 - 6. Electrical tools and lighting

- 7. Excavation and shoring
- 8. Fall protection
- 9. Stairs and ladders
- 10. Scaffolds and staging
- 11. Fire protection
- 12. Hoisting and lifting
- 13. Housekeeping
- 14. Noise control
- 15. Personal protective gear
- 16. First aid medical treatment
- 17. Sanitary facilities
- 18. Security
- 19. Signs, posters, signals
- 20. Temporary heating
- 21. Employee training
- 22. Unsafe practices
- 23. Hazard Communications
- 24. Recording/Reporting Incidents and Injuries
- 25. Emergency Action Plans
- 26. Work in proximity to overhead energized high voltage lines, if applicable

1.07 SAFETY PROCEDURES

- A. Prior to commencing Work, Contractor and its Subcontractor(s) shall meet with the Metro Project Manager, or its designee, and Metro Safety Department to review and agree to the following:
 - 1. Safety procedures at the Project site.
 - 2. Safety orientation and meetings for employees
 - 3. Tagging and lockout system procedures
 - 4. Equipment utilization and restrictions
 - 5. Project security and access
 - 6. Employee Orientation Safety Training
 - 7. Accident/Incident Reporting

1.08 EMPLOYEE SAFETY MEETINGS

- A. Contractor and its Subcontractors shall comply with OSHA 1910.1000 requirements that state, "each employer shall instruct each employee in the recognition, prevention and avoidance of unsafe conditions and the regulations applicable to its work environment." Each employee that works on the project shall attend a safety orientation course conducted by Metro.
- B. Contractor shall conduct routine safety meetings with its employees and its Subcontractors' employees. These safety meetings shall, at a minimum, occur weekly. The Contractor shall furnish to the Metro Project Manager and Metro Safety Department documentation of each safety meeting including date, topics discussed, list of attendance of the Contractor and Subcontractor employees and the names of individual(s) presiding at the meeting.

1.09 ACCIDENT AND INCIDENT REPORTING

- A. In the event of an injury to an employee of the Contractor or its Subcontractor(s) requiring treatment in addition to first aid, the employer shall furnish to the Metro Project Manager and Metro Safety Department a copy of the "First Report of Injury" and a Foreman's Accident Report within 24 hours after the injury occurrence.
- B. In the event of an accident involving property damage or injury to a person who is not an employee of the Contractor or its Subcontractor (s) the Contractor shall immediately notify the Metro Project

- Manager and Metro Safety Department and submit a copy of the Foreman's Accident Report to the Metro Project Manager and Metro Safety Department within 24 hours after the occurrence.
- C. In the event the Contractor's Superintendent, or other individual designated by the Contractor shall witness or be made aware of any unsafe act or practice by another contractor, immediately notify Metro Safety Department and Metro Project Manager and confirm the notification within 24 hours after the notification.

1.10 PROJECT EQUIPMENT AND VEHICLES

A. Contractor or its Subcontractor(s) shall supply proper equipment for the Work and shall take the necessary precautions for safe operation of equipment, shall maintain equipment according to current regulations and manufacturer specifications, and shall accept full responsibility to ensure that necessary safety equipment is supplied and used as required for the Work. Contractor agrees not to permit any worker on the site who fails or refuses to use the provided safety equipment.

1.11 MUTUAL COOPERATION

A. Contractor shall cooperate fully with the Metro Project Manager, Metro Safety Department, and other contractors to ensure a safe and sanitary work place. The Metro Project Manager may, as it deems appropriate, schedule special meetings with Contractor and its subcontractors individually or jointly to address general or specific safety issues or concerns involved in the Work. Contractor shall attend such meetings when requested by the Metro Project Manager, and shall have those employees or Subcontractors directly involved in the Work in attendance if so requested at no additional charge to Metro.

1.12 SAFETY DIRECTIVES

A. Contractor shall at all times perform the Work in a safe manner. In the event that the Contractor, its employees or its subcontractors' employees, perform work in an unsafe manner, the Metro Project Manager in concurrence with Metro Safety Department may direct that the Work be stopped until the Contractor implements the appropriate safety measures. Any failure of the Contractor, or its Subcontractors, to comply with the Metro Project Manager's directions in safety related matters shall be cause for an immediate suspension of the Work.

1.13 HAZARDOUS SUBSTANCES/MSDS

- A. Contractor shall maintain a copy of its Written Hazard Communication Program, including chemical inventory lists, Material Safety Data Sheets (MSDS), as required by 29 CFR 1910.1200, and copies of all OSHA required formal programs, at the job site during all work hours. Contractor will notify the Metro Project Manager, in writing, as to the location of these items and the name(s) of the person(s) responsible for maintaining them.
- B. Ensure on-site storage conditions are legally provided and maintained and that any discarded chemicals are disposed of in accordance with all federal, state and local rules, regulations and ordinances.

1.14 DRUG TESTING SITE

- A. Metro has declared the Operating ROW to be a drug-free workplace. The use, possession, or being under the influence of drugs or alcohol while on Metro property is forbidden. Any person violating this rule will be immediately removed from Metro property at the discretion of the Metro Project Manager.
- B. Pre-employment testing and fitness for duty assessment testing (e.g. post accident, post injury, observed behavior/for cause) is required for work designated as safety sensitive.

1.15 PROTECTION OF WORK AND ADJACENT PROPERTY

A. Public Utilities: The terms public utility or public utilities used in this article shall be construed to include those publicly and privately owned. Within the Contract Site, there are public utility facilities, and notwithstanding any other clause or clauses of this Contract, the Contractor shall not proceed with its work until it has made diligent inquiry at the office of the Metro Project Manager, the utility companies and municipal authorities or other owners to determine their exact location. The Contractor shall notify, in writing, the utility companies, municipalities, or other owners involved, of the nature and scope of its operations that may affect their facilities and operations. Two copies of such notice shall be transmitted simultaneously to the Metro Project Manager.

It shall be the responsibility of the Contractor to locate and protect all utilities from damage. Drawings on file with Metro may indicate the location of existing cables, sewers, gas and water lines and other utilities known to exist in the working area. The indicated locations may be different from their actual locations and Metro does not warrant the accuracy of this information. Some utilities may be encountered that are not shown on the drawings.

The Contractor shall carry out its work carefully and skillfully and shall support and secure public utility facilities to avoid any damage to them. Flow of sewers and drains shall be maintained. The Contractor shall not move any public utility facility without the utilities written consent. Upon completion of the work, the utility will inspect, test and approve the work to insure that the work is in accordance with utility requirements and the conditions are safe and not less than conditions prior to the movement. If the Contractor damages public utility facilities, the Contractor shall immediately notify the public utility and Metro and repair all damage at the Contractor's expense. Competent skilled workers shall only repair Service connections damaged by the Contractor. The Contractor is responsible for determining the location of all underground utilities. The Contractor shall be held responsible for any damage done to any structures in the prosecution of the work. The Contractor shall exercise any precaution necessary to prevent damage in working underneath or adjacent to any underground structure. If it becomes necessary for a utility company, through emergency purposes or because of unforeseen conditions, to repair, reconstruct, relay or relocate its structures within the Contract area, after the Contractor has commenced its work, then the said utility company and the Contractor shall make suitable arrangements to overcome such interference. No compensation will be allowed the Contractor for the disruption to its work. Metro may grant extra days at no cost for the delay that has occurred. All of the above shall be accomplished at the direction of the Metro Project Manager and at no extra expense or charge to Metro.

The Contractor shall cooperate with all utility owners in the relocation, removal or replacement of utility structures so as to avoid interruption of service. Requests for interruption shall be submitted in writing to the Metro Project Manager and to the utility 15 days in advance of the outages or changes to service. No interruption shall be made without prior approval.

- B. Protection of Adjacent Facilities: The Contractor shall take efficient and effective means to protect all streets, pavements, curbs, sidewalks, fire hydrants, utility poles, buildings, underground cables, and utilities, and all other facilities adjacent to the site, and all other existing equipment and construction which may be affected by the work.
- C. Responsibility for Repair and Damage: The Contractor shall be responsible for conducting a complete inspection of the existing structures to be reconfigured prior to the start of the work and shall notify the Metro Project Manager in writing regarding prevailing conditions. The Contractor shall be held responsible for any and all damage or unsatisfactory conditions that develop during the course of the work, which were not reported in writing to the Metro Project Manager prior to the start of the work and are deemed by the Metro Project Manager to be the Contractor's responsibility to correct. The Contractor shall make all repairs, replacements or corrections of such damage or unsatisfactory conditions at its own expense to the satisfaction of the Metro Project Manager.

1.16 MAINTENANCE OF METROLINK RAIL TRAFFIC

- A. Metro is a continuously operating facility that cannot tolerate interruption to communications, power and other vital services. To connect new work to existing systems the Contractor shall request such connection 15 days in advance of the proposed connection and shall not start any tie-in without the written approval of the Metro Project Manager.
- B. Approval for outages and tie-ins shall not be granted until the Contractor confirms that all materials and equipment necessary to complete the work are on hand.
- C. Where the Project includes work across, over, under or adjacent to Metro railroad tracks or railroad right-of-way, the Contractor shall safeguard the rail traffic, tracks, track appurtenances, and other Metro property affected by the work. The Contractor shall comply with MetroLink Operations regulations; shall keep the tracks clear of obstructions; shall provide barricades; warning signs, lights, flares, and other warning signals and means of protection; and shall arrange with Metro through the Metro Project Manager for the furnishing of other protective services as Metro may require. Work done within the Metro railroad right-of-way shall be subject to the approval of the Metro Project Manager in all matters affecting railroad property and the safety and operations of the trains. The safety and continuity of railroad operations shall be of the first importance and shall be at all times protected and safeguarded. Work shall be performed carefully and shall be regulated so as to avoid interruption of train movements and damage to the tracks and other facilities and systems of the railroad.
- D. The maintenance of railroad traffic will not be paid under any specific scheduled item but the cost thereof, including the safeguarding of tracks, traffic and appurtenances of the railroad, Contractor's Flagpersons, vehicular flag persons, barricades, lights, signs, signals, warning, other protections and other services, and insurance shall be included in the price proposed for the various items.
- E. Whenever equipment or personnel are working closer than 20 feet horizontally to the centerline of an in-service track, that track shall be considered obstructed and flag protection shall be required. Any operation involving persons, material or equipment which has the capability of obstructing track even while operating beyond 20 feet from the centerline of an in-service track shall also be flag protected.
- F. Cranes, trucks, front loaders, dozers, loaders, or any other equipment shall be considered possible of obstructing the tracks when working in such a position that failure of the same, with or without load, brings the equipment within 20 feet from the centerline of track
- G. A power line is fouled and subject to hazard when any object is brought to a point within 10 feet of that power line.
- H. Except at crossings equipped with automatic protection, crossing of tracks at grade by equipment and personnel is prohibited except by prior arrangement with the Metro Project Manager.

1.17 ON TRACK STORAGE OF MATERIAL

- A. The Contractor shall not permit the storage of materials or equipment upon Metro property without first obtaining written permission from Metro. Cleanup of all chemical spills shall occur immediately upon notice or notification from the Metro Project Manager. All cleanups will be at the Contractor's expense.
- 1.18 ERECTION, DEMOLITION, OR OTHER RIGGING OPERATIONS OVER OR ADJACENT TO THE RAILROAD RIGHT-OF-WAY

- A. Prior to beginning any erection, demolition, or other work involving rigging operations, over or adjacent to the railroad, the Contractor shall submit the following information to the Metro Project Manager:
 - 1. Plan view showing location of cranes, boom length and rigging operational radii, with delivery or disposal locations shown.
 - 2. Crane rating sheet showing cranes to be adequate for 150% of the Lift. Crane and boom nomenclature is to be indicated.
 - 3. Plans and computations showing weight of pick.
 - 4. Location plan showing obstructions, indicating that the proposed swing is possible.
 - 5. Plans showing locations and details of mats, planking, or special decking as may be required by the Metro Project Manager.
 - 6. Written statement from the crane owner giving date of last crane condition and safety inspection and the results of said inspection.
 - 7. Data sheet listing number, type, size and arrangement of slings or other connecting equipment. Include copies of catalog or informational sheets of specialized equipment.
 - 8. A complete procedure, indicating the order of lifts and repositioning or re-hitching of the crane or cranes.
 - 9. Temporary support of any components or intermediate stages.
 - 10. A time schedule of the various stages, as well as a schedule for the entire lifting procedure.
 - 11. All plans and calculations submitted to the Metro Project Manager as required above, must be signed and sealed by a Professional Engineer registered in the State of Missouri or Illinois.
- B. If, during the progress of the work, trains, tracks or other facilities of the railroad are endangered, the Contractor shall immediately do the necessary work as directed by the Metro Project Manager, to restore the operation to a safe condition, and upon failure of the Contractor to carry out the Metro Project Manager's orders immediately, the railroad, at the expense of the Contractor may take whatever steps it deems necessary to restore the operation to a safe condition.
- C. Work Methods:

Whenever any part of the Work may affect the safety or movement of trains, the method of doing the Work shall first be submitted to the Metro Project Manager.

AGGREGATE SUBGRADE IMPROVEMENT (BDE)

Effective: April 1, 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	2. and 3)1031

- Note 1. Crushed RAP, from either full depth or single lift removal, may be mechanically blended with aggregate gradations CS 01, CS 02, and RR 01 but shall not exceed 40 percent of the total product. The top size of the 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 gradations CS 01, CS 02, or RR 01 are used in lower lifts.
- 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.
- **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 gradations CA 02, CA 06, or CA 10 shall be 12 in. (300 mm). The maximum nominal lift thickness of aggregate gradations CS 01, CS 02, and RR 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 the contract specifies that a granular subbase is to be placed on the aggregate subgrade improvement, the 3 in. (75 mm) of capping aggregate shall be the same gradation and may be placed with the underlying aggregate subgrade improvement material.

- **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) or ton (metric ton) for AGGREGATE SUBGRADE IMPROVEMENT or at the contract unit price per square yard (square meter) for AGGREGATE SUBGRADE IMPROVEMENT, of the thickness specified."

Add the following to Section 1004 of the Standard Specifications:

- "1004.07 Coarse Aggregate for Aggregate Subgrade Improvement. The aggregate shall be according to Article 1004.01 and the following.
 - (a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete. In applications where greater than 24 in. (600 mm) of subgrade material is required, gravel may be used below the first 12 in (300 mm) of subgrade.
 - (b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials.
 - (c) Gradation.
 - (1) The coarse aggregate gradation for total subgrade thickness less than or equal to 12 in. (300 mm) shall be CA 2, CA 6, CA 10, or CS 01.

The coarse aggregate gradation for total subgrade thickness more than 12 in. (300 mm) shall be CS 01 or CS 02 as shown below or RR 01 according to Article 1005.01(c).

	COARSE AGGREGATE SUBGRADE GRADATIONS					
Grad No.	Sieve Size and Percent Passing					
Grad No.	8"	6"	4"	2"	#4	
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20	
CS 02		100	80 ± 10	25 ± 15		

	CO	ARSE AGGREGATE SUBGRADE GRADATIONS (Metric)

Grad No.		Sieve Si	ze and Percent	Passing	
Grad No.	200 mm	150 mm	100 mm	50 mm	4.75 mm
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20
CS 02		100	80 ± 10	25 ± 15	

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

AUTOMATED FLAGGER ASSISTANCE DEVICES (BDE)

Effective: January 1, 2008

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

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

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

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

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

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

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

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

<u>Flagging Requirements</u>. Flaggers and flagging requirements shall be according to Article 701.13 of the Standard Specifications and the following.

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

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

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

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

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

80192

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

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

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

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

CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

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

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

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

Effective Dates	Horsepower Range	Model Year
June 1, 2010 1/	600-749	2002
	750 and up	2006
June 1, 2011 ^{2/}	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

^{1/} 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 (http://www.epa.gov/cleandiesel/verification/verif-list.htm), or verified by the California Air Resources Board (CARB) (http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm); 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

^{2/} 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 20.00 % 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 "<u>DOT.DBE.UP@illinois.gov</u>" 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 ^{1/}	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	e coated thorou	ughly
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 ± 9 °F (190 ± 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 ± 1.0 °F (10.0 ± 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.

^{1/} 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."

HOT-MIX ASPHALT – BINDER AND SURFACE COURSE (BDE)

Effective: July 2, 2019 Revised: November 1, 2019

<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. Add the following after the second paragraph of Article 1003.03(c):

"For mixture IL-9.5FG, at least 67 percent of the required fine aggregate fraction shall consist of either stone sand, slag sand, steel slag sand, or combinations thereof meeting FA 20 gradation."

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 ^{1/}
	SMA 12.5 ^{2/}	CA 13, CA 14, or CA 16
HMA High ESAL	SMA 9.5 ^{2/}	CA 13 or CA 16 3/
	IL-9.5	CA 16
	IL-9.5FG	CA 16
HMA Low ECAL	IL-19.0L	CA 11 1/
HMA Low ESAL	IL-9.5L	CA 16

- 1/ CA 16 or CA 13 may be blended with the CA 11.
- 2/ The coarse aggregates used shall be capable of being combined with 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."

HMA Nomenclature. 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,
1 11g11 207 12	Billiadi Coalcoo	SMA 12.5. SMA 9.5

Surface Courses	IL-9.5, IL-9.5FG, SMA 12.5, SMA 9.5"
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 $\underline{\text{Mixture Design}}$. Revise the table in Article 1030.04(a)(1) and add SMA 9.5 and IL-9.5FG mixture compositions as follows:

"HIGH ESAL, MIXTURE COMPOSITION (% PASSING) 1/						
Sieve Size	SMA 12.5 ^{5/}		SMA 9.5 ^{5/}		IL-9.5FG	
Sieve Size	min.	max.	min.	max.	min.	max.
1 in. (25 mm)						
3/4 in. (19 mm)		100		100		
1/2 in. (12.5 mm)	90	99	95	100		100
3/8 in. (9.5 mm)	50	85	70	95	90	100
#4 4.75 mm)	20	40	30	50	60	75
#8 (2.36 mm)	16	24 4/	20	30	45	60
#16 (1.18 mm)				21	25	40
#30 (600 μm)				18	15	30
#50 (300 μm)				15	8	15
#100 (150 μm)					6	10
#200 (75 μm)	8.0	11.0 ^{3/}	8.0	11.0 ^{3/}	4.0	6.5
#635 (20 μm)		≤ 3.0		≤ 3.0		
Ratio of Dust/Asphalt Binder						1.0

^{1/} Based on percent of total aggregate weight.

^{2/} The mixture composition shall not exceed 44 percent passing the #8 (2.36 mm) sieve for surface courses with Ndesign = 90.

- 3/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer.
- 4/ When establishing the adjusted job mix formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted above 24 percent.
- 5/ When the bulk specific gravity (Gsb) of the component aggregates vary by more than 0.2, the blend gradations shall be based on volumetric percentage."

Revise the table in Article 1030.04(b)(1) to read:

"VOLUMETRIC REQUIREMENTS, High ESAL					
Ndesign		the Mineral A MA), % minim		Voids Filled with Asphalt Binder	
Nuesign	IL-19.0	IL-9.5 IL-9.5FG	IL-4.75 ^{1/}	(VFA),%	
50			18.5	65 - 78 ^{2/}	
70	13.5	15.0		65 – 75 ^{3/}	
90				65 – 75 **	

- 1/ Maximum draindown for IL-4.75 shall be 0.3 percent.
- 2/ VFA for IL-4.75 shall be 76-83 percent.
- 3/ VFA for IL-9.5FG shall be 65-78 percent."

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

"VOLUMETRIC REQUIREMENTS, SMA 12.5 1/ and SMA 9.5 1/					
ESALs (million)	Ndesign	Design Air Voids Target, %	Voids in the Mineral Aggregate (VMA), % min.	Voids Filled with Asphalt (VFA), %	
≤ 10	50	4.0	16.0	75 – 80	
> 10	80	4.0	17.0	75 – 80	

1/ Maximum draindown shall be 0.3 percent."

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 one-minute nuclear density reading or a core density and shall be included in the 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 ^{2/} – 97.4 %	90.0%		
SMA	Ndesign = 50 or 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 Roller1101.01"

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 ^{1/} 1 (25) - over PCC surfaces ^{1/}		
IL-9.5FG	1 1/4 (32)		
IL-9.5, IL-9.5L	1 1/2 (38)		
SMA 9.5	1 1/2 (38)		
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					
	Breakdown Roller (one of the following)	Intermediate Roller	Final Roller (one or more of the following)	Density Requirement	
Binder and Surface 1/	V _D , P ^{3/} , T _B , 3W, O _T , O _B	P ^{3/} , O _T , O _B	V _S , T _B , T _F , O _T	As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7).	
IL-4.75 and SMA 4/5/	T _B , 3W, O _T		T_F , $3W$, O_T		
Bridge Decks ^{2/}	Тв		T _F	As specified in Articles 582.05 and 582.06.	

^{3/} A vibratory roller (V_D) or oscillatory roller (O_T or O_B) 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_B Oscillatory roller, tangential and vertical impact mode, operated at a speed to produce not less than 10 vertical impacts/ft (30 impacts/m)."

<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, of the mixture composition and 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, of the mixture composition, friction aggregate, and Ndesign specified."

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

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

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

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

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

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

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

Add the following to Article 602.02 of the Standard Specifications:

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

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

"Catch basin Types A, B, C, and D; Manhole Type A; Inlet Types A and B; Drainage Structures Types 1, 2, 3, 4, 5, and 6; Valve Vault Type A; and reinforced concrete flat slab top (Highway Standard 602601) shall be manufactured according to AASHTO M 199 (M 199M), except the minimum wall thickness shall be as shown on the plans. Additionally, catch basins, inlets, and drainage structures shall have a minimum concrete compressive strength of 4500 psi

 $(31,000\ kPa)$ at 28 days and manholes, valve vaults, and reinforced concrete flat slab tops shall have a minimum concrete compressive strength of 5000 psi $(34,500\ kPa)$ at 28 days."

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."

PROGRESS PAYMENTS (BDE)

Effective: November 2, 2013

Revise Article 109.07(a) of the Standard Specifications to read:

"(a) Progress Payments. At least once each month, the Engineer will make a written estimate of the quantity of work performed in accordance with the contract, and the value thereof at the contract unit prices. The amount of the estimate approved as due for payment will be vouchered by the Department and presented to the State Comptroller for payment. No amount less than \$1000.00 will be approved for payment other than the final payment.

Progress payments may be reduced by liens filed pursuant to Section 23(c) of the Mechanics' Lien Act, 770 ILCS 60/23(c).

If a Contractor or subcontractor has defaulted on a loan issued under the Department's Disadvantaged Business Revolving Loan Program (20 ILCS 2705/2705-610), progress payments may be reduced pursuant to the terms of that loan agreement. In such cases, the amount of the estimate related to the work performed by the Contractor or subcontractor, in default of the loan agreement, will be offset, in whole or in part, and vouchered by the Department to the Working Capital Revolving Fund or designated escrow account. Payment for the work shall be considered as issued and received by the Contractor or subcontractor on the date of the offset voucher. Further, the amount of the offset voucher shall be a credit against the Department's obligation to pay the Contractor, the Contractor's obligation to pay the subcontractor, and the Contractor's or subcontractor's total loan indebtedness to the Department. The offset shall continue until such time as the entire loan indebtedness is satisfied. The Department will notify the Contractor and Fund Control Agent in a timely manner of such offset. The Contractor or subcontractor shall not be entitled to additional payment in consideration of the offset.

The failure to perform any requirement, obligation, or term of the contract by the Contractor shall be reason for withholding any progress payments until the Department determines that compliance has been achieved."

RAILROAD PROTECTIVE LIABILITY INSURANCE (BDE)

Effective: December 1, 1986 Revised: January 1, 2006

<u>Description</u>. Railroad Protective Liability and Property Damage Liability Insurance shall be carried according to Article 107.11 of the Standard Specifications. A separate policy is required for each railroad unless otherwise noted.

NAMED INSURED & ADDRESS	NUMBER & SPEED OF PASSENGER TRAINS	NUMBER & SPEED OF FREIGHT TRAINS
MetroLink One Metropolitan Square St. Louis, MO 63102	252 & 55 MPH	N/A

DOT/AAR No.: N/A RR Mile Post: 29.40 - 30.67 RR Division: St. Louis RR Sub-Division: N/A

For Freight/Passenger Information Contact: George Gress Phone:(314)982-1400 x1810 Phone:(314)982-1400 x1810

DOT/AAR No.: RR Mile Post: RR Division: RR Sub-Division:

For Freight/Passenger Information Contact:

Phone:
Phone:
Phone:

<u>Approval of Insurance</u>. The original and one certified copy of each required policy shall be submitted to the following address for approval:

Illinois Department of Transportation Bureau of Design and Environment 2300 South Dirksen Parkway, Room 326 Springfield, Illinois 62764 The Contractor will be advised when the Department has received approval of the insurance from the railroad(s). Before any work begins on railroad right-of-way, the Contractor shall submit to the Engineer evidence that the required insurance has been approved by the railroad(s). The Contractor shall also provide the Engineer with the expiration date of each required policy.

<u>Basis of Payment</u>. Providing Railroad Protective Liability and Property Damage Liability Insurance will be paid for at the contract unit price per Lump Sum for RAILROAD PROTECTIVE LIABILITY INSURANCE.

RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (BDE)

Effective: November 1, 2012 Revised: January 2, 2020

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 produced by cold milling or crushing an existing hot-mix asphalt (HMA) pavement. 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 93 percent passing the #4 (4.75 mm) sieve based on a dry shake gradation. RAS shall be uniform in gradation and asphalt binder content and 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. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. "Homogeneous Surface").

Prior to milling, the Contractor shall request the District provide documentation on the quality of the RAP to clarify the appropriate stockpile.

(1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, HMA (High and Low ESAL) 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 fractionated prior to testing by screening into a minimum of two size 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 shall pass the sieve size specified below for the mix into which the FRAP will be incorporated.

Mixture FRAP will be used in:	Sieve Size that 100 % of FRAP Shall Pass
IL-19.0	1 1/2 in. (37.5 mm)
SMA 12.5	1 in. (25.0 mm)
IL-9.5, IL-9.5FG, SMA 9.5	3/4 in. (19.0 mm)
IL-4.75	1/2 in. (12.5 mm)

- (2) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered "homogeneous" with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) 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 prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag.
- (4) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

RAP/FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, 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 not be intermingled. Each stockpile shall be signed indicating what type of RAS is present.

Unless otherwise specified by the Engineer, mechanically blending manufactured sand (FM 20 or FM 22) up to an equal weight of RAS with the processed RAS will be permitted

to improve workability. The sand shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The sand shall be 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. RAP/FRAP and RAS testing shall be according to the following.

- (a) RAP/FRAP Testing. When used in HMA, the RAP/FRAP shall be sampled and tested either during or after stockpiling.
 - (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) 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.

Each sample shall be split to obtain two equal 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 or RAS blended with manufactured sand shall be sampled and tested during stockpiling according to Central Bureau of Materials Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Source".

Samples shall be collected during stockpiling 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 250 tons (225 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once a ≤ 1000 ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS or RAS blended with manufactured sand shall be stockpiled 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.

Before testing, each sample shall be split to obtain two test samples. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall perform a washed extraction and test for unacceptable materials on 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.

If the sampling and testing was performed at the shingle processing facility in accordance with the QC Plan, the Contractor shall obtain and make available all of the test results from start of the initial stockpile.

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

(a) Evaluation of RAP/FRAP Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation, and when applicable G_{mm}. Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	FRAP/Homogeneous/ Conglomerate
1 in. (25 mm)	
1/2 in. (12.5 mm)	± 8 %
No. 4 (4.75 mm)	± 6 %
No. 8 (2.36 mm)	± 5 %
No. 16 (1.18 mm)	
No. 30 (600 µm)	± 5 %
No. 200 (75 μm)	± 2.0 %
Asphalt Binder	\pm 0.4 % ^{1/}
G _{mm}	± 0.03

1/ The tolerance for FRAP shall be \pm 0.3 %.

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, the RAP/FRAP shall not be used in HMA unless the RAP/FRAP representing the failing tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

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)".

(b) Evaluation of RAS and RAS Blended with Manufactured Sand 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. Individual test results, when compared to the averages, 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)	± 2.0 %
Asphalt Binder Content	± 1.5 %

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, or if the percent unacceptable material exceeds 0.5 percent by weight of material retained on the # 4 (4.75 mm) sieve, the RAS or RAS blend shall not be used in Department projects. All test data and acceptance ranges shall be sent to the District for evaluation.

1031.05 Quality Designation of Aggregate in RAP/FRAP.

- (a) RAP. The aggregate quality of the RAP for homogeneous and conglomerate 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, Superpave/HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.
 - (2) RAP from Class I binder, Superpave/HMA (High ESAL) binder, or (Low ESAL) IL-19.0L binder mixtures are designated as containing Class C 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. Coarse and fine FRAP stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5000 tons (4500 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.

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

- (a) RAP/FRAP. The use of RAP/FRAP in HMA shall be as follows.
 - (1) Coarse Aggregate Size. The coarse aggregate in all RAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
 - (2) Steel Slag Stockpiles. Homogeneous RAP stockpiles containing steel slag will be approved for use in all HMA (High ESAL and Low ESAL) Surface and Binder Mixture applications.
 - (3) Use in HMA Surface Mixtures (High and Low ESAL). RAP/FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be FRAP or homogeneous in which the coarse aggregate is Class B quality or better. FRAP from Conglomerate stockpiles shall be considered equivalent to limestone for frictional considerations. Known frictional contributions from plus #4 (4.75 mm) homogeneous FRAP stockpiles will be accounted for in meeting frictional requirements in the specified mixture.
 - (4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP/FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP, homogeneous, or conglomerate, in which the coarse aggregate is Class C quality or better.
 - (5) Use in Shoulders and Subbase. RAP/FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, homogeneous, or conglomerate.
 - (6) When the Contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in Article 1031.06(c)(1) below for a given Ndesign.
- (b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.
- (c) RAP/FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with RAP or FRAP in HMA mixtures up to a maximum of 5.0 percent by weight of the total mix.
 - (1) RAP/RAS. When RAP is used alone or RAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the following table.

RAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

HMA Mixtures 1/2/	RAP/RAS Maximum ABR %			
Ndesign	Binder Surface Polymer Mod Binder or Su			
30	30	30	10	

50	25	15	10
70	15	10	10
90	10	10	10

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the RAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When RAP/RAS ABR exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28). If warm mix asphalt (WMA) technology is utilized and production temperatures do not exceed 275 °F (135 °C), the high and low virgin asphalt binder grades shall each be reduced by one grade when RAP/RAS ABR exceeds 25 percent (i.e. 26 percent RAP/RAS ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28).
- (2) FRAP/RAS. When FRAP is used alone or FRAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the following table.

FRAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

HMA Mixtures 1/2/	FRAP/RAS Maximum ABR %		
Ndesign	Binder	Surface	Polymer Modified Binder or Surface
30	50	40	10
50	40	35	10
70	40	30	10
90	40	30	10
SMA			20
IL-4.75			30

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the FRAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When FRAP/RAS ABR exceeds 20 percent for all mixes, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28). If warm mix asphalt (WMA) technology is utilized and production temperatures do not exceed 275 °F (135 °C), the high and low virgin asphalt binder grades shall each be reduced by one grade when FRAP/RAS ABR exceeds 25 percent (i.e. 26 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28).

1031.07 HMA Mix Designs. At the Contractor's option, HMA mixtures may be constructed utilizing RAP/FRAP and/or RAS material meeting the detailed requirements specified herein.

- (a) RAP/FRAP and/or RAS. RAP/FRAP and/or RAS mix designs shall be submitted for verification. If additional RAP/FRAP and/or RAS stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP/FRAP and/or RAS stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP/FRAP and/or RAS stockpiles may be used in the original mix 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 bulk 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 RAP/FRAP and/or RAS shall be as follows.

(a) RAP/FRAP. The coarse aggregate in all RAP/FRAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.

To remove or reduce agglomerated material, a scalping screen, gator, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAP feed system to remove or reduce oversized material.

If the RAP/FRAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP/FRAP and either switch to the virgin aggregate design or submit a new RAP/FRAP design.

- (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) RAP/FRAP and/or RAS. HMA plants utilizing RAP/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 RAP/FRAP/RAS 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 RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.
- Aggregate and RAP/FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAP/FRAP are printed in wet condition.)

(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. RAP/FRAP/RAS weight to the nearest pound (kilogram).
- f. Virgin asphalt binder weight to the nearest pound (kilogram).
- g. Residual asphalt binder in the RAP/FRAP/RAS 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 (temporary access entrances only) and aggregate wedge shoulders, Type B 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. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5 mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted."

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 10⁻⁷ cm/sec according to ASTM D 5084, Method A or per another test method approved by the Engineer.

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

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

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

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

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

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

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

- **669.06 Non-Special Waste Certification.** An authorized representative of the Department shall sign and date all non-special waste certifications. The Contractor shall be responsible for providing the Engineer with the required information that will allow the Engineer to certify the waste is not a special waste.
 - (a) Definition. A waste is considered a non-special waste as long as it is not:
 - (1) a potentially infectious medical waste;
 - (2) a hazardous waste as defined in 35 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, GROUND STABILIZATION AND RIPRAP FILTER FABRIC (BDE)

Effective: November 1, 2019

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/	Ground Stabilization Woven ^{2/}	Ground Stabilization Nonwoven ^{2/}	
Grab Strength, lb (N) ^{3/} ASTM D 4632	123 (550) MD 101 (450) XD	247 (1100) min. ^{4/}	202 (900) min. ^{4/}	
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 ⁻¹ 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. RR 4 & RR 5		Gradation Nos. RR 6 & RR 7	
	Woven	Nonwoven	Woven	Nonwoven
Grab Strength, lb (N) ASTM D 4632 ^{2/}	180 (800) min.	157 (700) min.	247 (1100) min.	202 (900) min.
Elongation/Grab Strain, % ASTM D 4632 2/	49 max.	50 min.	49 max.	50 min.
Trapezoidal Tear Strength, lb (N) ASTM D 4533 2/	67 (300) min.	56 (250) min.	90 (400) min.	79 (350) min.
Puncture Strength, lb (N) ASTM D 6241 ^{2/}	370 (1650) min.	309 (1375) min.	494 (2200) min.	433 (1925) 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 ⁻¹
the No. 200 sieve (75 µm), %	Sieve No. (mm) - ASTM D 4751 1/	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."

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.

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within 40 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 (https://www.epls.gov/), which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

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

* * * * *

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

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

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

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

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

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

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

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

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

* * * * *

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

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

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

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

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

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

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

Contract Provision - Cargo Preference Requirements

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

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

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

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.