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Letting August 2, 2024

Notice to Bidders, Specifications and Proposal



Contract No. 85761
CARROLL County
Section 20-00102-00-PV
Route FAS 1084 (Ideal Road)
Project 0MNE-308 ()
District 2 Construction Funds

Prepared by

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Illinois Department of Transportation

NOTICE TO BIDDERS

- 1. **TIME AND PLACE OF OPENING BIDS.** Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. August 2, 2024 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. 85761
CARROLL County
Section 20-00102-00-PV
Project 0MNE-308 ()
Route FAS 1084 (Ideal Road)
District 2 Construction Funds

HMA reconstruction and widening of Ideal Road between Morrison Road and Dutchtown Road. Work road widening, full depth reclamation with soil cement base stabalization, aggregate shoulders, driveways, cast-in-place box Culverts, pipe culverts, guardrail replacement, pavement markings, signing, and other necessary work to complete the project.

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

By Order of the Illinois Department of Transportation

Omer Osman, Secretary

CONTRACT 85761

INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2024

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

ERRATA Standard Specifications for Road and Bridge Construction

(Adopted 1-1-22) (Revised 1-1-24)

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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, 2022
80274			Aggregate Subgrade Improvement	April 1, 2012	April 1, 2022
80192			Automated Flagger Assistance Device	Jan. 1, 2008	April 1, 2023
80173	51	\boxtimes	Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
80426			Bituminous Surface Treatment with Fog Seal	Jan. 1, 2020	Jan. 1, 2022
80241			Bridge Demolition Debris	July 1, 2009	
50531		Ш	Building Removal	Sept. 1, 1990	Aug. 1, 2022
50261		Ц	Building Removal with Asbestos Abatement	Sept. 1, 1990	Aug. 1, 2022
80449	53		Cement, Type IL	Aug. 1, 2023	
80384	54	\boxtimes	Compensable Delay Costs	June 2, 2017	April 1, 2019
80198		님	Completion Date (via calendar days)	April 1, 2008	
80199		님	Completion Date (via calendar days) Plus Working Days	April 1, 2008	
80453		H	Concrete Sealer Construction Air Quality Discal Betrefit	Nov. 1, 2023	Nov. 1, 2014
80261 80434	58	\mathbb{H}	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
80029	70		Corrugated Plastic Pipe (Culvert and Storm Sewer)	Jan. 1, 2021	Mar. 2, 2019
80229	70	\forall	Disadvantaged Business Enterprise Participation Fuel Cost Adjustment	Sept. 1, 2000 April 1, 2009	Aug. 1, 2017
80452		H	Full Lane Sealant Waterproofing System	Nov. 1, 2023	Aug. 1, 2011
80447		Ħ	Grading and Shaping Ditches	Jan 1, 2023	
80433		H	Green Preformed Thermoplastic Pavement Markings	Jan. 1, 2021	Jan. 1, 2022
80443		Ħ	High Tension Cable Median Barrier Removal	April 1, 2022	0dii. 1, 2022
80456	80	\boxtimes	Hot-Mix Asphalt	Jan. 1, 2024	
80446	81		Hot-Mix Asphalt – Longitudinal Joint Sealant	Nov. 1, 2022	Aug. 1, 2023
80438		Ħ	Illinois Works Apprenticeship Initiative – State Funded Contracts	June 2, 2021	April 2, 2024
80045		靣	Material Transfer Device	June 15, 1999	Jan. 1, 2022
80450			Mechanically Stabilized Earth Retaining Walls	Aug. 1, 2023	
80441	83	\boxtimes	Performance Graded Asphalt Binder	Jan 1, 2023	
80451	88	\boxtimes	Portland Cement Concrete	Aug. 1, 2023	
* 80459			Preformed Plastic Pavement Marking	June 2, 2024	
34261			Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2022
80455	89	\boxtimes	Removal and Disposal of Regulated Substances	Jan. 1, 2024	April 1, 2024
80445	91		Seeding	Nov. 1, 2022	
* 80457	97		Short Term and Temporary Pavement Markings	April 1, 2024	April 2, 2024
80448	101	\boxtimes	Source of Supply and Quality Requirements	Jan. 2, 2023	1 4. 0000
80340	400	片	Speed Display Trailer	April 2, 2014	Jan. 1, 2022
80127	102		Steel Cost Adjustment	April 2, 2014	Jan. 1, 2022
80397	105		Subcontractor and DBE Payment Reporting	April 2, 2018	April 1 2010
80391 80437	106 107		Subcontractor Mobilization Payments Submission of Payroll Records	Nov. 2, 2017	April 1, 2019
80435	107	\exists	Surface Testing of Pavements – IRI	April 1, 2021 Jan. 1, 2021	Nov. 2, 2023 Jan. 1, 2023
80410		H	Traffic Spotters	Jan. 1, 2019	Jan. 1, 2025
20338	109	\boxtimes	Training Special Provisions	Oct. 15, 1975	Sept. 2, 2021
80429	100	Ħ	Ultra-Thin Bonded Wearing Course	April 1, 2020	Jan. 1, 2022
80439	112	\boxtimes	Vehicle and Equipment Warning Lights	Nov. 1, 2021	Nov. 1, 2022
* 80458		H	Waterproofing Membrane System	Aug. 1, 2024	,
80302	113	\boxtimes	Weekly DBE Trucking Reports	June 2, 2012	Nov. 1, 2021
80454	-		Wood Sign Support	Nov. 1, 2023	, -
80427	114	\boxtimes	Work Zone Traffic Control Devices	Mar. 2, 2020	
80071	116	\boxtimes	Working Days	Jan. 1, 2002	
			-		

STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", adopted January 1, 2022, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways" and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the "Supplemental Specifications and Recurring Special Provisions" indicated on the Check Sheet included herein which apply to and govern the construction of FAS Route 1084, Section 20-00102-00-PV, in Carroll County, and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

FAS Route 1084 (Ideal Rd)
Roadway Reconstruction Project
Section 20-00102-00-PV
Carroll County
Contract No. 85761

LOCATION OF PROJECT

This project consists of the reconstruction of Carroll County Highway 8 between Morrison Road and Dutchtown Road. The total length of the project is 23,726 feet (4.49 miles). The project is located in Fairhaven and Wysox Townships.

DESCRIPTION OF PROJECT

This project consists of the reconstruction and widening of Ideal Road (C.H. 8) between Morrison Road and Dutchtown Road. The reconstruction will be completed with full depth reclamation methods and the use of cement for aggregate base stabilization. The existing flexible pavement will be widened along both sides with new subgrade aggregate material and the existing pavement structure recycled in place. All crossroad culverts will be replaced, five replacements will be cast in place box culverts ranging in size from single 4' x 5' to two cell 8' x 8' and eighteen crossroad pipe culverts ranging in size from 24" to 54" with precast flared end sections.

The work to be performed under this contract will consist of road widening, road reclamation with cement stabilization of the aggregate base course, aggregate shoulder placement, new driveway and entrance aprons, cast-in-place and pipe culvert improvements, new guardrail replacement, placement of pavement markings, signage and all incidental and collateral work necessary to complete the project as shown in the plans and as described herein.

TRAFFIC CONTROL PLAN Effective: January 14, 1999 Revised: January 13, 2017

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

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

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

STANDARDS:

701006	Off-Road Operations, 2L, 2W, 15 ft. (4.5 m) to 24 in. (600 mm) From Pavement
	Edge
701201	Lane Closure, 2L, 2W, Day Only, for Speeds ≥ 45 MPH
701311	Lane Closure, 2L, 2W, Moving Operations, Day Only
701326	Lane closure, 2L, 2W, Pavement Widening, for Speeds ≥ 45 MPH
701901	Traffic Control Devices
728001	Telescoping Steel Sign Support
729001	Applications of Types A & B Metal Posts (For Signs & Markers)
	,

DETAILS:

40.1 Traffic Control for Road Closure41.1 Typical Pavement Markings

GENERAL:

Parking of personal vehicles within the right-of-way will be strictly prohibited. Parking of construction equipment within the right-of-way will be permitted only at locations approved by the Engineer.

Signs:

"BUMP" (W8-1(O)48) signs shall be installed as directed by the Engineer.

"UNEVEN LANES" W8-11(O)48 signs shall be installed at 1 mile intervals or as directed by the Engineer.

"LOW SHOULDER" W8-9(O)48 signs shall be installed at 1 mile intervals or as directed by the Engineer.

"NO PASSING ZONES NOT STRIPED NEXT ___ MILES" (G20-I 100(O)) signs shall be 60" x 36".

When covering existing Department signs, no tape shall be used on the reflective portion of the sign. Contact the District sign shop for covering techniques.

Install a "TO ACTIVATE SIGNAL" sign below the "STOP HERE ON RED" sign. The detail of this sign is included in the plans.

Any plates or direct applied sheeting used to alter signs shall have the same sheeting as the base sign.

No more than one kind of alteration shall be used to alter a sign.

Any post stubs without a sign in place and visible shall have a reflector placed on each post.

Devices:

A minimum of 3 drums spaced at 4 feet shall be placed at each return when the sideroad is open.

Flaggers:

Flaggers shall comply with all requirements and signaling methods contained in the Department's "Traffic Control Field Manual" current at the time of letting. The flagger equipment listed for flaggers employed by the Illinois Department of Transportation shall apply to all flaggers.

In addition to the flaggers shown on applicable standards, a flagger shall be required on high volume commercial entrances listed below. High volume commercial entrances for this project shall be at the following locations:

EB Ideal Rd: STA 378+20, STA 478+50, STA 575+20

WB Ideal Rd: STA 380+50, STA 384+00,

When the mainline flagger is within 200 feet of an intersection, the sideroad flagger shall be required.

When the road is closed to through traffic and it is necessary to provide access for local traffic, all flaggers as shown on the applicable standards will be required. No reduction in the number of flaggers shall be allowed.

Pavement Markings:

All temporary pavement markings that will be operational during the winter months (December through March) shall be paint.

Traffic Control for Road Closure:

This work shall be done according to the Road Closure Standard and Section 701 of the Standard Specifications.

"ROAD CLOSED AHEAD" (W20-3(O)-48) with "_____ MILES" (W16-3A(O)-3612) plate mounted below the sign shall be required at the following locations with the distance noted. The contractor shall erect these signs at Oakville Rd & Ideal Rd (0.5 MILES), Ideal Rd & Hwy 40 (0.5 MILES).

"ROAD CLOSED AHEAD" (W20-3(O)-48) with flasher and the appropriate arrow plate (W1-6(O)-36x18 or W1-7(O)-36x18) shall be required on all side roads within the limits of the mainline "ROAD CLOSED AHEAD" signs.

Big Hill Rd, Jefferson Rd, School Rd, Dambman Rd, Wagner Rd and Dutchtown Rd shall be considered Condition I Major sideroad closures for signing as shown on the District Standard Traffic Control for Road Closure Detail.

The Contractor shall notify the Department via email at DOT.D2.TrafficNotice@illinois.gov. This request shall be submitted a minimum of three weeks (21 days) and no earlier than four weeks (28 days) prior to the anticipated closure date to allow the State adequate time to re-route oversized loads.

Signing and devices required to close the road, according to the Traffic Control for Road Closure detail and contained herein, shall be the responsibility of the Contractor. Detour signing required to detour traffic to alternate routes shall be the responsibility of the Contractor. The day the detour signing begins, the detour will be in effect when the Contractor has notified the Resident Engineer or personnel on the project. No detour shall be erected on Friday, Saturday or Sunday. The road shall not be closed until the detour signing is completely installed, verified, and ready to accept traffic.

The "ROAD CLOSED" sign on the Type III barricades shall be unobstructed and visible to traffic at all times. No equipment, debris, or other materials shall be stored within 20 feet of the first set of Type III barricades, unless approved by the Engineer.

The Contractor shall not drive around the outside of the Type III barricades, but shall relocate the barricades temporarily for access. When it is necessary for the barricades to be moved for access, the Contractor shall move the devices into the left lane and/or left shoulder area behind barricades that are to remain in place. At no time shall the barricades be turned parallel to traffic flow for access purposes.

If a path becomes evident around the outside of the barricades, the Contractor shall be required to place additional Type III barricades to prevent driving around the existing barricades. Additional barricades shall be included in the cost of applicable Traffic Control Standards

This work shall be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

Road Closure – Closures within Closures: The road closure shall be completed using Type III barricades in compliance with Standards 701901, and signing according to Traffic Control for Road Closure detail. Two flashers shall be installed above each Type III barricade. The "ROAD CLOSED" (R11-2) or "ROAD CLOSED TO THRU TRAFFIC" (R11-4) signs shall be placed as shown in Standard 701901. Flashers shall be installed above all warning signs involving a night time road closure. If a portion of the road is completely closed between a sideroad and any entrances, the roadway will be kept open to local access in the other direction between that closure and the next road.

The Contractor shall be required to notify the Bureau of Project Implementation and affected residents prior to a complete closure.

All cost involved in conforming with this provision shall be considered a part of TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

Maintenance of Traffic:

The Contractor shall notify the Carroll County Highway Department, the corresponding Township Commissioner, city municipality, emergency response agencies (i.e.: fire, ambulance, police), school bus companies and the Department of Transportation (Bureau of Project Implementation) regarding any changes in traffic control.

The Contractor shall notify the Carroll County Highway Department, corresponding Township Commissioner and/or city municipality for any sideroad closure or opening.

The Contractor shall submit a maintenance of local traffic plan to the Engineer at the preconstruction meeting telling how local access will be maintained at each access location. It will show which locations will be completely closed, and which locations will be constructed utilizing Traffic Control Standard 701206 and/or barricades. This traffic plan will need to be approved by the Engineer before the roadway is closed to traffic.

Two (2) changeable message signs shall be placed on this project two (2) weeks prior to the start of work informing the public of lane closures. Location of the message signs will be determined by the Resident Engineer.

DROP BOX

DESCRIPTION: This work shall include furnishing and installing drainage drop box structures in accordance with the detail on the plans and in accordance with the applicable portions of Section 602 of the Standard Specifications and as specified herein.

MATERIALS: In accordance with Sections 208 and 602 of the standard specifications. Backfill around the proposed structure shall be Trench Backfill meeting the requirements of Section 208 of the Standard Specifications. Pipe Handrails shall meet the requirements of Section 509 of the Standard Specifications.

CONSTRUCTION REQUIREMENTS: In accordance with Sections 208 and 602 of the standard specifications. Structures may be precast, or field poured. Precast structures will require shop drawings to be submitted to the Engineer for approval.

BASIS OF PAYMENT: This work shall be paid for at the contract at the contract unit price per Each for DROP BOX NO. X of the number listed on the plan sheet. Excavation, backfill material, and pipe handrail shall not be paid for separately but considered included in the price bid for DROP BOX NO. X for the number listed on the plan detail sheet.

CONCRETE COLLAR

DESCRIPTION: This work shall include furnishing and installing cast-in-place concrete collars to join existing crossroad culverts with new culvert material at the locations identified in the plans. The work shall be completed in accordance with the details in the plans and in accordance with the applicable portions of Section 542, Article 542.08 of the Standard Specifications and as specified herein.

MATERIALS: In accordance with Sections 542 of the standard specifications. Backfill around the proposed collar connection shall meet the requirements for backfill around pipe culvert under turf as noted in the requirements of Section 542 of the Standard Specifications.

CONSTRUCTION REQUIREMENTS: In accordance with Sections 542 of the standard specifications. Collars will be constructed to the details included in the plans and work will include excavation and removal and disposal of the existing end treatment, connection of the new pipe culvert extension and backfill of completed work.

BASIS OF PAYMENT: This work shall be paid for at the contract at the contract unit price per Cu. Yds for CONCRETE COLLAR as identified in the plans. Excavation, backfill material, connection and removal of existing end treatments shall not be paid for separately but considered included in the price bid for CONCRETE COLLAR.

GUARDRAIL REMOVAL Effective: August 20, 1990 Revised: April 10, 2014

This work shall be done according to Section 632 of the Standard Specifications except that all removed guardrail will become the property of the Contractor.

This work will be paid for at the contract unit price per Foot for GUARDRAIL REMOVAL, measured from center-to-center of end posts.

PCC AUTOMATIC BATCHING EQUIPMENT

Effective: January 1, 2015 Revised: January 31, 2023

Portland cement concrete provided shall be produced from batch plants that conform to the requirements of Article 1103.03 (a) and (b) of the Standard Specifications for Road and Bridge Construction. Semi-automatic batching will not be allowed.

Plants shall have computerized batching interfaced with a printer. IDOT Producer Number, IDOT Design Number, Concrete Material Code, batch weights, aggregate mixtures, water added, amount of each admixture or additive, and percent variance from design shall be printed for each batch. Tickets shall state the actual water-cement ratio as batched, and the amount of water that can be added to the batch without exceeding the maximum water-cement ratio. Truck delivery tickets are still required as per Article 1020.11(a)(7) of the Standard Specifications.

PCC QC/QA ELECTRONIC REPORTS SUBMITTAL

Effective: January 1, 2015 Revise: January 31, 2023

The Contractor's QC personnel shall be responsible for electronically submitting the following reports to the Department: PRO and IND data for BMPR MI654 "Concrete Air, Slump, and Quantity,"; PRO data for BMPR MI655 "P.C. Concrete Strength," and PRO data for BMPR MI504 "Aggregate Gradation" reports to the Department. The format for the electronic submittals shall be the QMP package reporting program, which will be provided by the Department. Microsoft Excel 2007 or newer and Microsoft Outlook is required for this program which shall be provided by the Contractor.



Storm Water Pollution Prevention Plan



Route	Marked Route	Section Number	
FAS Route 1084	County Highway 8	20-00102-00-PV	
Project Number	County	Contract Number	
MNE (308)	Carroll	85761	

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.

Signature	Date	
Treum		4/18/24
Print Name	Title	Agency
Jiahong Wen, P.E.	Project Engineer	Chastain & Associates LLC

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

I. Site Description:

A. Provide a description of the project location; include latitude and longitude, section, town, and range:

Project is located along County Highway 8 (Ideal Rd) in Carroll County from Morrison Rd to 0.1 mile east of Dutchtown Rd.

Project includes full-depth reconstruction, existing base widening, aggregate shoulder replacement, guardrail removal and replacement, ditch improvements, culvert removal and replacements and pavement striping.

Gross length of improvement is approximately 4.53 miles.

West End, Morrison Rd; Lat: 41.9748849, Lon: -089.9083806

East End, 0.1 mile east of Dutchtown Rd; Lat: 41.9752057, Lon: -089.8219192

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

Culvert removal and replacement at the following locations (in-stream work)

STA 365+15, STA 386+94, STA 390+70, STA 401+63, STA 403+77, STA 411+07, STA 416+19, STA 418+79, STA 425+34, STA 443+93, STA 452+56, STA 467+43, STA 482+54, STA 491+23, STA 498+18, STA 509+12, STA 521+92, STA 523+45, STA 569+75, STA 586+01

Grading and shaping ditches are along mainline due to reconstruction and widening of existing base and surface. Gutter removal and replacements: STA 536+90 to 540+40 LT, STA 473+24 to 475+22 LT, STA 472+98 to 475+81 RT, STA 514+50 to 517+07 LT&RT,

Guardrail remove and/or replacement: STA 389+80 to 391+65 LT, STA 389+70 to STA 391+57; STA 540+92 to 544+26 LT. STA 539+17 to 542+93 RT

C. Provide the estimated duration of this project:		
12 months		
D. The total area of the construction site is estimated to be $\frac{43.5}{}$	acres.	
The total area of the site estimated to be disturbed by excavation, grading or otl	her activities is 41.7	acres.
E. The following are weighted averages of the runoff coefficient for this project bef Section 4-102 of the IDOT Drainage Manual:	fore and after construction acti	ivities are completed; see
Existing= 0.40; Proposed = 0.46		
F. List all soils found within project boundaries; include map unit name, slope infor	rmation, and erosivity:	
G. If wetlands were delineated for this project, provide an extent of wetland acreage	ge at the site; see Phase I rep	ort:
None identified		
H. Provide a description of potentially erosive areas associated with this project:		
Roadway ditches adjacent to the pavement.		
Culvert replacements		
The following is a description of soil disturbing activities by stages, their location length of slopes, etc.):	ns, and their erosive factors (e	e.g., steepness of slopes,
The purpose of land disturbing activities on this project is:		
- Roadway reconstruction of existing Ideal Rd including base and sithe new mainline.	houlder widening and re	grading ditches along
- The removal and replacement of 20 pipe/box culverts across Idea	ા Rd including grading ar	reas near end
sections and connected ditches.		
- The removal and replacement of existing guardrails along County	• • • • • •	
Benching will be used for construction of embankment and 1:3 of for	preslopes and backslope	es will be used to limit

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

erosive factors. Where steeper slopes than 1: 3 are used, erosion control blanket will be used to limit erosive

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:

Carroll County, private

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

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

Culvert at STA 365, 387: Unnamed creek < Little Rock Creek < Rock Creek < Rock River < Mississippi River Culvert at STA 391, 401, 403, 411, 416, 418, 425, 443, 452, 467, 482, 491, 498, 509, 521, 523, 569, 586: Unnamed creek < Rock Creek < Rock River < 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 U.S. (except for activities for waterdependent structures authorized by a Section 404 permit, describe: a) How a 50-foot undisturbed natural buffer will be provided between the construction activity and the Waters of the U.S. or b) How additional erosion and sediment controls will be provided within that area. No work to be done within creeks. Contractor to install perimeter erosion barriers to avoid any contamination of waterways. O. Per the Phase I document, the following sensitive environmental resources are associated with this project and may have the potential to be impacted by the proposed development. Further guidance on these resources is available in Section 41-4 of the BDE Manual. N/A 303(d) Listed receiving waters for suspended solids, turbidity, or siltation. The name(s) of the listed water body, and identification of all pollutants causing impairment: Rock Creek; Aquatic Life impaired, Copper, Dissolved Oxygen, Fecal Coliform 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: Project work to stay out of waterway. Perimeter erosion barrier and ditch check is to be utilized to keep sediment out of waterway. Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body: Proposed ditches outlet into Rock Creek via proposed culverts at multiple locations along Ideal Rd Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body: N/A Applicable Federal, Tribal, State, or Local Programs N/A N/A Historic Preservation N/A Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or siltation TMDL (fill out this section if checked above) The name(s) of the listed water body: N/A Provide a description of the erosion and sediment control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL: N/A If a specific numeric waste load allocation has been established that would apply to the project's discharges, provide a description of the necessary steps to meet that allocation: N/A Threatened and Endangered Species/Illinois Natural Areas (INAI)/Nature Preserves N/A

	Other					
N/A	N/A					
V	Wetland					
N/A						
		J.				
	ne following pollutants of concern will be associated with this const					
	Antifreeze / Coolants	Solid Waste Debris Solid Waste Debris				
	Concrete	Solvents Waste water from elegating construction aguinments				
	Concrete Curing Compounds	Waste water from cleaning construction equipments				
	Concrete Truck Waste	Other (Specify)				
	Fertilizers / Pesticides	Other (Specify)				
	Paints	Other (Specify)				
	Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) Soil Sediment	Other (Specify) Other (Specify)				
<u> </u>						
II. C	ontrols:					
I.C imp ind mo	above and for all use areas, borrow sites, and waste sites. For eaplementation as indicated. The Contractor shall provide to the Resilicated. The Contractor, and subcontractors, will notify the Resider	ident Engineer a plan for the implementation of the measures				
A. Er	rosion and Sediment Controls: At a minimum, controls must be o	coordinated, installed and maintained to:				
	Minimize the amount of soil exposed during constructions	tion activity;				
	 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;					
	4. Minimize soil compaction and, unless infeasible, preserve topsoil.					
sc dis se ap co tha	eeding, mulching, geotextiles, sodding, vegetative buffer strips, propropriate measures. Except as provided below in II.B.1 and II.B.2 onstruction activities have temporarily or permanently ceased, but it	sure that existing vegetation is preserved where attainable and is may include but are not limited to: temporary seeding, permanent tection of trees, preservation of mature vegetation, and other, stabilization measures shall be initiated immediately where				
1.	Where the initiation of stabilization measures is precluded by sno practicable.	ow cover, stabilization measures shall be initiated as soon as				
2.	On areas where construction activity has temporarily ceased and method can be used.	will resume after fourteen (14) days, a temporary stabilization				
	The following stabilization practices will be used for this project:					
		Temporary Turf (Seeding, Class 7)				
	Geotextiles	Temporary Mulching				
	□ Permanent Seeding □	Vegetated Buffer Strips				
	□ Preservation of Mature Seeding □	Other (Specify) Temporary Erosion Control Blanket				
	Protection of Trees	Other (Specify)				
	Sodding	Other (Specify)				
		Other (Specify)				

Describe r	now the stabilization practices listed above will be utilized of	during construction.				
Erosion	Control Blanket/Mulching - protect disturbed slo	ped areas				
	ent seeding - to cover disturbed areas not being	•				
	Femporary Erosion Control Seeding - Bare areas to be covered throughout the construction.					
	,g	9.10.10.10.10.10.10.10.10.10.10.10.10.10.				
Describe h	now the stabilization practices listed above will be utilized a	after construction activities have been completed:				
	ed areas to be protected with Permanent Seedin					
	a areas to se protested man armanem essant	g and Erosion Control Diamitot.				
divert flo Such pr subsurfa systems	ows from exposed soils, store flows or otherwise limit runo ractices may include but are not limited to: perimeter erosic ace drains, pipe slope drains, level spreaders, storm drain	al practices that will be implemented, to the degree attainable, to ff and the discharge of pollutants from exposed areas of the site. on barrier, earth dikes, drainage swales, sediment traps, ditch checks, inlet protection, rock outlet protection, reinforced soil retaining The installation of these devices may be subject to Section 404 of the				
	Aggregate Ditch	Stabilized Construction Exits				
	Concrete Revetment Mats	Stabilized Trench Flow				
	Dust Suppression	Slope Mattress				
	Dewatering Filtering	Slope Walls				
	Gabions	☐ Temporary Ditch Check				
	In-Stream or Wetland Work	Temporary Pipe Slope Drain				
	-	Temporary Sediment Basin				
	Level Spreaders					
	Paved Ditch	Temporary Stream Crossing				
L	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)				
	Storm Drain Inlet Protection	Other (Specify)				
	now the structural practices listed above will be utilized dur					
runoff fro	om leaving the site.	ng the construction limits in an effort to contain silt and				
		vals to slow velocities and provide adequate sediment				
-	capacity.	and conta				
•	otection - Pipe protection will be provided for all					
Riprap -	Riprap is used to protect soil surface against er	osion and scour near end sections of proposed culverts.				
Describe h	now the structural practices listed above will be utilized after	er construction activities have been completed:				
Above p	rotections except riprap to remain until permane	ent vegetation established.				
). Treatm	ent Chemicals					
	er flocculants or treatment chemicals be utilized on this pro	piect: ☐ Yes ☒ No				
viii poiyiii	or necessaries or a countries chemicals be dulized on this pre-	٥,000. ت				
f yes abov	ve, identify where and how polymer flocculants or treatmen	nt chemicals will be utilized on this project.				
-						

Printed 04/14/24 Page 5 of 8 BDE 2342 (Rev. 07/19/19)

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

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

Description of permanent storm water management controls:

N/A

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

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

N/A - follow IDOT Standard Specifications

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

- · Waste Disposal Discuss methods of waste disposal that will be used for this project.
- Spill Prevention and Control Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.)
- Concrete Residuals and Washout Wastes Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
- Litter Management Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
- · Vehicle and Equipment Fueling Identify equipment fueling locations for this project and what BMPs will be used to ensure containment and spill prevention.
- Vehicle and Equipment Cleaning and Maintenance Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
- Dewatering Activities Identify the controls which will be used during dewatering operations to ensure sediments will not leave the construction site.
- Polymer Flocculants and Treatment Chemicals Identify the use and dosage of treatment chemicals and provide the Resident Engineer with Material Safety Data Sheets. Describe procedures on how the chemicals will be used and identify who will be responsible for the use and application of these chemicals. The selected individual must be trained on the established procedures.
- Additional measures indicated in the plan.

III. Maintenance:

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

All maintenance of erosion control systems will be the responsibility of the contractor. All locations where vehicles enter and exit the construction site and all other areas subject to erosion should be inspected periodically. Inspection of these areas shall be made at least once every seven days and within 24 hours of the end of each 0.5 inch or greater rainfall, or an equivalent snowfall.

Perimeter erosion barrier, temporary ditch checks, and rolled excelsior logs will be examined regularly and repaired as necessary. Sediment shall be removed when it reaches a height equal to 50% of the height of the barrier or if the integrity of the fencing is in jeopardy. Any fencing that has been knocked down will be repaired immediately.

Inlet and Pipe Protection - Sediment will be removed if the integrity of the pipe protection is in jeopardy. Any pipe protection which fails will be repaired or replaced immediately. Accumulated trash or debris will be removed.

Seeding - All erodible bare earth areas will be temporarily seeded on a weekly basis to minimize the amount of erodible surface within the contract limits.

Vegetative soil erosion measures - The vegetative growth of temporary and permanent seeding, vegetative filters, etc., shall be maintained periodically and supplied adequate watering and fertilizer. The vegetative cover shall be removed and reseeded as necessary.

Erosion control blankets/mulching will be restored or replaced when displacement occurs by reseeding or repairing straw of necessary.

Turf Reinforcement Mat - Any areas which fail will be repaired immediately.

Stone at riprap aprons will be replaced due to washout.

All offsite Borrow, Waste and Use areas area part of the construction site and area to be inspected according to the language in this section. Any damaged or undermining of any installations used for Erosion Control Measures shall be immediately repaired.

IDOT ESC link Field Guide for Construction Inspection:

https://idot.illinois.gov/content/dam/soi/en/web/idot/documents/transportation-system/manuals-guides-and-handbooks/highways/environment/erosion-and-sediment-control-field-guide-for-construction-inspection.pdf

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 non-compliance shall be signed by a responsible authority in accordance with Part VI. G of the Permit ILR10.

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

V. Failure to Comply:

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

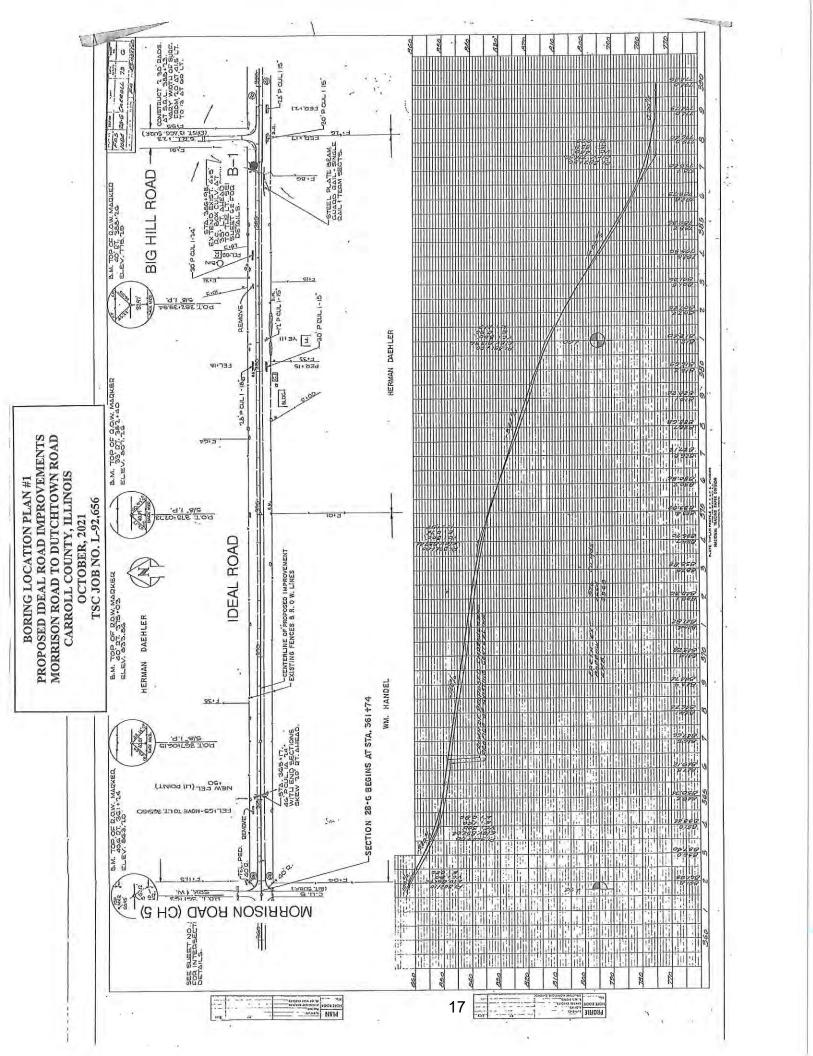


Contractor Certification Statement

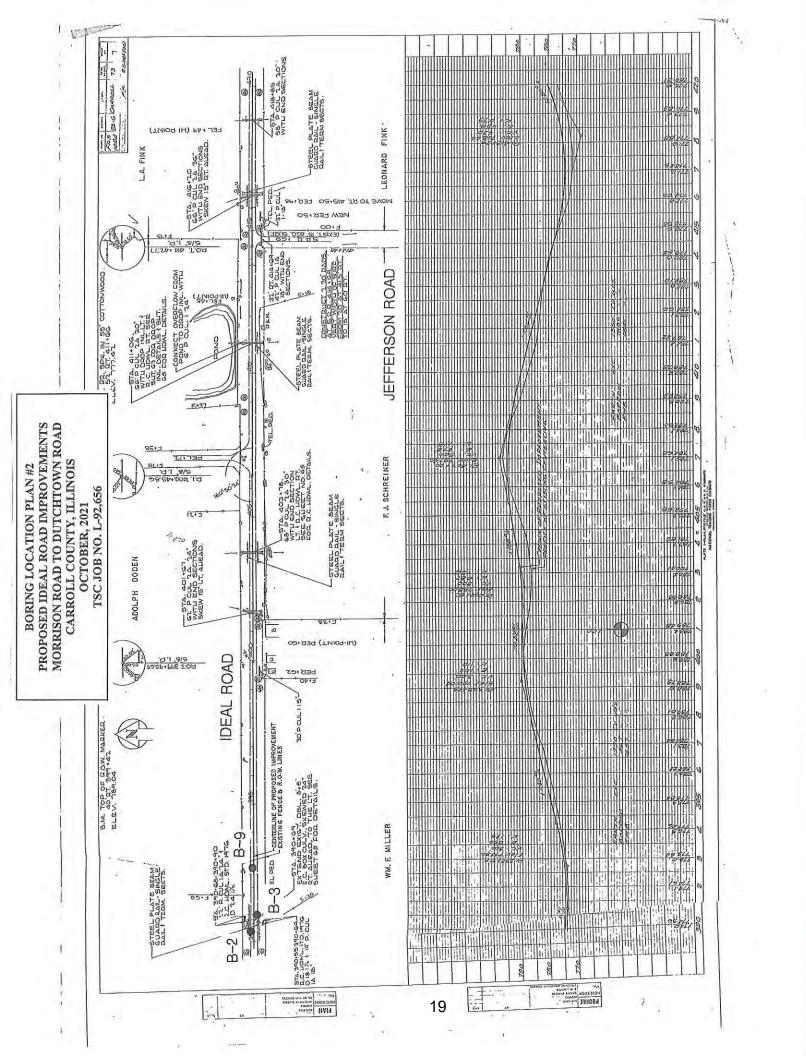


Prior to conducting any professional services at the site covered by this contract, the Contractor and every subcontractor must complete and return to the Resident Engineer the following certification. A separate certification must be submitted by each firm. Attach to this certification all items required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

Route	Marked Route	Section Number
FAS Route 1084	County Highway 8	20-00102-00-PV
Project Number	County	Contract Number
MNE(308)	Carroll	85761
This certification statement is a part of S Permit No. ILR10 issued by the Illinois En	WPPP for the project described above, i vironmental Protection Agency.	n accordance with the General NPDES
	tand the terms of the Permit No. ILR 10 that construction site identified as part of this c	•
project; I have received copies of all appro	all of the information and requirements state priate maintenance procedures; and, I have and SWPPP and will provide timely update	ve provided all documentation required
☐ Contractor ☐ Sub-Contractor		
Signature	Date	
Print Name	Title	
Name of Firm	Phone	
Street Address	City	State Zip Code
Items which this Contractor/subcontractor will	be responsible for as required in Section II.G. o	f SWPPP



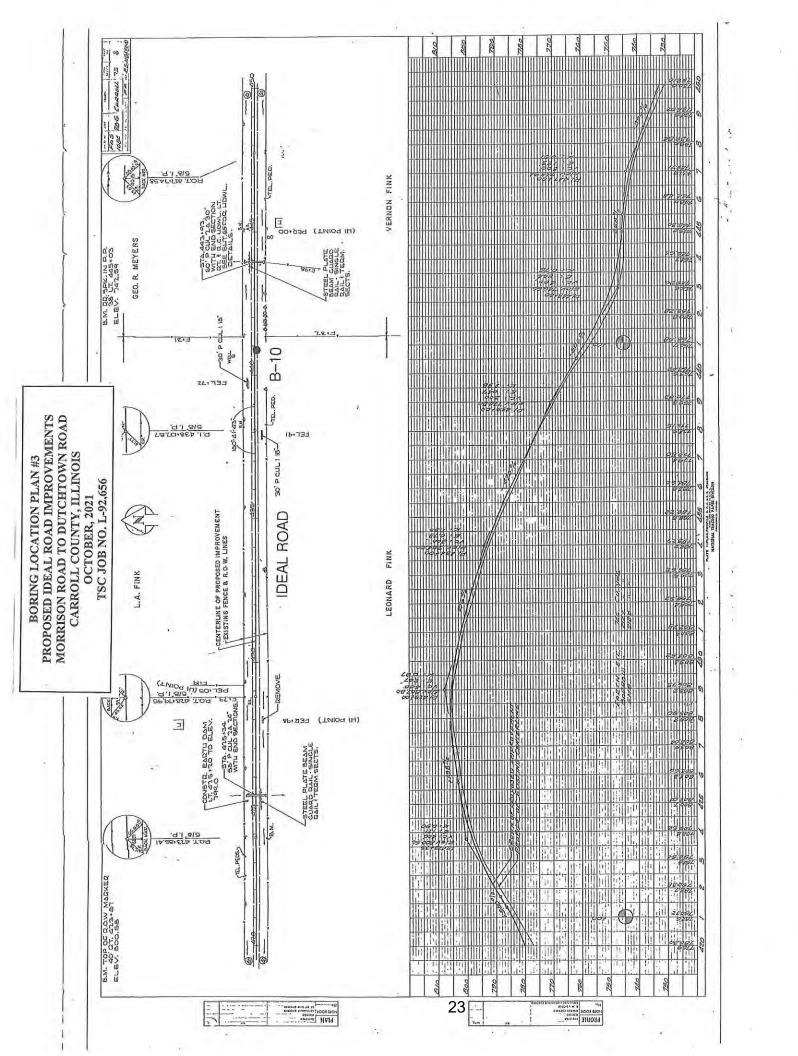
PROJECT Ideal Road Improvements from Morrison to Dutchtown Roads, Carroll Co., IL Chastain & Associates, LLC, Rockford, Illinois CLIENT 7-12-21 L-92,656 **BORING** DATE STARTED 7-12-21 DATE COMPLETED JOB WATER LEVEL OBSERVATIONS **ELEVATIONS** Dry 778.0 WHILE DRILLING **GROUND SURFACE** 748.0 AT END OF BORING Dry END OF BORING Apprx. Sta. 387+05 13'N of CL 24 HOURS LENGTH RECOVERY SAMPLE YDRY DEPTH ELEV. SOIL DESCRIPTIONS WC Qu N NO. TYPE FILL - Light brown CRUSHED STONE 777.5 0.5 FILL - Light brown and brown silty CLAY, 1 SS 7 9.7 1.5* some sand, trace gravel, moist (ČL) 3.0 775.0 2 SS 5 18.2 1.5* Stiff light brown to brown very silty CLAY, slight mottling, very moist (CL) 3 SS 1.25* 4 17.1 770.0 8.0 Medium stiff grayish-brown sandy CLAY, little gravel with clayey sandy seams, very moist (CL/SC) 0.75* 4 SS 7 18.9 10 10.5 767.5 5 SS 12.9 1.24 FEET 1.0* ZH 6 SS 8 11.3 1.75* SURFACE 7 SS 2.0* 9 10.7 BELOW Medium stiff to hard gray silty CLAY, little to some sand, trace to little gravel, very moist to wet (CL-ML) 2.72 2.5* 8 SS DISTANCE 11 11.4 20 9 SS 10 3.88 9.0 3.75 10 SS 11 10.6 4.27 4.0* 25 26.0 752.0 SS 12 16.8 4.46 4.0* Hard to very stiff gray silty CLAY, trace sand and gravel, moist (CL) 92656.GPJ TSC_ALL.GDT 10/12/21 12 SS 12 19.5 3.69 30 Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. EOB Division lines between deposits represent End of Boring at 30.0' approximate boundaries between soil types; in-situ, the transition may be gradual. SC DRILL RIG NO. 334 18



PROJECT Ideal Road Improvements from Morrison to Dutchtown Roads, Carroll Co., IL Chastain & Associates, LLC, Rockford, Illinois CLIENT 7-12-21 L-92.656 DATE STARTED 7-12-21 DATE COMPLETED JOB BORING WATER LEVEL OBSERVATIONS **ELEVATIONS** WHILE DRILLING 13.0 ' 774.0 GROUND SURFACE 20.5 744.0 AT END OF BORING END OF BORING Apprx. Sta. 390+57 7'N of CL 24 HOURS LENGTH RECOVERY SAMPLE YDRY DEPTH ELEV. SOIL DESCRIPTIONS WC Qu N NO. TYPE 5½" Hot-Mix Asphalt Pavement 773.5 0.5 121/2" Light brown Crushed Stone Base Course 1.5 772.5 1 SS 18 6.5 FILL - Dark brown and brown silty CLAY, some sand, trace gravel and crushed stone, 2 SS 5 20.7 1.0* 104 very moist (CL) 768.0 6.0 Medium stiff gray and light gray very silty 3 SS 30.1 0.75* 1 CLAY, very moist (CL) 766.0 8.0 Soft to medium stiff dark grayish-brown very SS 1 20.0 0.5* 103 silty CLAY, trace organic, very moist (CL) 11.0 763.0 Medium stiff black ORGANIC SILTY CLAY, 5 SS 2 32.4 0.75* 88 FEET trace roots, very moist (OL) 761.0 13.0 ZI Very loose brown clayey SAND, some gravel 6 with sandy clay seams, wet (SC/CL) SS 12.6 1 SURFACE 759.0 15.0 7 SS 6 14.0 1,63 1.5* BELOW SS DISTANCE 8 6 13.0 1.71 Stiff gray silty CLAY, little to some sand, trace to little gravel with occasional silty sand 1.75* 20 seams, moist (CL/SM) SS 7 13.3 1.78 1.5* 10 SS 20 16.4 1.75* 25 26.0 748.0 SS 12 2.0* 13.4 Stiff to very stiff gray silty CLAY, little to some sand, trace gravel, moist (CL) 92656.GPJ TSC_ALL,GDT_10/12/21 12 SS 11 20.4 1.94 30 Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. Driller's Note: "Pounded on a rock at depths of 23.5 feet and 26.0 feet.' EOB 35 Division lines between deposits represent approximate boundaries between soil types; End of Boring at 30.0' SC DRILL RIG NO. 334 in-situ, the transition may be gradual. 20

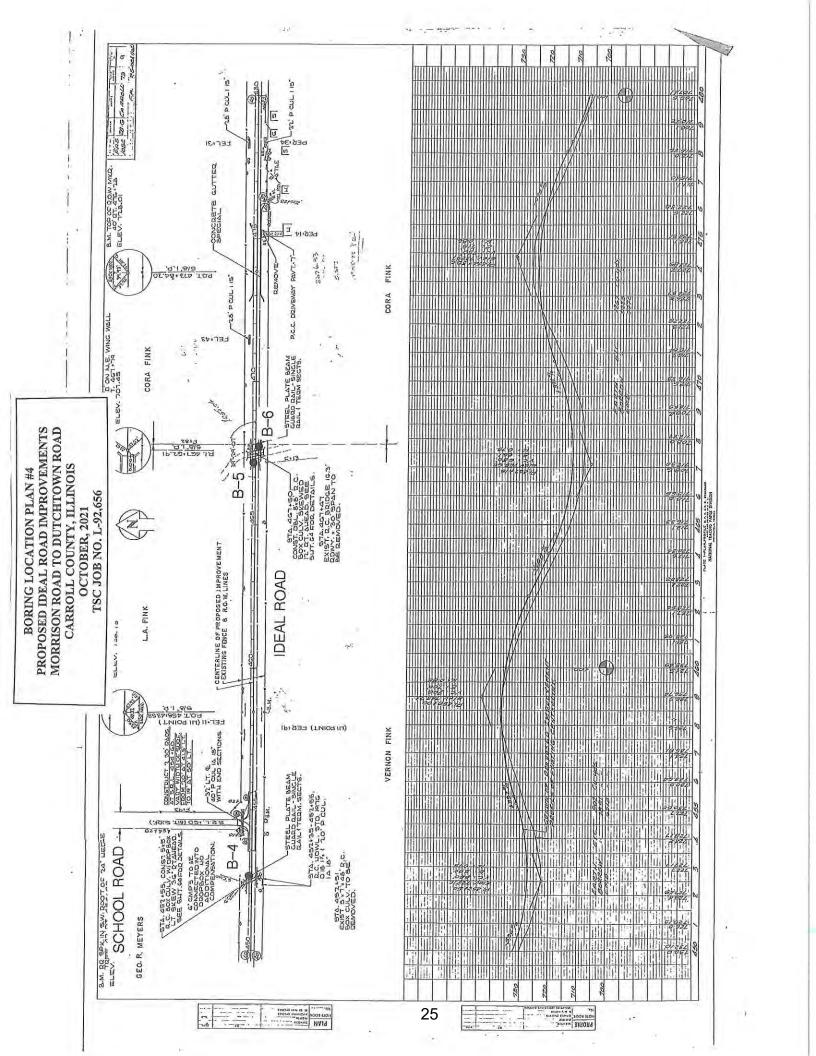
PROJECT Ideal Road Improvements from Morrison to Dutchtown Roads, Carroll Co., IL Chastain & Associates, LLC, Rockford, Illinois CLIENT 3 7-12-21 L-92.656 **BORING** DATE STARTED 7-12-21 DATE COMPLETED **JOB** WATER LEVEL OBSERVATIONS **ELEVATIONS** 774.0 WHILE DRILLING Dry **GROUND SURFACE** Dry 744.0 AT END OF BORING END OF BORING Apprx. Sta. 390+76 5'S of CL 24 HOURS LENGTH RECOVERS SAMPLE γ_{DRY} DEPTH ELEV. SOIL DESCRIPTIONS WC Qu N NO. TYPE 0 5" Hot-Mix Asphalt Pavement 773.6 0.4 31" Light brown Crushed Stone Base Course SS 22 5.8 3.0 771.0 Very stiff gray to grayish-brown very silty 107 2 SS 8 17.2 2.0* CLAY, moist (CL) 768.0 6.0 Medium stiff to stiff grayish-brown silty CLAY, 3 SS 2 21.2 1.0* 106 little sand and gravel, very moist (CL) 766.0 8.0 Soft to medium stiff gray silty CLAY, trace to 100 SS 3 23.9 0.5* little sand, trace gravel and organic, very moist (CL) 11.0 763.0 Medium stiff gray very silty CLAY, trace sand, very moist (CL) 5 SS 2 27.4 0.75* FEET 761.0 13.0 NI Medium stiff to stiff gray very silty CLAY with 6 SS 8 19.6 1.0* SURFACE sand seams, very moist (CL/SP) 16.0 758.0 SS 1,25* 6 12.9 BELOW SS 8 11.5 2.33 DISTANCE 20 Stiff to hard light gray silty CLAY, little to SS 9 11.6 1.78 some sand, trace to little gravel, moist (CL) 10 SS 14 16.3 4.27 4.5* 25 SS 17 16.1 4.46 4.0* 28.0 746.0 Medium dense gray clayey SILT with silty 92656.GPJ TSC_ALL.GDT 10/12/21 12 SS 16 12.6 fine sand seams, very moist (ML) 30 Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. Driller's Note: "Pounded on a rock at a depth of 28.5 feet.' EOB Division lines between deposits represent End of Boring at 30.0' approximate boundaries between soil types; in-situ, the transition may be gradual. DRILL RIG NO. 334 21

	CLIENT	Ch	astair	8 A	ssoci	ates, l	LC, R	ockfor	ockford, Illinois				
	BORING	9			DAT	E STAR	TED _	7-12-2	21	DATE COMPLETED _	7-12-21	JOB L-92,65	
					ATION	S					WATER L	EVEL OBSERVATION	
		ND SURFACE 775.0						∇		WHILE DRILLING		Dry	
	END OF B		_		5.0		-			AT END OF BORING		Dry	
	H ERY	A 5	pprx.	Sta. 3 CL	393+0	0				▼ 24 HOURS	*		
	LENGTH RECOVERY	SAN NO.	/PLE TYPE	N	WC	Qu	γ_{DRY}	DEPTH	ELEV.	SOIL	L DESCRIPTI	ONS	
0-								0.3	774.7	4" Hot-Mix Aspha			
-		1	SS	16	17.7	4.0*		1.8	773.2			one Base Course	
		2	00	10	14.4	4.0				FILL - Dark brown	n and brow aravel, mo	n silty CLAY, bist (CL)	
1.7		IJ						3.0	772.0	some sand, trace gravel, moist (CL) Lab Sample #2			
5-		2	SS	8	16.5	1.0*				Loose light gray t SILT, moist to ve	to grayish-b ry moist (M	rown clayey L)	
-			100					6.0	769.0				
-		3	SS	7	23.8	1.25*				Stiff brown to gra	yish-brown	silty CLAY to	
		A	ex C0	0.3	23.0	1.75*		- 1	-	very sitty of the	very moist t	o moior (OL)	
10 —		4	SS	12	9.3	1.7.0		9,5	765.5	Medium dense lig	ght brown c	layey SAND,	
		В				1				\some gravel, ver	y moist (SC	(5)/	
								100		* Approximate u			
12										* Approximate u strength based calibrated pool	inconfined d on measu ket penetro	compressive rements with a meter.	
-	1 11									Lab Sample #2:			
15-	4 11									IDOT/AASHTO: 0	Clay Loam	A-6 (8)	
	4 11									LL = 32, PL = 18,	, PI = 14		
-	4 11												
1	4 11												
16	1 11												
20 —	4 11												
			Ų.										
-	1 11												
25 —	1 11												
) -	1 11												
1	+ 11												
1	4 11												
e e	4 11												
30 —	4 11												
-	1 11												
47													
\(\frac{1}{2}\)													
35-	1 1 1	1		-	Division	lines be	tween de	posits repre etween so be gradual	esent	End of Boring at	40.01		



			DATE STARTED			7-12-21		DATE COMPLETED 7-12-		JOB
			ATION	S					WATER L	EVEL OBSERVAT
GROUND S		760	100					WHILE DRILLING		Dry
END OF BO	-	754			_			▼ AT END OF BORING		Dry
H ZRY	Apprx. 7'S of	Sta. 4 CL	40+9	4				▼ 24 HOURS	-	
NGT	Apprx. 7'S of SAMPLE NO. TYPE			5.77	V	DEPTH	ereo.	2011	DESCRIPTION	ONE
REG	NO. TYPE	N	WC	Qu	DRY	DEPTH	ELEV.		DESCRIPTION	
						0.4	759.6	4" Hot-Mix Aspha 9½" Light brown (It Pavemer	nt one Base
	1 SS	7	12.1	4.25*		1.2	758.8	Course		
	1 00		12.1	4.20		2.5	757.5	FILL - Dark brown some sand, trace Lab Sample #2	n and brow	n silty CLAY, iist (CL)
	2 SS	15	17.2	4.5+*				Lab Sample #2	B. C	the OLAY topics
		4.7				4.0	756.0	Hard gray and lig	nt brown si	ity CLAY, trace
5— X 	3 SS	24	14.5	4.5*		1		Medium dense lig	jht brown c	layey SILT, mo
Т			7 - 1					(ML)		
0— ———————————————————————————————————								Lab Sample #2 IDOT/AASHTO: (LL = 32, PL = 18,	Clay Loam A	A-6 (8)

TSC_EOB 92656.GPJ TSC_ALL.GDT 10/12/21



PROJECT Ideal Road Improvements from Morrison to Dutchtown Roads, Carroll Co., IL Chastain & Associates, LLC, Rockford, Illinois CLIENT DATE STARTED 7-13-21 DATE COMPLETED 7-13-21 JOB L-92,656 **BORING ELEVATIONS** WATER LEVEL OBSERVATIONS 16.0 727.0 WHILE DRILLING **GROUND SURFACE** 697.0 20.0 ' END OF BORING AT END OF BORING Apprx. Sta. 452+64 8'N of CL V 24 HOURS LENGTH RECOVERY SAMPLE YDRY DEPTH ELEV. WC SOIL DESCRIPTIONS Qu NO. TYPE 4" Hot-Mix Asphalt Pavement 0.3 726.7 14" Light brown Crushed Stone Base Course 1.5 725.5 SS 15.5 1.75* 12 Stiff to very stiff light grayish-brown and gray very silty CLAY, moist (CL) 2 SS 13.1 2.75* 15 6.0 721.0 3 SS 3 24.7 1.5* Stiff to soft gray very silty CLAY, very moist (CL) SS 29.3 0.43 0.5* 92 1 11.0 716.0 SS 2 1.0* Medium stiff to stiff bluish-gray and gray silty 5 25.9 CLAY, very moist (CL) 13.0 714.0 Soft to medium stiff gray and grayish-brown sandy CLAY, trace gravel with clayey sand seams, very moist (CL/SC) 6 SS 5 19.3 0.5* 16.0 711.0 Medium stiff to stiff gray silty CLAY, very SS 26.9 0.81 4 1.75 moist (CL) 709,0 18,0 Loose gray clayey SAND, little gravel with 8 SS 6 11.7 ▽ sandy clay seams, very moist to wet (SC/CL) 20 706.0 21.0 1.71 1.5* SS 10 12.9 1.86 1.75* 10 SS 9 12.8 25 Stiff to very stiff gray silty CLAY, little to some sand, trace to little gravel, moist (CL) SS 12 13.6 2.13 1.75* 12 SS 13 11.2 2.72 30-Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. Division lines between deposits represent End of Boring at 30.0' approximate boundaries between soil types; DRILL RIG NO. 334 26 in-situ, the transition may be gradual.

FEET

NI

SURFACE

BELOW

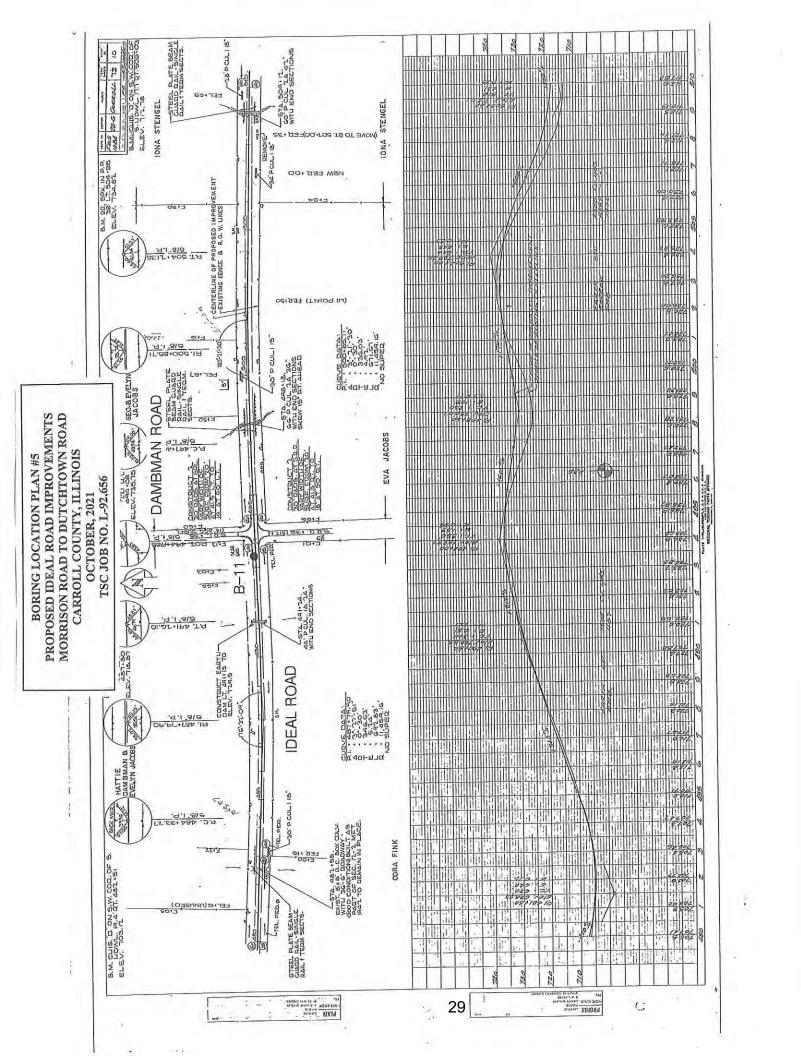
DISTANCE

EOB 92656.GPJ TSC_ALL.GDT 10/12/21

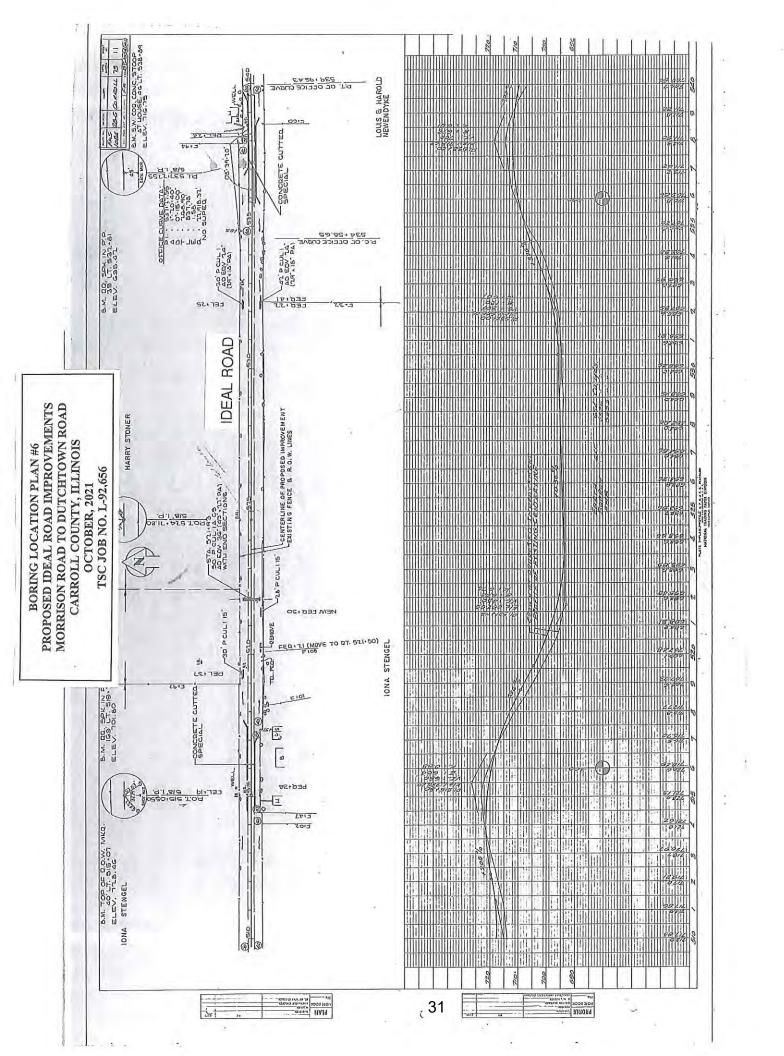
PROJECT Ideal Road Improvements from Morrison to Dutchtown Roads, Carroll Co., IL. Chastain & Associates, LLC, Rockford, Illinois CLIENT 7-13-21 JOB L-92,656 7-13-21 DATE COMPLETED **BORING** DATE STARTED WATER LEVEL OBSERVATIONS **ELEVATIONS** 18.0 ' WHILE DRILLING GROUND SURFACE 712.0 18.0 ' END OF BORING 682.0 AT END OF BORING Apprx. Sta. 467+40 9'N of CL 24 HOURS Apprx. SECOVERY SHAPE NO. TALE γ_{DRY} DEPTH SOIL DESCRIPTIONS ELEV. WC Qu 0 5" Hot-Mix Asphalt Pavement 711.6 0.4 13" Light brown Crushed Stone Base Course 710.5 1.5 FILL - Brown and reddish-brown sandy SS 9 13.7 3.0* 119 CLAY, little gravel and crushed stone, moist 709.0 3.0 SS 4.0* 2 10 14.2 114 FILL - Brown, gray and light brown silty CLAY, little to some sand, trace to little gravel, moist (CL) 3 SS 4 18.2 1.75* 109 8.0 704.0 Medium stiff light gray and rusty brown silty CLAY, very moist (CL) 0.75* 105 SS 1 18.2 10.0 702.0 10 Medium stiif dark brown to brown silty CLAY, 0.75*100 trace organic, very moist (CL) FEET SS 3 22.9 13.0 699.0 Soft to medium stiff dark brown to dark IN bluish-gray silty CLAY, trace sand and organic, very moist (CL) 29.9 SS 2 0.5* 91 SURFACE 15.0 697.0 15 Stiff dark gray silty CLAY, trace organic, very SS 28.0 1.25* 89 moist (CL) 4 DISTANCE BELOW 694.0 18.0 Very loose gray and brown SAND, some gravel, trace clay, wet (SP-SC) 8 SS 3 20 21.0 691.0 Soft to medium stiff gray to grayish-brown 0.5* silty CLAY, some sand, trace to little gravel, very moist (CL-ML) 9 SS 8 13.7 23.0 689.0 Very stiff light brown silty CLAY, little to some 10 SS 10.3 2.72 9 sand, trace to little gravel, moist (CL-ML) 25 26.0 686.0 1.40 SS 10 11.4 1.5* Stiff grayish-brown silty CLAY, little to some sand, trace to little gravel, moist (CL-ML) TSC_EOB 92656.GPJ TSC_ALL.GDT 10/12/21 12 SS 10 11.8 1.5* 30 Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. Division lines between deposits represent End of Boring at 30.0' approximate boundaries between soil types; DRILL RIG NO. 334

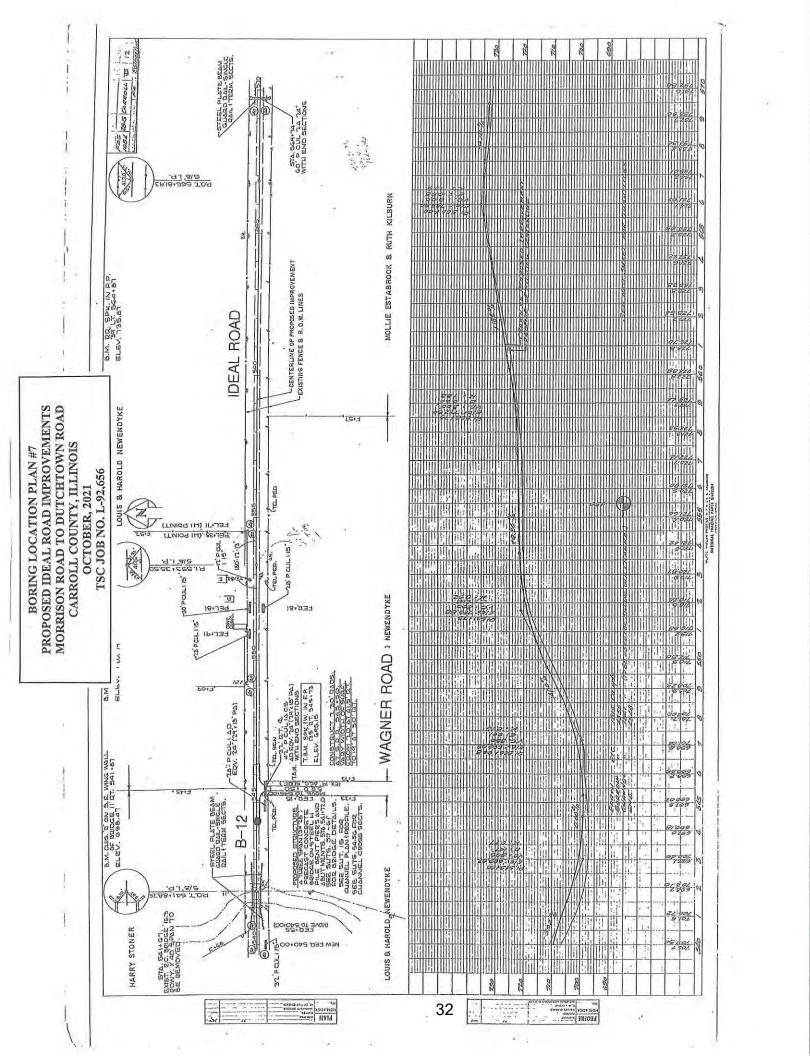
in-situ, the transition may be gradual.

PROJECT Ideal Road Improvements from Morrison to Dutchtown Roads, Carroll Co., IL Chastain & Associates, LLC, Rockford, Illinois CLIENT 7-13-21 JOB L-92,656 BORING DATE STARTED DATE COMPLETED WATER LEVEL OBSERVATIONS **ELEVATIONS** 16.0 ' 712.0 WHILE DRILLING **GROUND SURFACE** 20.0 ' END OF BORING 682.0 ₹ 24 HOURS Apprx. Sta. 467+58 8'S of CL LENGTH SAMPLE PDRY DEPTH ELEV. SOIL DESCRIPTIONS WC Qu NO. TYPE 0 5" Hot-Mix Asphalt Pavement 711.6 0.4 13" Light brown CrushedStone Base Course 1.5 710.5 119 SS 7 11.4 4.5* FILL - Light brown, brown and gray silty CLAY, little sand, trace gravel, moist 2 SS 16.6 4.0* 114 (CL-ML/CL) 706.0 6,0 Stiff brown silty CLAY, trace organic, moist 3 SS 5 20.5 1.5* 100 704.0 8.0 Stiff brown and light gray silty CLAY, moist 4 SS 4 20.8 1.75* 102 10 701.0 11.0 Stiff light brown and brown silty CLAY, moist 1.75* 104 5 SS 4 22.1 FEET 13.0 699.0 ZI Stiff light gray very silty CLAY, very moist 6 SS 101 2 21.9 1.40 SURFACE 1.5* 15 V 16.0 696.0 7 SS 0.5*12.1 BELOW Soft to medium stiff gray very silty CLAY with silty sand seams, very moist to wet (CL/SM) 8 SS 9 8.6 DISTANCE V 20 21.0 691.0 2.75* 9 SS 23 10.0 Very stiff gray and light brown very silty CLAY, some sand, trace to little gravel, moist (CL-ML) 10 SS 24 2.5* 7.9 25 26.0 686.0 SS 31 Dense light brown and grayish-brown silty SAND, little to some gravel, trace clay, wet (SM) EOB 92656.GPJ TSC_ALL.GDT 10/12/27 12 SS 35 30 Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. Division lines between deposits represent End of Boring at 30.0' approximate boundaries between soil types DRILL RIG NO. 334 in-situ, the transition may be gradual.



15— 	ELEVATIONS GROUND SURFACE END OF BORING 729.0 Apprx. Sta. 493+74 5'N of CL SAMPLE N WC Qu YDRY DEPTH ELEV. SOIL DESCRIPTIONS 1 SS 9 16.6 4.5* 115 2 SS 7 20.0 2.33 3.0* 4.0 731.0 3 SS 5 25.1 0.78 1.0* Apprx. Sta. 493+74 The provided High thrown Crushed Stone Base Control of the provided High thrown Silty CLAY, moist Strength based on measurements we calibrated pocket penetrometer. Approximate unconfined compressing strength based on measurements we calibrated pocket penetrometer. Lab Sample #3:	Course y
END OF BORING 729.0 Apprx. Sta. 493+74 SAMPLE N WC Qu YDRY DEPTH ELEV. SOIL DESCRIPTIONS 1 SS 9 16.6 4.5* 115 2 SS 7 20.0 2.33 3.0* 3 SS 5 25.1 0.78 1.0* Medium stiff to stiff light brown silty CLAY, slight mottling, very moist (CL) * Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.	Apprx. Sta. 493+74 Apprx. Sta. 493+74 Soll Descriptions Apprx. Sta. 493+74 Soll Descriptions Apprx. Sta. 493+74 Soll Descriptions O O O O O O O O O O O O O	t (CL)
Apprx, Sta. 493+74 SN of CL Solid Descriptions Apprx, Sta. 493+74 SN of CL Solid Descriptions 3 734.7 733.8 1 1	Apprx. Sta. 493+74 Soll Descriptions Soll Descriptions Soll Descriptions Soll Descriptions Soll Descriptions 1 SS 9 16.6 4.5* 115 2 SS 7 20.0 2.33 3.0* 4.0 731.0 Medium stiff to stiff light brown silty CLAY, moist Medium stiff to stiff light brown silty CL slight mottling, very moist (CL) * Approximate unconfined compressi strength based on measurements we calibrated pocket penetrometer. * Approximate unconfined compressi strength based on measurements we calibrated pocket penetrometer.	t (CL)
Soll Descriptions No. Type 1 SS 9 16.6 4.5* 115 2 SS 7 20.0 2.33 3 SS 5 25.1 0.78 1.0* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. Lab Sample #3: 1001/AASHTO: Sity Clay Loam A-6 (11) L = 33, PL = 18, Pf = 15	SOIL DESCRIPTIONS SAMPLE NO. TYPE NO.	t (CL)
1 SS 9 16.8 4.5* 115 2 SS 7 20.0 2.33 3.0* 2.5 25.1 0.78 1.0* 2.5 25.1 0.0* 2.5	1 SS 9 16.6 4.5* 115 1.2 733.8 2 SS 7 20.0 2.33 3.0* 25.1 0.78 1.0* 3.1" Hot-Mix Asphalt Pavement 11" Light brown Crushed Stone Base (FILL - Brown and dark brown very silty CLAY, little sand, moist (CL) Lab Sample #3 Very stiff light brown silty CLAY, moist Medium stiff to stiff light brown silty CL slight mottling, very moist (CL) * Approximate unconfined compressi strength based on measurements we calibrated pocket penetrometer. Lab Sample #3:	t (CL)
1 SS 9 16.8 4.5* 115 2.5 SS 7 20.0 2.33 3.0* 4.0 731.0 2.5 SS 7 20.0 2.33 3.0* 4.0 731.0 3.1 Hot-Mix Aspinal Pavement 2 Stone Base Course FILL - Brown and dark brown very silty CLAY, moist (CL) Lab Sample #3 Very stiff light brown silty CLAY, moist (CL) Medium stiff to stiff light brown silty CLAY, slight mottling, very moist (CL) 4.0 Sample #3 Silty Clay Loam A-6 (11) L = 33, PL = 18, PI = 15	1 SS 9 16.6 4.5* 115 2 SS 7 20.0 2.33 3.0* 25.1 0.78 1.0* 3.1" Hot-Mix Asphalt Pavement 11" Light brown Crushed Stone Base (FILL - Brown and dark brown very silty CLAY, little sand, moist (CL) Lab Sample #3 Very stiff light brown silty CLAY, moist Medium stiff to stiff light brown silty CL slight mottling, very moist (CL) * Approximate unconfined compressi strength based on measurements we calibrated pocket penetrometer. Lab Sample #3:	t (CL)
2 SS 7 20.0 2.33 3.0* 4.0 731.0 2 SS 7 20.0 2.33 3.0* 4.0 731.0 Medium stiff to stiff light brown silty CLAY, moist (CL) Medium stiff to stiff light brown silty CLAY, slight mottling, very moist (CL) * Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. Lab Sample #3: IDOT/AASHTO: Silty Clay Loam A-6 (11) LL = 33, PL = 18, PI = 15	2 SS 7 20.0 2.33 3.0* 4.0 731.0 CLAY, little sand, moist (CL) Lab Sample #3 Very stiff light brown silty CLAY, moist Medium stiff to stiff light brown silty CL slight mottling, very moist (CL) * Approximate unconfined compressi strength based on measurements we calibrated pocket penetrometer. Lab Sample #3:	t (CL)
Very stiff light brown silty CLAY, moist (CL) 3 SS 5 25.1 0.78 1.0° 4.0 731.0 Medium stiff to stiff light brown silty CLAY, slight mottling, very moist (CL) * Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. Lab Sample #3: IDOT/AASHTO: Silty Clay Loam A-6 (11) LL = 33, PL = 18, PI = 15	2 SS 7 20.0 2.33 3.0* 3 SS 5 25.1 0.78 1.0* Medium stiff to stiff light brown silty CLAY, moist slight mottling, very moist (CL) * Approximate unconfined compressi strength based on measurements we calibrated pocket penetrometer. Lab Sample #3:	Aug at
Medium stiff to stiff light brown silty CLAY, slight mottling, very moist (CL) * Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. * Lab Sample #3: IDOT/IAASHTO: Silty Clay Loam A-6 (11) LL = 33, PL = 18, PI = 15	Medium stiff to stiff light brown silty CL slight mottling, very moist (CL) * Approximate unconfined compressi strength based on measurements we calibrated pocket penetrometer. Lab Sample #3:	AV
strength based on measurements with a calibrated pocket penetrometer. Lab Sample #3: IDOT/AASHTO: Sitty Clay Loam A-6 (11) LL = 33, PL = 18, PI = 15	strength based on measurements w calibrated pocket penetrometer. Lab Sample #3:	_AY,
		with a





PROJECT Ideal Road Improvements from Morrison to Dutchtown Roads, Carroll Co., IL Chastain & Associates, LLC, Rockford, Illinois CLIENT 12 DATE COMPLETED 7-13-21 JOB L-92,656 7-13-21 DATE STARTED **BORING** WATER LEVEL OBSERVATIONS **ELEVATIONS** 699.0 WHILE DRILLING Dry GROUND SURFACE Dry **END OF BORING** 693.0 Apprx. Sta. 544+50 7'S of CL 24 HOURS Apprx. 7'S of SAMPLE NO. TYPE YDRY DEPTH ELEV. SOIL DESCRIPTIONS WC Qu 0 3.8" Hot-Mix Asphalt Pavement 17½" Light brown Crushed Stone Base 698.7 0.3 Course SS 18 1.8 697.2 FILL - Brown silty CLAY, some sand, trace gravel, moist (CL) 16.0 2.5 696.5 В SS 20.4 2.0* 107 Lab Sample #1 8 2 FILL - Dark gray and brown silty CLAY, trace sand and organic, moist (CL) SS 13 15.9 3.0* 114 Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. Lab Sample #1: IDOT/AASHTO: Clay Loam A-6 (7) LL = 28, PL = 15, PI = 13 10 15 20 25 30 Division lines between deposits represent End of Boring at 6.0' approximate boundaries between soil types; DRILL RIG NO. 334 in-situ, the transition may be gradual.

33

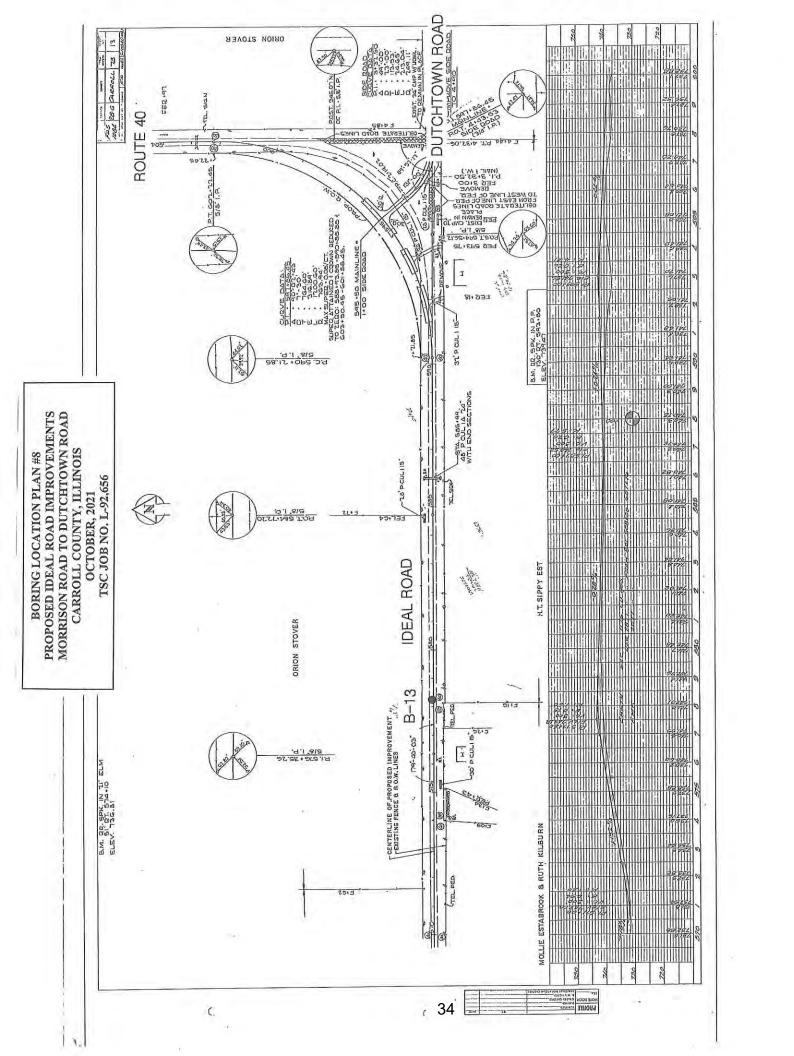
FEET

NI

SURFACE

DISTANCE BELOW

TSC_EOB 92656.GPJ TSC_ALL.GDT 10/12/21



BORING 13 DATE STARTED 7-13-21 DATE COMPLETED 7-13-21 JOS L-92,65 GROUND SURFACE 743.0 ENDOF BORINS 737.0 Appr. Sia. 578-22 Appr. Sia. 578-22 Appr. No. Type No. Type No. Type No. 13.3 1 SS 8 13.8 2.25* 122 2 SS 9 24.2 1.5* 97 4.0 73.0 3 SS 7 23.9 1.32 2.0* 10.0 3 SS 7 23.9 1.32 2.0* 10.0 Appr. Soil Descriptions 1 SS 8 13.8 2.25* 122 2 SS 9 24.2 1.5* 97 4.0 73.0 Melle Drilling Dry 24 Hours Soil Descriptions Soil Descriptions Till. Firown sity CLAY, some sand, trace gravel, most (CL) Stiff town very sitly CLAY, moist to very moist (CL) Stiff town very sitly CLAY, moist to very moist (CL) Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. Lab Sample #1: IDOT/ABSHTO: Clay Loam A-6 (7) LL = 28, PL = 15, PI = 13		CLIENT			of A				- X - X - X -	d, Illino			
GROUND SURFACE END OF BORING 737.0 Approx Sta. 578+22 SAMPLE N WC QU YDRY DEPTH ELEV. SOIL DESCRIPTIONS SOIL DESCRIPTIONS 13" Light brown crushed Stone Base Course FILL - Brown silty CLAY, some sand, trace gravel, moist (CL) Lab Sample #1: DOT/AASHTO: Clay Loam A-6 (7) LL = 28, PL = 15, Pl = 13		BORING	13		-	DAT	E STAR	TED _	7-13-2	21	DATE COMPLETED		
END OF BORING AT END OF BORING Dry							S				-	WATER L	
Apprx, Sta. 578+22 Solid Descriptions				_									23.14
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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:
The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.

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

SPECIAL PROVISION

For

FULL-DEPTH RECLAMATION (FDR) WITH CEMENT OR CEMENT SLURRY

Effective: May 1, 2021

All references to Divisions, Sections, and Articles in this Special Provision shall be construed to mean specific Divisions, Sections, and Articles in the Standard Specifications for Road and Bridge Construction adopted by the Department of Transportation.

<u>Description</u>. This work shall consist of constructing a base course by pulverizing in-place bituminous surface treatment or hot mix asphalt layers, portions of the aggregate base material, and/or subgrade to a specified depth and maximum size; spreading and mixing cement, water, and additives with the recycled material; and shaping, compacting, and curing the mixture.

<u>Materials</u>. Materials shall be according to the following Articles/Sections of the Standard Specifications.

Item	Article/Section	
(a)	Cement (Notes 1 and 2)	1001.01(a)
(b)	Concrete Admixtures (Note 2)	1021
(c)	Water	1002
(d)	Fine Aggregates (Note 3)	1003
(e)	Coarse Aggregates (Note 3)	1004
(f)	Soil for Soil-Cement Base Course (Note 4)	1009.03
(g)	Reclaimed Asphalt Pavement (Note 5)	1031
(h)	Pulverized Material (Note 6)	
(i)	Bituminous Materials (Note 7)	1032

- Note 1. Bulk cement may be used for the road reclaimer method if the equipment for handling, weighing, and spreading the cement is approved by the Engineer.
- Note 2. The type and allowable percentage will be described in the mix design.
- Note 3. The mix design will specify gradation and quality of any additional aggregate. 100 percent of any additional aggregate shall pass a 1 1/2 in. (37.5 mm) sieve and shall contain a maximum of 15 percent retained on a 1 in. (25 mm) sieve. Additional fine aggregate shall meet Class B quality as a minimum. Additional coarse aggregate shall meet Class C quality as a minimum.
- Note 4. This soil requirement only applies when subgrade material is included in the pulverized material.
- Note 5. The RAP material shall not exceed the maximum size requirement of the pulverized material, and when blended with the pulverized material shall produce a product which meets the specifications of the mix design.

Note 6. Pulverized material shall consist of the mixture resulting from pulverizing in-place bituminous surface treatment or hot mix asphalt layers layers, aggregate base material, and/or subgrade to a specified depth. After pulverization, the gradation of the pulverized material shall meet the following requirements.

PULVERIZED MATERIAL GRADATION				
Grad No. Sieve Size and Minimum Percent Passing				
	3 in.	2 in.	No 4	
	(75 mm)	(50 mm)	(4.75 mm)	
PM 4	100	95	55	

Note 7. The bituminous materials used for curing shall be emulsified asphalt RS-2, CRS-2, HFE 90, or HFE 150; rapid curing liquid asphalt RC-70; or medium curing liquid asphalt MC-70 or MC-250.

Equipment. Equipment shall be according to the following Articles of Division 1100 – Equipment.

- (a) Heavy Pneumatic-Tired Rollers
 1101.01(b)

 (b) Vibratory Roller (Note 1)
 1101.01(g)

 (c) Motor Grader
 1101.05

 (d) Distributor (Note 2)
 1103.01(b)

 (e) Truck Mixer (Note 2)
 1103.01(b)

 (f) Road Reclaimer (Note 3)
 1101.01(d)

 (g) Tamping Roller (Note 4)
 1101.01(d)

 (h) Membrane Curing Equipment
 1101.09(a)

 (i) Aggregate Spreaders (Note 5)
 1102.04

 (j) Water Truck (Note 6)
- Note 1. The vibratory steel roller shall have a minimum gross weight of 10 tons (9 metric tons) and shall provide a total applied force not less than 325 lb/in. (57 N/mm).
- Note 2. The distributor shall be a mechanical type and shall be approved by the Engineer. The distributors or truck mixers used to apply the cement and/or chemical admixtures for FDR shall be able to demonstrate a consistent and accurate application rate while minimizing dust during construction according to Article 107.36.
- Note 3. The road reclaimer shall be self-propelled and capable of fully pulverizing the existing pavement, incorporating the water, and mixing the materials to produce a homogeneous material. The minimum power of the road reclaimer shall be 540 hp (403 kW). The road reclaimer shall be capable of reclaiming not less than 8 ft (2.4 m) wide and up to 12 in. (305 mm) deep in each pass. The road reclaimer shall be capable of injecting water directly into the mixing chamber via an electronic control system that records the amount of water injected. The cutting drum shall be fitted with cutting teeth capable of trimming earth, aggregate, and bituminous surface treatments or hot mix asphalt mixtures, and be accurately adjusted vertically and held in place. The machine shall weigh at least 12.5 tons (11.3 metric tons) and shall not develop a center deflection of more than 1/8 in (0.125 mm).
- Note 4. The tamping roller shall be a self-propelled vibratory padfoot roller with a minimum drum width of 7 ft (2.1 m) and gross weight of not less than 10 tons (9 metric tons). A tamping roller shall be required for each road reclaimer.

- Note 5. Imported granular material used for FDR shall be spread with an aggregate spreader or placed with a spreading and finishing machine according to Article 1102.03.
- Note 6. Water trucks used shall be set up for a controlled and non-eroding spray.

CONSTRUCTION REQUIREMENTS

Proportioning. Proportioning shall be as follows.

- (a) Samples. Samples of the cement, chemical admixtures, additional fine and coarse aggregate, reclaimed asphalt pavement, and material to be pulverized (all in-place bituminous surface treatment or hot mix asphalt layers layers, aggregate base material, and/or subgrade through the full design depth) shall be obtained and submitted to the Engineer at least 60 days prior to the construction of the full-depth reclamation with cement. Sample sizes shall be a minimum of 25 lb (11 kg) for the cement, 1 qt or 1 L for the chemical admixtures, and 200 lb (91 kg) for the material to be pulverized. Any additional aggregates or RAP material samples shall be at a minimum the anticipated mix design proportion percentage multiplied by 200 lb (91 kg).
- (b) Mix Design. The actual proportions of cement, water, aggregates, RAP, chemical admixtures, and soil will be determined by the Engineer prior to construction using the submitted samples. The Engineer reserves the right to make such adjustments in proportions as are considered necessary during the progress of the work.

A mix design for each distinct change of in-place materials shall be developed prior to construction using all actual materials proposed for the project and submitted to the Department. The mix design shall follow items listed for soil-cement mixtures in the Department's "Geotechnical Manual". The final mix design will be approved by the Engineer.

FDR WITH CEMENT MIX DESIGN REQUIREMENTS	
Test Method	Requirement
Gradation for Pulverized Material, Illinois Test Procedure 27 ¹ , AASHTO T 88	Report
Liquid Limit ² , AASHTO T 89	Report
Plasticity Index ² , AASHTO T 90	Report
Moisture-Density Relationship, Illinois Modified AASHTO T 134 (Method B) ¹	Report
Unconfined Compressive Strength, 7-Day, Illinois Modified AASHTO T 22 ¹ , psi	500 min
Freeze-Thaw Durability (choose one)	
Vacuum Saturation Strength (ASTM C 593³), psi	350 min
Mass Loss (AASHTO T 136), percent loss	14 max
Additional Additive(s) ⁴	
Concrete Admixtures	Report
Coarse Aggregate	Report
Fine Aggregate	Report
RAP	Report
Cement⁴, percentage by dry mass	Report

Notes:

- 1. Test information contained in the Manual of Test Procedures for Materials.
- 2. Only required if subgrade soil is being incorporated into the mixture.
- 3. Samples will be prepared according to Illinois Modified AASHTO T 134 (Method B), cured according to AASHTO T 136, vacuum saturated according to ASTM C 593, and test for unconfined compressive strength.
- 4. Report will include type/gradation and producer/supplier.

- **Weather Limitations.** This work shall not be performed when the FDR to be processed is frozen, when the ambient air temperature is less than 40 °F (4 °C) or greater than 95 °F (35 °C), or if the weather is rainy. The weather forecast shall not call for temperatures less than 32 °F (0 °C) within 7 days after placement of any portion of the project.
- Preparation of Subgrade. The area to be processed shall have all vegetation and other objectionable material removed. Widening and grade correction areas shall be shaped to the proper grade and cross section. Subgrade in cut or at grade sections shall be prepared according to Article 301.03 and 301.04; except the minimum immediate bearing value (IBV) of the soil shall be 3.0. The IBV will be determined according to Illinois Test Procedure 501 or 502.

Where soft and unstable subgrade material is encountered beneath the area to be pulverized, the Engineer will determine whether the ground and soil conditions warrant more extensive treatments according to the Department's "Subgrade Stability Manual". Soft and unstable material that will not compact when rolled or tamped, shall be removed and disposed of according to Article 202.03, and replaced with material approved by the Engineer according to Articles 205.04 and 205.05.

Initial Pulverization and Shaping. The existing pavement shall be initially pulverized by the road reclaimer and shaped by the motor grader to the required lines, grades, and cross section before the addition of dry cement or cement slurry. Water, fine and/or coarse aggregate, RAP material, or other additives required may be added during this operation. The pulverized and shaped material shall be compacted to support equipment and/or traffic without excessive rutting or shoving and to facilitate depth control during processing.

During the start of pulverization, the Contractor shall complete a strip for evaluation by the Engineer. To ensure the pavement is being pulverized to the specified gradation, the Contractor shall excavate a pulverized area of 10 sq ft (1 sq m), in two separate locations during the first day of pulverizing, as directed by the Engineer. Modifications to the pulverizing procedure must be made if the size and/or gradation requirements are not met. These excavations shall be repaired with by recompacting the pulverized material. If pulverization procedures or conditions change, additional excavations to inspect the pulverized pavement size and gradation shall be made, as directed by the Engineer.

Unsuitable or unstable material encountered during the pulverization and shaping process shall be removed and disposed of according to Article 202.03. Areas of approximately 10 sq ft (1 sq m) or less may be repaired by use of aggregate replacement material. Larger unstable areas require removal and replacement, as directed by the Engineer. Following subgrade repairs, aggregate replacement material shall be placed to the depth of the FDR specified thickness.

After initial pulverization is complete, the pulverized material shall undergo an initial shaping to the proper lines and grades with a motor grader.

Cement Application. Following initial pulverization and shaping, the quantity of dry cement or cement slurry specified in the mix design shall be spread uniformly on the finished surface. The cement spread shall be calculated to provide the required application rate in a manner that minimizes dust or slurry runoff and is satisfactory to the Engineer. The application of the cement shall be limited to that amount which can be mixed and compacted with the pulverized material within 4 hours.

When cement slurry is used, the surface of the pulverized material shall be lightly scarified

or disked prior to slurry application, and berms shall be formed to prevent excessive runoff, unless the Contractor has demonstrated to the satisfaction of the Engineer that the slurry has been proportioned such that it will not run off.

Dry cement shall not be applied when wind conditions are such that blowing cement becomes objectionable to adjacent property owners or creates a hazard to traffic on adjacent roadways, as determined by the Engineer.

Cement slurry shall be produced in a ready mixed concrete plant or other type of mixing device approved by the Engineer and delivered in truck mixers or other approved slurry transport equipment. Cement slurry shall be proportioned such that it contains a minimum 60 percent dry solids content by weight. The cement slurry producer shall supply a record of the amount of cement, water, and chemical admixtures with each truck delivery. The time from first contact of cement with water to application on the prepared surface of the initially pulverized material shall not exceed 60 minutes unless an approved retarding admixture is used, in which case the Engineer may allow a maximum of 90 minutes.

No equipment, except that used in applying cement and mixing, will be allowed to pass over the applied cement, and this equipment shall be operated in such a manner as to avoid displacement of cement.

The Engineer shall be notified any time the cement application rate is changed. The cement application rate shall be checked and recorded for each segment in which the rate is changed.

Mixing. Mixing shall begin as soon as possible after the cement has been applied, but shall not exceed 30 minutes from the time cement has been applied. Mixing shall continue until a uniform mixture of pulverized material, cement, admixtures, aggregate, and water is obtained that passes the gradation and moisture content specified. A final gradation test shall be made at the conclusion of mixing operations.

During mixing, water application shall only be done through the road reclaimer's integrated fluid injection system.

Dry cement or cement slurry which has been disturbed or displaced by rain, the Contractor's equipment or other traffic after application, shall be replaced.

After mixing is complete, the material shall be shaped to the proper lines and grades with a motor grader.

Compaction and Finishing. Compaction shall begin within 30 minutes of the most recent mixing pass and be completed no later than two hours after mixing begins. The mixture shall be compacted according to the following.

(a) Moisture Content. At the start of compaction, the moisture content shall be between 80 to 120 percent of the optimum moisture content determined according to Illinois Modified AASHTO T 134 (Method B) for the mix design.

(b) Density. The compacted, full-depth reclamation base course shall have a minimum dry density of 98 percent of the laboratory standard dry density based on a moving average of five consecutive tests with no test below 95 percent. The in-place dry density will be determined according to Illinois Modified AASHTO T 191, or Illinois Modified AASHTO T 310 (Direct Transmission Density/Backscatter Moisture). The laboratory standard dry density will be determined according to Illinois Modified AASHTO T 134 (Method B) for the mix design.

Any portion of the base course that has a density less than 95 percent of the standard laboratory density shall be corrected by continued compaction within specified time constraints, or removed and replaced.

(c) Rollers. Immediately after processing and final shaping, the FDR base course shall be compacted with equipment meeting the following requirements.

MINIMUI	MINIMUM ROLLER REQUIREMENTS FOR FDR				
Initial Roller	Final Roller ¹ (one or more of the following)	Density Requirement			
Tamping roller	P, Vs	As specified in the Compaction section (b) above			

Note(s): 1. Equipment definitions in Table 1 of Article 406.07.

(d) Rolling and Finishing. The initial roller shall be within 500 ft. (150 m) behind all road reclaimer units. The FDR base course shall be uniformly compacted by the tamping roller, applying high amplitude and low frequency. Initial rolling shall be performed until the initial roller walks out of the material and the specified density has been obtained. Walking out for the tamping roller is defined as light being clearly evident between all of the pads at the material-padfoot drum interface and the pads being no more than 3/16 in. (5 mm) deep. Care shall be exercised to ensure satisfactory density along the edges of the section and adjacent to construction joints.

Any unstable material encountered while compacting or under construction trafficking shall be treated as defined in the sections titled Preparation of Subgrade and Initial Pulverization and Shaping. If a large area of unstable material is identified during the compaction process, work on the affected area shall be halted and the Engineer notified.

When initial compaction of the FDR base course is nearing completion, the surface of the base course shall be shaped to the required lines, grades, and cross section with a motor grader. The FDR base course shall be cut no deeper than necessary to remove roller marks from the initial compaction and to achieve desired cross slope.

The bladed recycled material shall be compacted by final rollers until the required density is obtained. The number of passes and order of rollers may be altered to meet density requirements. Finish rolling shall not be done in vibratory mode. The moisture content of the surface material shall be maintained at or slightly above its specified optimum during all finishing operations and until the curing material is applied. Water may be lightly sprayed by a water truck to aid in improving final density and appearance. A second water truck is required if water is also being added at the road reclaimer.

Surface compaction and finishing shall be done in such a manner as to produce a smooth, dense, uniform, closely knit surface, relatively free from cracks, ridges, low spots, or loose material, conforming to the crown, grades, and lines shown on the plans.

Protection and Curing. After the FDR base course has been finished, it shall be protected against drying for a period of 7 days by applying a bituminous material or the surface shall receive continuous moist curing with a non-eroding water spray for a minimum of 7 days, unless a surface course is placed within 7 days, at which point moist curing may be discontinued.

Curing shall be applied as soon as possible after the completion of final rolling. Prior to applying the curing, the FDR base course surface shall be dense, free of all loose and extraneous materials, and contain sufficient moisture to prevent excessive penetration of the curing material. Bituminous material shall be uniformly applied at the rate of 0.20 gal/sq. yd. (0.90 L/sq. m) to the surface of the FDR base course by a pressure distributor to give complete coverage without excessive runoff. The exact rate of application and temperature will be specified by the Engineer. If needed, water shall be applied to fill surface voids immediately before the bituminous material cover is applied. The equipment used for wetting the finished FDR base course with water or to apply the bituminous protective cover shall be of such limited weight that its use will not cause marring or rutting of the base course. Should it be necessary for construction equipment or other traffic to use the bituminous covered surface before the bituminous material has cured sufficiently to prevent pickup, sufficient blotter fine aggregate shall be applied with aggregate spreaders to prevent pickup.

Finished portions of the FDR base course that are traveled on by equipment used in constructing an adjoining section shall be protected in such a manner as to prevent equipment from marring or damaging completed work.

- **Construction Joints.** At the end of each day's construction, a straight transverse construction joint shall be formed by cutting back into the completed work to form a vertical face. Damage to completed work shall be avoided.
- **Opening to Traffic**. The finished FDR base course may be opened immediately to local traffic and to the Contractor's construction equipment once the base has hardened sufficiently to withstand marring or permanent deformation by such traffic and received a bituminous or other approved sealing membrane. The base course may be opened to all traffic after the 7-day protection period, provided the base course is not damaged, marred, or distorted by such traffic, and provided that the protection and curing material specified in the Protection and Curing section above is not impaired.
- **Maintenance.** The Contractor shall maintain the entire FDR base course in a manner satisfactory to the Engineer until the surface course has been constructed. Maintenance shall include immediate repairs of any defective or damaged portions of the base course. Repairs or replacements shall be made in such a manner as to ensure restoration of a uniform surface and durability of the portion repaired or replaced.
- **Tolerance in Thickness.** The FDR base course shall be constructed to the thickness shown on the plans. Base thickness will be based on thickness measurements of cores taken, measured, and recorded according to Article 407.10(a)(2). Any portion of the FDR base course that is less than 90 percent of the specified thickness shall be removed and replaced with new material to the correct thickness.

Quality Control/ Quality Assurance (QC/QA).

(a) Quality Control by the Contractor. The Contractor shall perform or have performed the inspection and tests required to assure conformance to contract requirements. Quality Control includes the recognition of obvious defects and their immediate correction. This may require increased testing, communication of test results to the job site, modification of operations, suspension of the work, or other actions as appropriate.

The Engineer shall be immediately notified of any failing tests and proposed remedial action. Passing tests shall be reported to the Engineer no later than the start of the next work day.

- (b) Quality Assurance by the Engineer. The Engineer will conduct independent assurance tests on split samples taken by the Contractor for quality control testing. In addition, the Engineer will witness the sampling and splitting of these samples and will immediately retain witnessed split samples for quality assurance testing.
- (c) Test Methods and Frequency. Test methods and test frequencies shall be according to the following table.

	QC/QA MINIMUM TESTING FREQUENCY ²					
Test	Test Method	QC Frequency ¹	QA Frequency ¹			
Depth of Pulverization		1 per 500 feet (150 m)	1 per 1000 feet (300 m)			
Pulverized Material Gradation	AASHTO T168	1 per 0.5 day of production	1 per day of production			
Cement Application Rate	Note 2	1 per 500 feet (150 m)	1 per 1000 feet (300 m)			
One-Point Moisture- Density	Illinois Modified AASHTO T272	1 per 0.5 day of production	1 per day of production			
Density	Illinois Modified AASHTO T191 or T310	1 per 500 feet (150 m)	1 per 1000 feet (300 m)			

Note: 1. The Contractor shall perform all quality control tests within the first 500 ft (150 m) after startup or any change in the mix or depth of pulverization. The Engineer will also run split samples at these locations.

2. Cement application rates shall be verified by calculating the weight of cement contained in the cement tanker/truck mixer and the area covered after application. For slurry application rates, calculate the weight of cement as the weight of slurry minus weight of water.

Method of Measurement. The work will be measured for payment as follows.

- (a) Contract Quantities. The requirements for the use of Contract Quantities shall conform to Article 202.07(a).
- (b) Measured Quantities. The work will be measured for payment as follows.
- (1) Cement incorporated in the full-depth reclamation mixture will be measured for payment in hundredweights (kilograms), but payment will not be made for cement in excess of 105 percent of the amount specified by the mix design or approved by the Engineer.
- (2) Any additional aggregate, including RAP, used to meet the requirements of the mix design will be measured for payment in square yard (square meter).
- (3) Full-depth reclamation will be measured for payment in place and the area computed in square yards (square meters) of the recycled pavement.
- (4) Removal and disposal of unstable and/or unsuitable material will be measured for payment according to Article 202.07(b).
- (5) Replacement of unstable and/or unsuitable material will be measured for payment according to Article 204.07(b).
- (6) Cement treatment of unstable pulverized base course, when specified by the Engineer, will be measured for payment according to (1) and (3) above.

Basis of Payment. This work will be paid for at the contract unit prices as follows.

- (a) The cement material will be paid for at the contract unit price per hundredweight (kilogram) for CEMENT.
- (b) If any additional aggregate, including RAP, is required to meet the requirements of the mix design, the cost will be paid for at the contract unit price per square yard (square meter) for ADD ROCK. The cost incurred introducing the additional aggregate into the FDR base course will not be paid for separately, but shall be considered as included in the contract unit price for FULL-DEPTH RECLAMATION below. No additional compensation will be awarded to the Contractor because of reduced production rates associated with the addition of the additional aggregate.
- (c) The full-depth reclamation will be paid for at the contract unit price per square yard (square meter) for FULL-DEPTH RECLAMATION, of the thickness specified.
- (d) Removal and disposal of unstable and/or unsuitable material will be paid for according to Article 202.08.
- (e) Replacement of unstable or unsuitable material will be paid for according to Article 204.08.
- (f) Cement treatment of unstable pulverized base course, when specified by the Engineer, will be paid for at the contract unit prices for (a) and (c) above.

Department of Transportation Bureau of Local Roads and Streets SPECIAL PROVISION FOR CONSTRUCTION AND MAINTENANCE SIGNS

State of Illinois

Effective: January 1, 2004 Revised: June 1, 2007

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

701.14. Signs. Add the following paragraph to Article 701.14:

All warning signs shall have minimum dimensions of 1200 mm x 1200 mm (48" x 48") and have a black legend on a fluorescent orange reflectorized background, meeting, as a minimum, Type AP reflectivity requirements of Table 1091-2 in Article 1091.02.

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

LOCAL QUALITY ASSURANCE/ QUALITY MANAGEMENT QC/QA

Effective: January 1, 2022

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

IDOT TRAINING PROGRAM GRADUATE ON-THE-JOB TRAINING SPECIAL PROVISION

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

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

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

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

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

Finally, the Contractor must maintain all records it creates as a result of participation in the Program on the Contract, and furnish periodic written reports to the IDOT District EEO Officer that document its contractual performance under and compliance with this Special Provision. Finally, through participation in the Program and reimbursement of wages, the Contractor is not relieved of, and IDOT has not waived, the requirements of any federal or state labor or employment law applicable to TPG workers, including compliance with the Illinois Prevailing Wage Act.

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

BASIS OF PAYMENT: This work will be paid for at the contract unit price of \$15.00 per hour for each utilized certified TPG Program trainee (TRAINES TRAINING PROGRAM GRADUATE). The estimated total number of hours, unit price, and total price must be included in the schedule of prices for the Contract submitted by Contractor prior to beginning work. The initial number of TPG trainees for which the incentive is available for this contract is **2**.

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

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

Training through the Program is intended to move TPGs toward journeyman status, which is the primary objective of this Special Provision. Accordingly, the Contractor must make every effort to enroll TPG trainees by recruitment through the Program participant educational institutions to the extent eligible TPGs are available within a reasonable geographic area of the project. The Contractor is responsible for demonstrating, through documentation, the recruitment efforts it has undertaken prior to the determination by IDOT whether the Contractor is in compliance with this Special Provision, and therefore, entitled to the Training Program Graduate reimbursement of \$15.00 per hour.

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

BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE)

Effective: November 2, 2006 | Revised: August 1, 2017

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

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

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

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

Where: CA = Cost Adjustment, \$.

BPI_P = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).

BPI_L = Bituminous Price Index, as published by the Department for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price, \$/ton (\$/metric ton).

 $^{\circ}$ AC $_{V}$ = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the $^{\circ}$ AC $_{V}$ will be determined from the adjusted job mix formula. For bituminous materials applied, a performance graded or cutback asphalt will be considered to be 100% AC $_{V}$ and undiluted emulsified asphalt will be considered to be 65% AC $_{V}$.

Q = Authorized construction Quantity, tons (metric tons) (see below).

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

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

Where: A = Area of the HMA mixture, sq yd (sq m).

D = Depth of the HMA mixture, in. (mm).

 G_{mb} = Average bulk specific gravity of the mixture, from the approved mix design.

V = Volume of the bituminous material, gal (L).

SG = Specific Gravity of bituminous material as shown on the bill of lading.

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

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

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

80173

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."

80384

CORRUGATED PLASTIC PIPE (CULVERT AND STORM SEWER) (BDE)

Effective: January 1, 2021

Revise Tables IIIA and IIIB of Article 542.03 and the storm sewers tables of Article 550.03 of the Standard Specifications to read:

(SEE TABLES ON NEXT 10 PAGES)

"PIPE CULVERTS TABLE IIIA: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE

	Type 1					Type 2									Type 4						
Nominal	F	ill Heigl			S,	Fill Height: Greater than 3',						Height:			10',	Fill Height: Greater than 15',					
Diameter		Wi	<u>th 1' m</u>	nin		not exceeding 10'						not ex	ceedir	ng 15'		not exceeding 20'					
(in.)	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	
10	Χ	QPL	Х	QPL	NA	Х	QPL	Х	QPL	NA	Χ	QPL	Χ	QPL	NA	Χ	QPL	Χ	QPL	NA	
12	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	
15	Χ	QPL	NA	QPL	QPL	Χ	QPL	NA	QPL	QPL	Х	QPL	NA	QPL	QPL	Χ	QPL	NA	QPL	QPL	
18	Χ	QPL	Х	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	
21	Χ	QPL	NA	QPL	NA	Χ	QPL	NA	QPL	NA	Χ	QPL	NA	QPL	NA	Χ	QPL	NA	NA	NA	
24	Χ	QPL	Х	QPL	QPL	Х	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	NA	QPL	
27	Х	NA	NA	NA	NA	Х	NA	NA	NA	NA	Х	NA	NA	NA	NA	Х	NA	NA	NA	NA	
30	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	NA	QPL	
36	Х	QPL	Х	QPL	QPL	Х	QPL	Χ	QPL	QPL	Х	QPL	Χ	QPL	QPL	Х	QPL	Х	NA	QPL	
42	Х	NA	Х	QPL	QPL	Х	NA	Χ	QPL	QPL	Х	NA	Χ	NA	QPL	Х	NA	Х	NA	NA	
48	Χ	NA	Χ	QPL	QPL	Χ	NA	Χ	QPL	QPL	Χ	NA	Χ	NA	QPL	Χ	NA	Χ	NA	NA	
54	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
60	NA	NA	NA	QPL	QPL	NA	NA	NA	QPL	QPL	NA	NA	NA	NA	QPL	NA	NA	NA	NA	NA	

Notes: PVC

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

PΕ Polyethylene Pipe

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

Χ Permitted

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

Not Acceptable NA

PIPE CULVERTS (metric) TABLE IIIA: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE

Nominal Diameter (mm)			Гуре 1			Type 2						1	Гуре 3			Type 4				
		II Height with 0.3				Fill Height: Greater than 1 m, not exceeding 3 m						leight: not exc			,	Fill Height: Greater than 4.5 m, not exceeding 6 m				
	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP
250	Χ	QPL	Х	QPL	NA	Х	QPL	Χ	QPL	NA	Χ	QPL	Х	QPL	NA	Χ	QPL	Χ	QPL	NA
300	Χ	QPL	Χ	QPL	QPL	Х	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Х	QPL	Χ	QPL	QPL
375	Χ	QPL	NA	QPL	QPL	Х	QPL	NA	QPL	QPL	Χ	QPL	NA	QPL	QPL	Χ	QPL	NA	QPL	QPL
450	Χ	QPL	Χ	QPL	QPL	Х	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Х	QPL	Χ	QPL	QPL
525	Χ	QPL	NA	QPL	NA	Χ	QPL	NA	QPL	NA	Χ	QPL	NA	QPL	NA	Χ	QPL	NA	NA	NA
600	Χ	QPL	Χ	QPL	QPL	Х	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Х	QPL	Χ	NA	QPL
675	Χ	NA	NA	NA	NA	Χ	NA	NA	NA	NA	Χ	NA	NA	NA	NA	Χ	NA	NA	NA	NA
750	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Χ	QPL	Χ	NA	QPL
900	Χ	QPL	Χ	QPL	QPL	Х	QPL	Χ	QPL	QPL	Χ	QPL	Χ	QPL	QPL	Х	QPL	Χ	NA	QPL
1050	Χ	NA	Χ	QPL	QPL	Х	NA	Χ	QPL	QPL	Χ	NA	Χ	NA	QPL	Х	NA	Χ	NA	NA
1200	Χ	NA	Χ	QPL	QPL	Χ	NA	Χ	QPL	QPL	Χ	NA	Χ	NA	QPL	Χ	NA	Χ	NA	NA
1350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1500	NA	NA	NA	QPL	QPL	NA	NA	NA	QPL	QPL	NA	NA	NA	NA	QPL	NA	NA	NA	NA	NA

Notes: PVC Polyvinyl Chloride Pipe
CPVC Corrugated Polyvinyl Chloride Pipe with a Smooth Interior
PE Polyvethylene Pipe

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

Permitted Χ

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

NA Not Acceptable

PIPE CULVERTS TABLE IIIB: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE Type 5 Type 6 Type 7 Fill Height: Greater than 20', Fill Height: Greater than 30', Fill Height: Greater than 25', Nominal not exceeding 25' not exceeding 30' not exceeding 35' Diameter (in.) CPVC PΕ CPE CPP PVC CPVC PVC CPVC **PVC** PΕ PΕ 10 Χ QPL Χ QPL NA Χ QPL Χ Χ QPL Χ 12 Χ QPL Χ QPL QPL Χ QPL Χ Χ QPL Χ 15 Х NA QPL Χ QPL NA Х NA QPL NA QPL 18 Χ QPL Χ NA NA Χ QPL Χ Χ QPL Χ Х Х QPL Χ 21 QPL NA NA NA NA QPL NA 24 Х QPL Χ NA NA Χ QPL Χ Χ QPL Χ Χ Χ 27 Χ NA NA NA NA NA NA NA NA 30 Χ QPL QPL Χ QPL Χ Χ QPL Χ Χ NA 36 QPL Χ Χ QPL Х Χ QPL Χ Χ NA NA 42 Χ NA Χ NA NA Χ NA Χ Χ NA Χ Χ Χ Χ 48 Χ NA NA NA NA Χ NA Χ 54 NA 60 NA NA

Notes: PVC Polyvinyl Chloride Pipe

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

X Permitted

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

NA Not Acceptable

PIPE CULVERTS (metric) TABLE IIIB: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE

			Type 5				Type 6		Type 7				
Nominal			t: Greater				t: Greater the		Fill Height: Greater than 9 m, not exceeding 10.5 m				
Diameter (mm)	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	PVC	CPVC	PE		
250	Χ	QPL	Χ	QPL	NA	Х	QPL	X	X	QPL	Х		
300	X	QPL	X	QPL	QPL	X	QPL	X	X	QPL	X		
375	Χ	QPL	NA	NA	QPL	Х	QPL	NA	Х	QPL	NA		
450	X	QPL	X	NA	NA	X	QPL	X	X	QPL	X		
525	X	QPL	NA	NA	NA	X	QPL	NA	X	QPL	NA		
600	Χ	QPL	Χ	NA	NA	Х	QPL	Х	Х	QPL	Х		
675	X	NA	NA	NA	NA	X	NA	NA	X	NA	NA		
750	X	QPL	X	NA	QPL	X	QPL	X	X	QPL	X		
900	Χ	QPL	Χ	NA	NA	Х	QPL	Х	Х	QPL	Х		
1000	X	NA	X	NA	NA	X	NA	X	X	NA	X		
1200	X	NA	X	NA	NA	X	NA	X	X	NA	X		
1350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
1500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

Notes: PVC

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

Χ Permitted

QPL Permitted for the producers approved for that diameter in the Department's qualified product list Not Acceptable

NA

STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE

				Тур	e 1			Type 2									
Nominal Diameter in.			Fil	I Height: with 1	3' and les	ss,		Fill Height: Greater than 3', not exceeding 10'									
	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	
10	NA	3	Х	Х	QPL	Х	QPL	NA	NA	1	*X	Х	QPL	Х	QPL	NA	
12	IV	NA	Х	Х	QPL	Х	QPL	QPL	ll l	1	*X	Χ	QPL	Х	QPL	QPL	
15	IV	NA	NA	Χ	QPL	NA	QPL	QPL	II	1	*X	X	QPL	NA	QPL	QPL	
18	IV	NA	NA	Х	QPL	X	QPL	QPL	II	2	Х	Χ	QPL	Х	QPL	QPL	
21	III	NA	NA	Х	QPL	NA	QPL	NA	II	2	Х	Χ	QPL	NA	QPL	NA	
24	III	NA	NA	X	QPL	X	QPL	QPL	II	2	Χ	Χ	QPL	Х	QPL	QPL	
27	III	NA	NA	Х	NA	NA	NA	NA	II	3	Х	Х	NA	NA	NA	NA	
30	IV	NA	NA	Х	QPL	Х	QPL	QPL	II	3	Х	Х	QPL	Х	QPL	QPL	
33	III	NA	NA	NA	NA	NA	NA	NA	II	NA	Χ	NA	NA	NA	NA	NA	
36	III	NA	NA	Х	QPL	Х	QPL	QPL	II	NA	Х	Х	QPL	Х	QPL	QPL	
42	II	NA	Х	Х	NA	Х	QPL	QPL	II	NA	Х	Х	NA	Х	QPL	QPL	
48	П	NA	Х	Х	NA	X	QPL	QPL	II	NA	Χ	Χ	NA	Х	QPL	QPL	
54	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA	
60	II	NA	NA	NA	NA	NA	QPL	QPL	II	NA	NA	NA	NA	NA	QPL	QPL	
66	П	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA	
72	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA	
78	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA	
84	П	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA	
90	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA	
96	II	NA	NA	NA	NA	NA	NA	NA	III	NA	NA	NA	NA	NA	NA	NA	
102	II	NA	NA	NA	NA	NA	NA	NA	III	NA	NA	NA	NA	NA	NA	NA	
108		NA	NA	NA Otensio	NA	NA O Di	NA	NA	Ш	NA	NA	NA	NA	NA	NA	NA	

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

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

Extra Strength Clay Pipe **ESCP** PVC

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

PΕ Polyethylene Pipe

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

Permitted Χ

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

Not Acceptable NA

May also use Standard Strength Clay Pipe

STORM SEWERS (metric) KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE

				Тур	e 1			Type 2									
Nominal Diameter mm			Fill	Height: 7	l m and le mm min,	ess,		Fill Height: Greater than 1 m, not exceeding 3 m									
	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	
250	NA	3	Х	Х	QPL	Χ	QPL	NA	NA	1	*X	Х	QPL	Χ	QPL	NA	
300	IV	NA	Х	X	QPL	Χ	QPL	QPL	II	1	*X	Χ	QPL	Χ	QPL	QPL	
375	IV	NA	NA	Χ	QPL	NA	QPL	QPL	II	1	*X	Χ	QPL	NA	QPL	QPL	
450	IV	NA	NA	Х	QPL	Χ	QPL	QPL	II	2	Х	Χ	QPL	Χ	QPL	QPL	
525	Ш	NA	NA	Х	QPL	NA	QPL	NA	II	2	Х	Χ	QPL	NA	QPL	NA	
600	Ш	NA	NA	Х	QPL	Χ	QPL	QPL	Ш	2	X	Χ	QPL	X	QPL	QPL	
675	Ш	NA	NA	X	NA	NA	NA	NA	II	3	Х	Χ	NA	NA	NA	NA	
750	IV	NA	NA	X	QPL	Χ	QPL	QPL	II	3	Х	Χ	QPL	Χ	QPL	QPL	
825	Ш	NA	NA	NA	NA	NA	NA	NA	Ш	NA	Х	NA	NA	NA	NA	NA	
900	Ш	NA	NA	Х	QPL	Χ	QPL	QPL	II	NA	Х	Χ	QPL	Χ	QPL	QPL	
1050	II	NA	Х	Х	NA	X	QPL	QPL	II	NA	Х	Χ	NA	Х	QPL	QPL	
1200	II	NA	Х	Х	NA	Χ	QPL	QPL	Ш	NA	Х	Χ	NA	X	QPL	QPL	
1350	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA	
1500	II	NA	NA	NA	NA	NA	QPL	QPL	II	NA	NA	NA	NA	NA	QPL	QPL	
1650	II	NA	NA	NA	NA	NA	NA	NA	Ш	NA	NA	NA	NA	NA	NA	NA	
1800	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA	
1950	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA	
2100	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA	
2250	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA	
2400	II	NA	NA	NA	NA	NA	NA	NA	III	NA	NA	NA	NA	NA	NA	NA	
2550	II	NA	NA	NA	NA	NA	NA	NA	III	NA	NA	NA	NA	NA	NA	NA	
2700		NA	NA	NA Otensio	NA	NA O Di	NA	NA	III	NA	NA	NA	NA	NA	NA	NA	

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

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

Extra Strength Clay Pipe **ESCP** PVC

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

PΕ Polyethylene Pipe

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

Permitted Χ

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

Not Acceptable NA

May also use Standard Strength Clay Pipe

STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE Type 3 Type 4 Nominal Fill Height: Greater than 10' Fill Height: Greater than 15' Diameter not exceeding 15' not exceeding 20' in. PVC **RCCP CSP ESCP** CPVC CPE CPP **RCCP** PVC **CPVC** CPE CPP PΕ **CSP ESCP** PΕ NA 2 Χ QPL Χ QPL 3 Χ QPL Χ QPL 10 Χ NA NA Х NA 12 2 Χ Χ QPL Χ QPL QPL Χ QPL Χ QPL QPL Ш IV NA NA QPL 15 Ш 3 Χ Χ QPL NA QPL QPL IV NA NA Χ NA QPL QPL 18 Χ Χ Х QPL Ш NA QPL Χ QPL QPL IV NA NA QPL Х QPL 21 Ш NA NA Χ QPL NA QPL NA IV NA NA Х QPL NA NA NA Χ QPL QPL QPL Х QPL QPL 24 Ш NA NA Χ IV NA NA Χ NA 27 NA Χ NA IV NA X NA NA NA NA NA NA NA NA 30 Х QPL QPL QPL Х QPL NA NA Χ IV NA NA QPL Х NA Ш 33 NA NA NA NA IV NA NA NA NA Ш NA NA NA NA NA NA 36 Χ QPL QPL QPL Χ QPL NA NA Χ QPL IV NA NA Χ NA 42 NA Χ NA Χ QPL IV Х NA Χ NA Ш NA NA NA NA NA 48 Χ QPL Х Χ Ш NA NA Х NA NA IV NA NA NA NA NA 54 Ш NA NA NA NA NA NA NA IV NA NA NA NA NA NA NA 60 NA NA QPL NA NA Ш NA NA NA NA IV NA NA NA NA NA 66 NA NA NA NA NA NA NA IV NA NA NA NA NA NA NA 72 NA NA IV Ш NA 78 NA NA NA NA NA NA NA NA NA Ш NA NA NA IV NA NA 84 NA IV Ш NA 90 NA NA NA NA NA NA NA 1680 NA NA NA NA NA NA NA Ш 96 Ш NA NA NA NA NA NA NA 1690 NA NA NA NA NA NA NA 102 1700 Ш NA 108 1360 NA NA NA NA NA NA NA 1710 NA NA NA NA NA NA

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe (RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the D-load to produce a 0.01 in crack.)

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

ESCP Extra Strength Clay Pipe

Polyvinyl Chloride Pipe PVC

CPVC Corrugated Polyvinyl Chloride Pipe with a Smooth Interior

PΕ Polyethylene Pipe

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

Permitted Χ

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

NA Not Acceptable

STORM SEWERS (metric) KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE Type 3 Type 4 Nominal Fill Height: Greater than 3 m, Fill Height: Greater than 4.5 m, Diameter not exceeding 4.5 m not exceeding 6 m mm **RCCP CSP ESCP** PVC CPVC CPE CPP **RCCP PVC** CPE CPP PΕ **CSP ESCP CPVC** PΕ 250 NA 2 QPL Χ QPL 3 Χ QPL Χ QPL NA Χ Χ NA NA Х 300 2 Χ Χ QPL Χ QPL QPL Χ QPL Χ QPL QPL IV NA NA Ш 375 Ш 3 Χ Χ QPL NA QPL QPL IV NA NA Χ QPL NA QPL QPL 450 Χ Χ Х Х QPL QPL Ш NA QPL Χ QPL QPL IV NA NA QPL 525 Ш NA NA Χ QPL NA QPL NA IV NA NA Х QPL NA NA NA Χ QPL QPL QPL Х QPL QPL 600 Ш NA NA Χ IV NA NA Χ NA 675 NA Χ NA IV NA X NA NA NA NA NA NA NA NA NA Х QPL QPL QPL Х QPL 750 Ш NA NA Χ IV NA NA QPL Х NA 825 NA NA NA NA IV NA NA NA NA Ш NA NA NA NA NA NA Χ QPL QPL QPL Χ QPL 900 NA NA Χ QPL IV NA NA Х NA 1050 NA Χ NA Χ QPL IV Х NA Χ NA NA Ш NA NA NA NA 1200 Χ QPL Х Χ Ш NA NA Χ NA NA IV NA NA NA NA NA 1350 Ш NA NA NA NA NA NA NA IV NA NA NA NA NA NA NA 1500 NA NA QPL IV NA NA Ш NA NA NA NA NA NA NA NA NA 1650 NA NA NA NA NA NA NA IV NA NA NA NA NA NA NA 1800 NA NA IV NA NA NA Ш NA NA NA NA NA NA NA NA NA 1950 NA Ш NA NA IV NA NA 2100 NA IV NA NA Ш NA 2250 NA NA NA NA NA NA NA 80 NA NA NA NA NA NA NA Ш 2400 Ш NA NA NA NA NA NA NA 80 NA NA NA NA NA NA NA 2550 NA 80 Ш NA NA

NA

NA

NA

NA

NA

NA

NA NA 80 NA RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe (RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the D-load to produce a 25.4 micro-meter crack.)

NA

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

ESCP Extra Strength Clay Pipe Polyvinyl Chloride Pipe PVC

70

NA

CPVC Corrugated Polyvinyl Chloride Pipe with a Smooth Interior

NA

NA

PΕ Polyethylene Pipe

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

Permitted Χ

2700

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

NA Not Acceptable

STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE

l	Type 5			Type 6		Type 7								
Nominal Diameter in.	Fill Height: Greater than 20', not exceeding 25'				Fill Height: Greater than 25', not exceeding 30'		Fill Height: Greater than 30', not exceeding 35'							
	RCCP	PVC	CPVC	PE	CPE	CPP	RCCP	PVC	CPVC	PE	RCCP	PVC	CPVC	PE
10	NA	Х	QPL	Χ	QPL	NA	NA	Χ	QPL	Χ	NA	Χ	QPL	Х
12	IV	Χ	QPL	Χ	QPL	QPL	V	Χ	QPL	Χ	V	Χ	QPL	X
15	IV	Χ	QPL	NA	NA	QPL	V	Χ	QPL	NA	V	Χ	QPL	NA
18	IV	Χ	QPL	Χ	NA	NA	V	Χ	QPL	Χ	V	Х	QPL	Χ
21	IV	Χ	QPL	NA	NA	NA	V	Χ	QPL	NA	V	Χ	QPL	NA
24	IV	Χ	QPL	Χ	NA	NA	V	Χ	QPL	Χ	V	Χ	QPL	Χ
27	IV	Χ	NA	NA	NA	NA	V	Χ	NA	NA	V	Х	NA	NA
30	IV	Χ	QPL	Χ	NA	QPL	V	Χ	QPL	Χ	V	Χ	QPL	Х
33	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA
36	IV	Χ	QPL	Χ	NA	NA	V	Χ	QPL	Χ	V	Х	QPL	Χ
42	IV	Χ	NA	Χ	NA	NA	V	Χ	NA	Χ	V	Χ	NA	Х
48	IV	Χ	NA	Χ	NA	NA	V	Χ	NA	Χ	V	Χ	NA	Χ
54	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA
60	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA
66	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA
72	V	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA
78	2020	NA	NA	NA	NA	NA	2370	NA	NA	NA	2730	NA	NA	NA
84	2020	NA	NA	NA	NA	NA	2380	NA	NA	NA	2740	NA	NA	NA
90	2030	NA	NA	NA	NA	NA	2390	NA	NA	NA	2750	NA	NA	NA
96	2040	NA	NA	NA	NA	NA	2400	NA	NA	NA	2750	NA	NA	NA
102	2050	NA	NA	NA	NA	NA	2410	NA	NA	NA	2760	NA	NA	NA
108	2060	NA NA	NA to Outron	NA t Ctarra I	NA Dualina a ma	NA L Causan F	2410	NA D with a	NA	NA -tdf	2770	NA	NA hall ha fuu	NA

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe (RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the D-load to produce a 0.01 in crack.)

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe with a Smooth Interior

PE Polyethylene Pipe

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

X Permitted

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

NA Not Acceptable

STORM SEWERS (metric) KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE

	Type 5			Type 6		Type 7								
Diameter		Height: Greater than 6 m, not exceeding 7.5 m		Fill He	Fill Height: Greater than 7.5 m, not exceeding 9 m		Fill Height: Greater than 9 m, not exceeding 10.5 m							
mm	RCCP	PVC	CPVC	PE	CPE	CPP	RCCP	PVC	CPVC	PE	RCCP	PVC	CPVC	PE
250	NA	Х	QPL	Х	QPL	NA	NA	Х	QPL	Х	NA	Χ	QPL	Х
300	IV	Χ	QPL	Χ	QPL	QPL	V	Χ	QPL	Χ	V	Χ	QPL	X
375	IV	Χ	QPL	NA	NA	QPL	V	Χ	QPL	NA	V	Χ	QPL	NA
450	IV	Χ	QPL	Χ	NA	NA	٧	Χ	QPL	Χ	V	Χ	QPL	X
525	IV	Χ	QPL	NA	NA	NA	V	Χ	QPL	NA	V	Χ	QPL	NA
600	IV	Χ	QPL	Χ	NA	NA	V	Χ	QPL	Χ	V	Χ	QPL	X
675	IV	Χ	NA	NA	NA	NA	٧	Χ	NA	NA	V	Χ	NA	NA
750	IV	Χ	QPL	Χ	NA	QPL	V	Χ	QPL	Χ	V	Χ	QPL	X
825	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA
900	IV	Χ	QPL	Χ	NA	NA	٧	Χ	QPL	Χ	V	Χ	QPL	X
1050	IV	Χ	NA	Χ	NA	NA	V	Χ	NA	Χ	V	X	NA	X
1200	IV	Χ	NA	Χ	NA	NA	V	Χ	NA	Χ	V	Χ	NA	X
1350	IV	NA	NA	NA	NA	NA	٧	NA	NA	NA	V	NA	NA	NA
1500	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA
1650	IV	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA
1800	V	NA	NA	NA	NA	NA	V	NA	NA	NA	V	NA	NA	NA
1950	100	NA	NA	NA	NA	NA	110	NA	NA	NA	130	NA	NA	NA
2100	100	NA	NA	NA	NA	NA	110	NA	NA	NA	130	NA	NA	NA
2250	100	NA	NA	NA	NA	NA	110	NA	NA	NA	130	NA	NA	NA
2400	100	NA	NA	NA	NA	NA	120	NA	NA	NA	130	NA	NA	NA
2550	100	NA	NA	NA	NA	NA	120	NA	NA	NA	130	NA	NA	NA
2700	100	NA	NA	NA	NA	NA	120	NA	NA	NA	130	NA	NA o furnished	NA

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe (RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the D-load to produce a 25.4 micro-meter crack.)

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe with a Smooth Interior

PE Polyethylene Pipe

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

X Permitted

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

NA Not Acceptable"

Revise the first paragraph of Article 1040.03 of the Standard Specifications to read:

"1040.03 Polyvinyl Chloride (PVC) Pipe. Acceptance testing of PVC pipe and fittings shall be accomplished during the same construction season in which they are installed. The pipe shall meet the following additional requirements."

Revise Article 1040.04(b) of the Standard Specifications to read:

"(b) Corrugated PE Pipe with a Smooth Interior. The manufacturer shall be listed as compliant through the NTPEP program and the pipe shall be according to AASHTO M 294 (nominal size – 12 to 60 in. (300 to 1500 mm)). The pipe shall be Type S or D."

Revise the first paragraph of Article 1040.04(d) of the Standard Specifications to read:

"(d) PE Pipe with a Smooth Interior. The pipe shall be according to ASTM F 714 (DR 32.5) with a minimum cell classification of PE 335434 as defined in ASTM D 3350."

Revise the first paragraph of Article 1040.08 of the Standard Specifications to read:

"1040.08 Polypropylene (PP) Pipe. Storage and handling shall be according to the manufacturer's recommendations, except in no case shall the pipe be exposed to direct sunlight for more than six months. Acceptance testing of the pipe shall be accomplished during the same construction season in which it is installed. The pipe shall meet the following additional requirements."

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

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

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

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

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

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

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

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

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

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 2 % 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.

HOT-MIX ASPHALT (BDE)

Effective: January 1, 2024

Revise the second paragraph of Articles 1030.07(a)(11) and 1030.08(a)(9) of the Standard Specifications to read:

"When establishing the target density, the HMA maximum theoretical specific gravity (G_{mm}) will be based on the running average of four available Department test results for that project. If less than four G_{mm} test results are available, an average of all available Department test results for that project will be used. The initial G_{mm} will be the last available Department test result from a QMP project. If there is no available Department test result from a QMP project, the Department mix design verification test result will be used as the initial G_{mm} ."

In the Supplemental Specifications, replace the revision for the end of the third paragraph of Article 1030.09(h)(2) with the following:

"When establishing the target density, the HMA maximum theoretical specific gravity (G_{mm}) will be the Department mix design verification test result."

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

"Production is not required to stop after a test strip has been constructed."

HOT-MIX ASPHALT – LONGITUDINAL JOINT SEALANT (BDE)

Effective: November 1, 2022 Revised: August 1, 2023

Add the following after the second sentence in the eighth paragraph of Article 406.06(h)(2) of the Standard Specifications:

"If rain is forecasted and traffic is to be on the LJS or if pickup/tracking of the LJS material is likely, the LJS shall be covered immediately following its application with FA 20 fine aggregate mechanically spread uniformly at a rate of 1.5 ± 0.5 lb/sq yd $(0.75 \pm 0.25$ kg/sq m). Fine aggregate landing outside of the LJS shall be removed prior to application of tack coat."

Add the following after the first sentence in the ninth paragraph of Article 406.06(h)(2) of the Standard Specifications:

"LJS half-width shall be applied at a width of 9 ± 1 in. (225 \pm 25 mm) in the immediate lane to be placed with the outside edge flush with the joint of the next HMA lift. The vertical face of any longitudinal joint remaining in place shall also be coated."

Add the following after the eleventh paragraph of Article 406.06(h)(2) of the Standard Specifications:

"LJS Half-Width Application Rate, lb/ft (kg/m) 1/					
Lift Thickness, in. (mm)	Coarse Graded Mixture (IL-19.0, IL-19.0L, IL-9.5, IL-9.5L, IL-4.75)	Fine Graded Mixture (IL-9.5FG)	SMA Mixture (SMA-9.5, SMA-12.5)		
³ ⁄ ₄ (19)	0.44 (0.66)				
1 (25)	0.58 (0.86)				
1 ¼ (32)	0.66 (0.98)	0.44 (0.66)			
1 ½ (38)	0.74 (1.10)	0.48 (0.71)	0.63 (0.94)		
1 ¾ (44)	0.82 (1.22)	0.52 (0.77)	0.69 (1.03)		
2 (50)	0.90 (1.34)	0.56 (0.83)	0.76 (1.13)		
≥ 2 ¼ (60)	0.98 (1.46)				

^{1/} The application rate includes a surface demand for liquid. The thickness of the LJS may taper from the center of the application to a lesser thickness on the edge of the application, provided the correct width and application rate are maintained."

Revise the second paragraph of Article 406.13(b) of the Standard Specifications to read:

Add the following to the end of the second paragraph of Article 406.14 of the Standard Specifications:

[&]quot;Aggregate for covering tack, LJS, or FLS will not be measured for payment."

"Longitudinal joint sealant (LJS) half-width will be paid for at the contract unit price per foot (meter) for LONGITUDINAL JOINT SEALANT, HALF-WIDTH."

PERFORMANCE GRADED ASPHALT BINDER (BDE)

Effective: January 1, 2023

Revise Article 1032.05 of the Standard Specifications to read:

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

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

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

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

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

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

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

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

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

Table 2 - Requirements for Styrene-Butadiene Rubber (SBR) Modified Asphalt Binders					
Test	Asphalt Grade SBR PG 64-28 SBR PG 70-22	Asphalt Grade SB/SBS PG 64-34 SB/SBS PG 70-28 SBR PG 76-22 SBR PG 76-28			
Separation of Polymer					
ITP, "Separation of Polymer from Asphalt					
Binder"					
Difference in °F (°C) of the softening					
point between top and bottom portions	4 (2) max.	4 (2) max.			
Toughness					
ASTM D 5801, 77 °F (25 °C),	440 (40 =)	440 (40 =)			
20 in./min. (500 mm/min.), inlbs (N-m)	110 (12.5) min.	110 (12.5) min.			
Tenacity					
ASTM D 5801, 77 °F (25 °C),	()	()			
20 in./min. (500 mm/min.), inlbs (N-m)	75 (8.5) min.	75 (8.5) min.			
TESTS ON RESIDUE FROM ROLLING THIN FILM OVEN TEST (AASHTO T 240)					
Elastic Recovery					
ASTM D 6084, Procedure A,					
77 °F (25 °C), 100 mm elongation, %	40 min.	50 min.			

(2) Ground Tire Rubber (GTR) Modification. GTR modification is the addition of recycled ground tire rubber to liquid asphalt binder to achieve the specified performance grade. GTR shall be produced from processing automobile and/or truck tires by the ambient

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

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

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

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

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

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

An Attenuated Total Reflectance-Fourier Transform Infrared spectrum (ATR-FTIR) shall be collected for both the softening compound as well as the softener modified

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

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

Table 4 - Requirements for Softener Modified Asphalt Binders					
	Asphalt Grade				
	SM PG 46-28 SM P	G 46-34			
Test	SM PG 52-28 SM P	G 52-34			
	SM PG 58-22 SM P	G 58-28			
	SM PG 64-22				
Small Strain Parameter (AASHTO PP 113)					
BBR, ΔTc, 40 hrs PAV (40 hrs	-5°C min.				
continuous or 2 PAV at 20 hrs)					
Large Strain Parameter (Illinois Modified					
AASHTO T 391) DSR/LAS Fatigue	≥ 54 %				
Property, Δ G* peak τ, 40 hrs PAV					
(40 hrs continuous or 2 PAV at 20 hrs)					

The following grades may be specified as tack coats.

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

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

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

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

^{1/} For Low ESAL HMA shoulder and stabilized subbase, the RAP/RAS ABR shall not exceed 50 percent of the mixture.

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

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

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

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

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

PORTLAND CEMENT CONCRETE (BDE)

Effective: August 1, 2023

Revise the second paragraph of Article 1103.03(a)(4) the Standard Specifications to read:

"The dispenser system shall provide a visual indication that the liquid admixture is actually entering the batch, such as via a transparent or translucent section of tubing or by independent check with an integrated secondary metering device. If approved by the Engineer, an alternate indicator may be used for admixtures dosed at rates of 25 oz/cwt (1630 mL/100 kg) or greater, such as accelerating admixtures, corrosion inhibitors, and viscosity modifying admixtures."

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE)

Effective: January 1, 2024 Revised: April 1, 2024

Revise the first paragraph of Article 669.04 of the Standard Specifications to read:

"669.04 Regulated Substances Monitoring. Regulated substances monitoring includes environmental observation and field screening during regulated substances management activities. The excavated soil and groundwater within the work areas shall be managed as either uncontaminated soil, hazardous waste, special waste, or non-special waste.

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)"."

Revise the first two sentences of the nineteenth paragraph of Article 669.05 of the Standard Specifications to read:

"The Contractor shall coordinate waste disposal approvals with the disposal facility and provide the specific analytical testing requirements of that facility. The Contractor shall make all arrangements for collection, transportation, and analysis of landfill acceptance testing."

Revise the last paragraph of Article 669.05 of the Standard Specifications to read:

"The Contractor shall select a permitted landfill facility or CCDD/USFO facility meeting the requirements of 35 III. Admin. Code Parts 810-814 or Part 1100, respectively. The Department will review and approve or reject the facility proposed by the Contractor based upon information provided in BDE 2730. The Contractor shall verify whether the selected facility is compliant with those applicable standards as mandated by their permit and whether the 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 facility shall in no manner delay the construction schedule or alter the Contractor's responsibilities as set forth."

Revise the first paragraph of Article 669.07 of the Standard Specifications to read:

"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. All other 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.

Topsoil for re-use as final cover which has been field screened and found not to exhibit PID readings over daily background readings as documented on the BDE 2732, visual staining or

odors, and is classified according to Articles 669.05(a)(2), (a)(3), (a)(4), (b)(1), or (c) may be temporarily staged at the Contractor's option."

Add the following paragraph after the sixth paragraph of Article 669.11 of the Standard Specifications.

"The sampling and testing of effluent water derived from dewatering discharges for priority pollutants volatile organic compounds (VOCs), priority pollutants semi-volatile organic compounds (SVOCs), or priority pollutants metals, will be paid for at the contract unit price per each for VOCS GROUNDWATER ANALYSIS using EPA Method 8260B, SVOCS GROUNDWATER ANALYSIS using EPA Methods 8270C, or RCRA METALS GROUNDWATER ANALYSIS using EPA Methods 6010B and 7471A. This price shall include transporting the sample from the job site to the laboratory."

Revise the first sentence of the eight paragraph of Article 669.11 of the Standard Specifications to read:

"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) to be managed and disposed of, if required and approved by the Engineer, will be paid according to Article 109.04."

SEEDING (BDE)

Effective: November 1, 2022

Revise Article 250.07 of the Standard Specifications to read:

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

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

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

Class -	– Туре	Seeds	lb/acre (kg/hectare)
4	Native Grass 2/6/	Andropogon gerardi (Big Blue Stem) 5/	4 (4)
		Schizachyrium scoparium (Little Blue Stem) 5/	5 (5)
		Bouteloua curtipendula (Side-Oats Grama) 5/	5 (5)
		Elymus canadensis (Canada Wild Rye) 5/	1 (1)
		Panicum virgatum (Switch Grass) 5/ Sorghastrum nutans (Indian Grass) 5/	1 (1) 2 (2)
		Annual Ryegrass	25 (25)
		Oats, Spring	25 (25)
		Perennial Ryegrass	15 (15)
4A	Low Profile Native Grass 2/ 6/	Schizachyrium scoparium (Little Blue Stem) 5/	5 (5)
		Bouteloua curtipendula (Side-Oats Grama) 5/	5 (5)
		Elymus canadensis (Canada Wild Rye) 5/	1 (1)
		Sporobolus heterolepis (Prairie Dropseed) 5/	0.5 (0.5)
		Annual Ryegrass	25 (25)
		Oats, Spring	25 (25)
45	W II 10 I	Perennial Ryegrass	15 (15)
4B	Wetland Grass and	Annual Ryegrass Oats, Spring	25 (25) 25 (25)
	Sedge Mixture 2/ 6/	Wetland Grasses (species below) 5/	6 (6)
	Species:	Vancia (Plus laint Crass)	<u>% By Weight</u> 12
	Carex lacustris (Lake	densis (Blue Joint Grass) -Bank Sedge)	6
	Carex slipata (Awl-Fr		6
	Carex stricta (Tussoc	9 /	6
	Carex vulpinoidea (F		6
		(Needle Spike Rush)	3
	Eleocharis obtusa (B Glyceria striata (Fow		3 14
	Juncus effusus (Com		6
	Juncus tenuis (Slend		6
	Juncus torreyi (Torre		6
	Leersia oryzoides (Ri	ce Cut Grass)	10
	Scirpus acutus (Hard		3
	Scirpus atrovirens (D		3
	Bolboschoenus fluvia		3 3
	Scrioeriopiectus tabe Spartina pectinata (C	ernaemontani (Softstem Bulrush) Ford Grass)	3
	oparina pedinala (O	ora Graddj	т

Class -	– Туре	Seeds	lb/acre (kg/hectare)	
5	Forb with	Annuals Mixture (Below)	1 (1)	
	Annuals Mixture 2/ 5/ 6/	Forb Mixture (Below)	10 (10)	
		e not exceeding 25 % by weight of species, of the following:		
	Coreopsis lanceolata (Sand Coreopsis)			
	Leucanthemum maxim			
	Gaillardia pulchella (Bla Ratibida columnifera (F			
	Rudbeckia hirta (Black-Eyed Susan)			
	Forb Mixture - Mixture no	ot exceeding 5 % by weight PLS of		
	any one spe	ecies, of the following:		
	Amorpha canescens (L	ead Plant) 4/		
	1	-tilala AA/a'a al)		

Anemone cylindrica (Thimble Weed) Asclepias tuberosa (Butterfly Weed) Aster azureus (Sky Blue Aster) Symphyotrichum leave (Smooth Aster) Aster novae-angliae (New England Aster) Baptisia leucantha (White Wild Indigo) 4/ Coreopsis palmata (Prairie Coreopsis) Echinacea pallida (Pale Purple Coneflower) Eryngium yuccifolium (Rattlesnake Master) Helianthus mollis (Downy Sunflower) Heliopsis helianthoides (Ox-Eye) Liatris aspera (Rough Blazing Star) Liatris pycnostachya (Prairie Blazing Star) Monarda fistulosa (Prairie Bergamot) Parthenium integrifolium (Wild Quinine) Dalea candida (White Prairie Clover) 4/ Dalea purpurea (Purple Prairie Clover) 4/ Physostegia virginiana (False Dragonhead) Potentilla arguta (Prairie Cinquefoil) Ratibida pinnata (Yellow Coneflower) Rudbeckia subtomentosa (Fragrant Coneflower) Silphium laciniatum (Compass Plant) Silphium terebinthinaceum (Prairie Dock) Oligoneuron rigidum (Rigid Goldenrod) Tradescantia ohiensis (Spiderwort)

Veronicastrum virginicum (Culver's Root)

Class -	– Туре	Seeds	lb/acre (kg/hectare)
5A	Large Flower Native Forb Mixture 2/ 5/ 6/	Forb Mixture (see below)	5 (5)
	Species: Aster novae-angliae (New Echinacea pallida (Pale P Helianthus mollis (Downy Heliopsis helianthoides (C Liatris pycnostachya (Prai Ratibida pinnata (Yellow C Rudbeckia hirta (Black-Ey Silphium laciniatum (Com Silphium terebinthinaceun Oligoneuron rigidum (Rigi	urple Coneflower) Sunflower) lx-Eye) rie Blazing Star) Coneflower) ed Susan) pass Plant) n (Prairie Dock)	% By Weight 5 10 10 10 10 5 10 10 20 10
5B	Wetland Forb 2/5/6/	Forb Mixture (see below)	2 (2)
	Species: Acorus calamus (Sweet F Angelica atropurpurea (Ar Asclepias incarnata (Swar Aster puniceus (Purple St Bidens cernua (Beggartick Eutrochium maculatum (S Eupatorium perfoliatum (E Helenium autumnale (Auti Iris virginica shrevei (Blue Lobelia cardinalis (Cardina Lobelia cardinalis (Cardina Lobelia siphilitica (Great E Lythrum alatum (Winged I Physostegia virginiana (Fa Persicaria pensylvanica (Fa Persicaria lapathifolia (Cu Pychanthemum virginianu Rudbeckia laciniata (Cut-I Oligoneuron riddellii (Ridd Sparganium eurycarpum (ngelica) np Milkweed) emmed Aster) (s) potted Joe Pye Weed) coneset) umn Sneeze Weed) Flag Iris) al Flower) silue Lobelia) Loosestrife) alse Dragonhead) Pennsylvania Smartweed) rlytop Knotweed) um (Mountain Mint) eaf Coneflower) ell Goldenrod) Giant Burreed)	% By Weight 3 6 2 10 7 7 2 2 5 5 10 10 10 5 5 2 5 5
6	Conservation Mixture 2/ 6/	Schizachyrium scoparium (Little Blue Stem) 5/ Elymus canadensis (Canada Wild Rye) 5/ Buffalo Grass 5/ 7/ Vernal Alfalfa 4/ Oats, Spring	5 (5) 2 (2) 5 (5) 15 (15) 48 (55)
6A	Salt Tolerant Conservation Mixture 2/ 6/	Schizachyrium scoparium (Little Blue Stem) 5/ Elymus canadensis (Canada Wild Rye) 5/ Buffalo Grass 5/ 7/ Vernal Alfalfa 4/ Oats, Spring Puccinellia distans (Fults Saltgrass or Salty Alkaligrass)	5 (5) 2 (2) 5 (5) 15 (15) 48 (55) 20 (20)
7	Temporary Turf Cover Mixture	Perennial Ryegrass Oats, Spring	50 (55) 64 (70)

Notes:

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

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

SHORT TERM AND TEMPORARY PAVEMENT MARKINGS (BDE)

Effective: April 1, 2024 Revised: April 2, 2024

Revise Article 701.02(d) of the Standard Specifications to read:

"(d) Pavement Marking Tapes (Note 3)1095.06"

Add the following Note to the end of Article 701.02 of the Standard Specifications:

"Note 3. White or yellow pavement marking tape that is to remain in place longer than 14 days shall be Type IV tape."

Revise Article 703.02(c) of the Standard Specifications to read:

"(c) Pavement Marking Tapes (Note 1)1095.06"

Add the following Note to the end of Article 703.02 of the Standard Specifications:

"Note 1. White or yellow pavement marking tape that is to remain in place longer than 14 days shall be Type IV tape."

Revise Article 1095.06 of the Standard Specifications to read:

"1095.06 Pavement Marking Tapes. Type I white or yellow marking tape shall consist of glass spheres embedded into a binder on a foil backing that is precoated with a pressure sensitive adhesive. The spheres shall be of uniform gradation and distributed evenly over the surface of the tape.

Type IV tape shall consist of white or yellow tape with wet reflective media incorporated to provide immediate and continuing retroreflection in wet and dry conditions. The wet retroreflective media shall be bonded to a durable polyurethane surface. The patterned surface shall have approximately 40 ± 10 percent of the surface area raised and presenting a near vertical face to traffic from any direction. The channels between the raised areas shall be substantially free of exposed reflective elements or particles.

Blackout tape shall consist of a matte black, non-reflective, patterned surface that is precoated with a pressure sensitive adhesive.

(a) Color. The white and yellow markings shall meet the following requirements for daylight reflectance and color, when tested, using a color spectrophotometer with 45 degrees circumferential/zero degree geometry, illuminant D65, and two degree observer angle. The color instrument shall measure the visible spectrum from 380 to 720 nm with a wavelength measurement interval and spectral bandpass of 10 nm.

Color	Daylight Reflectance %Y
White	65 min.
Yellow *	36 - 59

^{*}Shall match Aerospace Material Specification Standard 595 33538 (Orange Yellow) and the chromaticity limits as follows.

Х	0.490	0.475	0.485	0.530
У	0.470	0.438	0.425	0.456

(b) Retroreflectivity. The white and yellow markings shall be retroreflective. Reflective values measured in accordance with the photometric testing procedure of ASTM D 4061 shall not be less than those listed in the table below. The coefficient of retroreflected luminance, R_L, shall be expressed as average millicandelas/footcandle/sq ft (millicandelas/lux/sq m), measured on a 3.0 x 0.5 ft (900 mm x 150 mm) panel at 86 degree entrance angle.

Coefficient of Retroreflected Luminance, R _L , Dry						
	Type I Type IV					
Observation Angle	White	Yellow	Observation Angle	White	Yellow	
0.2°	2700	2400	0.2°	1300	1200	
0.5°	2250	2000	0.5°	1100	1000	

Wet retroreflectance shall be measured for Type IV under wet conditions according to ASTM E 2177 and meet the following.

Wet Retroreflectance, Initial R∟				
Color R _L 1.05/88.76				
White	300			
Yellow 200				

- (c) Skid Resistance. The surface of Type IV and blackout markings shall provide a minimum skid resistance of 45 BPN when tested according to ASTM E 303.
- (d) Application. The pavement marking tape shall have a precoated pressure sensitive adhesive and shall require no activation procedures. Test pieces of the tape shall be applied according to the manufacturer's instructions and tested according to ASTM D 1000, Method A, except that a stiff, short bristle roller brush and heavy hand pressure will be substituted for the weighted rubber roller in applying the test pieces to the metal test panel. Material tested as directed above shall show a minimum adhesion value of 750 g/in. (30 g/mm) width at the temperatures specified in ASTM D 1000. The adhesive shall be resistant to oils, acids, solvents, and water, and shall not leave objectionable stains or residue after removal. The material shall be flexible and conformable to the texture of the pavement.

- (e) Durability. Type IV and blackout tape shall be capable of performing for the duration of a normal construction season and shall then be capable of being removed intact or in large sections at pavement temperatures above 40 °F (4 °C) either manually or with a roll-up device without the use of sandblasting, solvents, or grinding. The Contractor shall provide a manufacturer's certification that the material meets the requirements for being removed after the following minimum traffic exposure based on transverse test decks with rolling traffic.
 - (1) Time in place 400 days
 - (2) ADT per lane 9,000 (28 percent trucks)
 - (3) Axle hits 10,000,000 minimum

Samples of the material applied to standard specimen plates will be measured for thickness and tested for durability in accordance with ASTM D 4060, using a CS-17 wheel and 1000-gram load, and shall meet the following criteria showing no significant change in color after being tested for the number of cycles indicated.

Test	Type I	Type IV	Blackout
Minimum Initial Thickness, mils (mm)	20 (0.51)	65 (1.65) ^{1/} 20 (0.51) ^{2/}	65 (1.65) ^{1/} 20 (0.51) ^{2/}
Durability (cycles)	5,000	1,500	1,500

- 1/ Measured at the thickest point of the patterned surface.
- 2/ Measured at the thinnest point of the patterned surface.

The pavement marking tape, when applied according to the manufacturer's recommended procedures, shall be weather resistant and shall show no appreciable fading, lifting, or shrinkage during the useful life of the marking. The tape, as applied, shall be of good appearance, free of cracks, and edges shall be true, straight, and unbroken.

- (f) Sampling and Inspection.
 - (1) Sample. Prior to approval and use of Type IV pavement marking tape, the manufacturer shall submit a notarized certification from an independent laboratory, together with the results of all tests, stating that the material meets the requirements as set forth herein. The independent laboratory test report shall state the lot tested, the manufacturer's name, and the date of manufacture.

After initial approval by the Department, samples and certification by the manufacturer shall be submitted for each subsequent batch of Type IV tape used. The manufacturer shall submit a certification stating that the material meets the requirements as set forth herein and is essentially identical to the material sent for qualification. The certification shall state the lot tested, the manufacturer's name, and the date of manufacture.

(2) Inspection. The Contractor shall provide a manufacturer's certification to the Engineer stating the material meets all requirements of this specification. All material samples for acceptance tests shall be taken or witnessed by a representative of the Bureau of Materials and shall be submitted to the Engineer of Materials, 126 East Ash Street, Springfield, Illinois 62704-4766 at least 30 days in advance of the pavement marking operations."

SOURCE OF SUPPLY AND QUALITY REQUIREMENTS (BDE)

Effective: January 2, 2023

Add the following to Article 106.01 of the Standard Specifications:

"The final manufacturing process for construction materials and the immediately preceding manufacturing stage for construction materials shall occur within the United States. Construction materials shall include an article, material, or supply that is or consists primarily of the following.

- (a) Non-ferrous metals;
- (b) Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- (c) Glass (including optic glass);
- (d) Lumber;
- (e) Drywall.

Items consisting of two or more of the listed construction materials that have been combined through a manufacturing process, and items including at least one of the listed materials combined with a material that is not listed through a manufacturing process shall be exempt."

STEEL COST ADJUSTMENT (BDE)

Effective: April 2, 2004 Revised: January 1, 2022

<u>Description</u>. Steel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in steel prices when optioned by the Contractor. The bidder shall indicate with their bid whether or not this special provision will be part of the contract. Failure to indicate "Yes" for any item of work will make that item of steel exempt from steel cost adjustment.

<u>Types of Steel Products</u>. An adjustment will be made for fluctuations in the cost of steel used in the manufacture of the following items:

Metal Piling (excluding temporary sheet piling) Structural Steel Reinforcing Steel

Other steel materials such as dowel bars, tie bars, welded reinforcement, guardrail, steel traffic signal and light poles, towers and mast arms, metal railings (excluding wire fence), and frames and grates will be subject to a steel cost adjustment when the pay items they are used in have a contract value of \$10,000 or greater.

The adjustments shall apply to the above items when they are part of the original proposed construction, or added as extra work and paid for by agreed unit prices. The adjustments shall not apply when the item is added as extra work and paid for at a lump sum price or by force account.

<u>Documentation</u>. Sufficient documentation shall be furnished to the Engineer to verify the following:

- (a) The dates and quantity of steel, in lb (kg), shipped from the mill to the fabricator.
- (b) The quantity of steel, in lb (kg), incorporated into the various items of work covered by this special provision. The Department reserves the right to verify submitted quantities.

Method of Adjustment. Steel cost adjustments will be computed as follows:

SCA = Q X D

Where: SCA = steel cost adjustment, in dollars

Q = quantity of steel incorporated into the work, in lb (kg)

D = price factor, in dollars per lb (kg)

 $D = MPI_M - MPI_L$

Where: $MPI_M =$ The Materials Cost Index for steel as published by the Engineering News-Record for the month the steel is shipped from the mill. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

MPI_L = The Materials Cost Index for steel as published by the Engineering News-Record for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price,. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

The unit weights (masses) of steel that will be used to calculate the steel cost adjustment for the various items are shown in the attached table.

No steel cost adjustment will be made for any products manufactured from steel having a mill shipping date prior to the letting date.

If the Contractor fails to provide the required documentation, the method of adjustment will be calculated as described above; however, the MPI_M will be based on the date the steel arrives at the job site. In this case, an adjustment will only be made when there is a decrease in steel costs.

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

Percent Difference = $\{(MPI_L - MPI_M) \div MPI_L\} \times 100$

Steel cost adjustments will be calculated by the Engineer and will be paid or deducted when all other contract requirements for the items of work are satisfied. Adjustments will only be made for fluctuations in the cost of the steel as described herein. No adjustment will be made for changes in the cost of manufacturing, fabrication, shipping, storage, etc.

The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Attachment

Attachment	
Item	Unit Mass (Weight)
Metal Piling (excluding temporary sheet piling)	
Furnishing Metal Pile Shells 12 in. (305 mm), 0.179 in. (3.80 mm) wall thickness)	23 lb/ft (34 kg/m)
Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness)	32 lb/ft (48 kg/m)
Furnishing Metal Pile Shells 14 in. (356 mm), 0.250 in. (6.35 mm) wall thickness)	37 lb/ft (55 kg/m)
Other piling	See plans
Structural Steel	See plans for weights
	(masses)
Reinforcing Steel	See plans for weights
	(masses)
Dowel Bars and Tie Bars	6 lb (3 kg) each
Welded Reinforcement	63 lb/100 sq ft (310 kg/sq m)
Guardrail	
Steel Plate Beam Guardrail, Type A w/steel posts	20 lb/ft (30 kg/m)
Steel Plate Beam Guardrail, Type B w/steel posts	30 lb/ft (45 kg/m)
Steel Plate Beam Guardrail, Types A and B w/wood posts	8 lb/ft (12 kg/m)
Steel Plate Beam Guardrail, Type 2	305 lb (140 kg) each
Steel Plate Beam Guardrail, Type 6	1260 lb (570 kg) each
Traffic Barrier Terminal, Type 1 Special (Tangent)	730 lb (330 kg) each
Traffic Barrier Terminal, Type 1 Special (Flared)	410 lb (185 kg) each
Steel Traffic Signal and Light Poles, Towers and Mast Arms	
Traffic Signal Post	11 lb/ft (16 kg/m)
Light Pole, Tenon Mount and Twin Mount, 30 - 40 ft (9 – 12 m)	14 lb/ft (21 kg/m)
Light Pole, Tenon Mount and Twin Mount, 45 - 55 ft (13.5 – 16.5 m)	21 lb/ft (31 kg/m)
Light Pole w/Mast Arm, 30 - 50 ft (9 – 15.2 m)	13 lb/ft (19 kg/m)
Light Pole w/Mast Arm, 55 - 60 ft (16.5 – 18 m)	19 lb/ft (28 kg/m)
Light Tower w/Luminaire Mount, 80 - 110 ft (24 – 33.5 m)	31 lb/ft (46 kg/m)
Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 – 42.5 m)	65 lb/ft (97 kg/m)
Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 – 48.5 m)	80 lb/ft (119 kg/m)
Metal Railings (excluding wire fence)	
Steel Railing, Type SM	64 lb/ft (95 kg/m)
Steel Railing, Type S-1	39 lb/ft (58 kg/m)
Steel Railing, Type T-1	53 lb/ft (79 kg/m)
Steel Bridge Rail	52 lb/ft (77 kg/m)
Frames and Grates	
Frame	250 lb (115 kg)
Lids and Grates	150 lb (70 kg)

SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)

Effective: April 2, 2018

Add the following to Section 109 of the Standard Specifications.

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

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

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

SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: November 2, 2017

Revised: April 1, 2019

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

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

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

SUBMISSION OF PAYROLL RECORDS (BDE)

Effective: April 1, 2021 Revised: November 2, 2023

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

"STATEMENTS AND PAYROLLS

The payroll records shall include the worker's name, social security number, last known address, telephone number, email address, classification(s) of work actually performed, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof), daily and weekly number of hours actually worked in total, deductions made, and actual wages paid.

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

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

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

In addition to filing certified payroll(s) with the IDOL, the Contractor and each subcontractor shall certify and submit payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers shall not be included on weekly submittals. Instead, the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted. The submittals shall be made using LCPtracker Pro software. The software is web-based and can be accessed at https://lcptracker.com/.

When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option ("No Work", "Suspended", or "Complete") selected."

TRAINING SPECIAL PROVISIONS (BDE)

Effective: October 15, 1975 Revised: September 2, 2021

This Training Special Provision supersedes Section 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," and is in implementation of 23 U.S.C. 140(a).

As part of the Contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The Contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be **2**. In the event the Contractor subcontracts a portion of the contract work, it shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The Contractor shall also ensure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the Contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee it employs on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps it has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he or she has successfully completed a training course leading to journeyman status or in which he or she has been employed as a journeyman. The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor Employment Training Administration shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the Contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the Contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A Contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The Contractor shall furnish the trainee a copy of the program he will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The Contractor shall provide for the maintenance of records and furnish periodic reports documenting its performance under this Training Special Provision.

For contracts with an awarded contract value of \$500,000 or more, the Contractor is required to comply with the Illinois Works Apprenticeship Initiative (30 ILCS 559/20-20 to 20-25) and all applicable administrative rules to the extent permitted by Section 20-20(g). For federally funded projects, the number of trainees to be trained under this contract, as stated in the Training Special Provisions, will be the established goal for the Illinois Works Apprenticeship Initiative 30 ILCS 559/20-20(g). The Contractor shall make a good faith effort to meet this goal. For federally funded projects, the Illinois Works Apprenticeship Initiative will be implemented using the FHWA approved OJT procedures. The Contractor must comply with the recordkeeping and reporting obligations of the Illinois Works Apprenticeship Initiative for the life of the project, including the certification as to whether the trainee/apprentice labor hour goals were met.

<u>Method of Measurement</u>. The unit of measurement is in hours.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price, and total price have been included in the schedule of prices.

VEHICLE AND EQUIPMENT WARNING LIGHTS (BDE)

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

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

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

WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012 Revised: November 1, 2021

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

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

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

WORK ZONE TRAFFIC CONTROL DEVICES (BDE)

Effective: March 2, 2020

Add the following to Article 701.03 of the Standard Specifications:

"(q) Temporary Sign Supports1106.02"

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within 125 working days.

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

ATTACHMENTS

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

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid designbuild contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The designbuilder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).
- II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

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

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

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

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

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

- 1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).
- b. The contractor will accept as its operating policy the following statement:

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

- 2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women

- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

- a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.
- b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:
 - (1) Withholding monthly progress payments;
 - (2) Assessing sanctions;
 - (3) Liquidated damages, and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.
- c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
- a. The records kept by the contractor shall document the following:

- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on 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 more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

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

1. Minimum wages (29 CFR 5.5)

- a. Wage rates and fringe benefits. All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.
- b. Frequently recurring classifications. (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:
 - (i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

- (ii) The classification is used in the area by the construction industry; and
- (iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.
- (2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.
- c. Conformance. (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:
 - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (ii) The classification is used in the area by the construction industry; and
 - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.
- (3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.
- (4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to <code>DBAconformance@dol.gov</code>, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.
- (5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

- under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- d. Fringe benefits not expressed as an hourly rate. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- e. Unfunded plans. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
- f. Interest. In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

- a. Withholding requirements. The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.
- b. Priority to withheld funds. The Department has priority to funds withheld or to be withheld in accordance with paragraph

- 2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:
- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
 - (2) A contracting agency for its reprocurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
 - (4) A contractor's assignee(s);
 - (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, <u>31</u> U.S.C. 3901–3907.

3. Records and certified payrolls (29 CFR 5.5)

- a. Basic record requirements (1) Length of record retention. All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.
- (2) Information required. Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.
- (3) Additional records relating to fringe benefits. Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.
- (4) Additional records relating to apprenticeship. Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.
- b. Certified payroll requirements (1) Frequency and method of submission. The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

- agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.
- (2) Information required. The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at https://www.dol.gov/sites/dolgov/files/WHD/ legacy/files/wh347/.pdf or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.
- (3) Statement of Compliance. Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:
 - (i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;
 - (ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and
 - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.
- (4) Use of Optional Form WH–347. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

- (5) Signature. The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.
- (6) Falsification. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.
- (7) Length of certified payroll retention. The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
- c. Contracts, subcontracts, and related documents. The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
- d. Required disclosures and access (1) Required record disclosures and access to workers. The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.
- (2) Sanctions for non-compliance with records and worker access requirements. If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.
- (3) Required information disclosures. Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action

4. Apprentices and equal employment opportunity (29 CFR 5.5)

- a. Apprentices (1) Rate of pay. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (2) Fringe benefits. Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.
- (3) Apprenticeship ratio. The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.
- (4) Reciprocity of ratios and wage rates. Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.
- b. Equal employment opportunity. The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.
- **6. Subcontracts**. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- **8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.
- 9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
- 10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of $\underline{40}$ $\underline{\text{U.s.c. }3144(b)}$ or \S 5.12(a).
- c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, <u>18</u> <u>U.S.C. 1001</u>.
- **11. Anti-retaliation**. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:
- a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;
- b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or $\underline{29\ CFR\ part\ 1}$ or $\underline{3}$;
- c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or
- d. Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

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

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

- a. Withholding process. The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.
- b. *Priority to withheld funds*. The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:
- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
 - (2) A contracting agency for its reprocurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate:
 - (4) A contractor's assignee(s);
 - (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, <u>31</u> U.S.C. 3901–3907.
- **4. Subcontracts.** The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lowertier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

- **5. Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:
- a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;
- b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;
- c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or
- d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

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

- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
 - (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.
- 2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).
- 5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

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

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and

health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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

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

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

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

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

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

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

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EYELLISION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

- e. The terms "covered transaction," "debarred,"
 "suspended," "ineligible," "participant," "person," "principal,"
 and "voluntarily excluded," as used in this clause, are defined
 in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200.
 "First Tier Covered Transactions" refers to any covered
 transaction between a recipient or subrecipient of Federal
 funds and a participant (such as the prime or general contract).
 "Lower Tier Covered Transactions" refers to any covered
 transaction under a First Tier Covered Transaction (such as
 subcontracts). "First Tier Participant" refers to the participant
 who has entered into a covered transaction with a recipient or
 subrecipient of Federal funds (such as the prime or general
 contractor). "Lower Tier Participant" refers any participant who
 has entered into a covered transaction with a First Tier
 Participant or other Lower Tier Participants (such as
 subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/). 2 CFR 180.300, 180.320, and 180.325.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

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

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800:
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800: and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).
- (5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and
- (6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

- a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 - 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

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

- a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:
- (1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;
- (2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and
- (3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)
- b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

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XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

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

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or

cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

- 1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.
- 2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

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

ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B) This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

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