116

Letting November 8, 2024

Notice to Bidders, Specifications and Proposal

Illinois Department of Transportation

Contract No. 61K74
LAKE County
Section 20-00108-00-PV (DeErfield)
Route FAU 1263 (Hazel Avenue)
Project E4Y2-438 ()
District 1 Construction Funds

Prepared by	F
Checked by	

(Printed by authority of the State of Illinois)

Illinois Department of Transportation

NOTICE TO BIDDERS

1. **TIME AND PLACE OF OPENING BIDS.** Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. November 8, 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. 61K74
   LAKE County
   Section 20-00108-00-PV (DeErfield)
   Project E4Y2-438 ()
   Route FAU 1263 (Hazel Avenue)
   District 1 Construction Funds

HMA reconstruction of Hazel Avenue from Wilmot Road to Waukegan Road in Deerfield. Includes curb & gutter, PCC Sidewalk, ADA improvements, bridge deck sealing and landscaping.

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 61K74

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)

SUPPLEMENTAL SPECIFICATIONS

RECURRING SPECIAL PROVISIONS

The following RECURRING SPECIAL PROVISIONS indicated by an "X" are applicable to this contract and are included by reference:

LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

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BDE SPECIAL PROVISIONS

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

File Name	Pg.		Special Provision Title	Effective	Revised
80099		☐	Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2022
80274	169	☒	Aggregate Subgrade Improvement	April 1, 2012	April 1, 2022
80192		☐	Automated Flagger Assistance Device	Jan. 1, 2008	April 1, 2023
80173	172	☒	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	
5053I		☐	Building Removal	Sept. 1, 1990	Aug. 1, 2022
5026I		☐	Building Removal with Asbestos Abatement	Sept. 1, 1990	Aug. 1, 2022
80449	174	☒	Cement, Type IL	Aug. 1, 2023	
80384	175	☒	Compensable Delay Costs	June 2, 2017	April 1, 2019
80198		☐	Completion Date (via calendar days)	April 1, 2008	
80199		☐	Completion Date (via calendar days) Plus Working Days	April 1, 2008	
80453	179	☒	Concrete Sealer	Nov. 1, 2023	
80261	180	☒	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
80434		☐	Corrugated Plastic Pipe (Culvert and Storm Sewer)	Jan. 1, 2021	
80029	183	☒	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Mar. 2, 2019
80229	193	☒	Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
80452		☐	Full Lane Sealant Waterproofing System	Nov. 1, 2023	
80447		☐	Grading and Shaping Ditches	Jan 1, 2023	
80433		☐	Green Preformed Thermoplastic Pavement Markings	Jan. 1, 2021	Jan. 1, 2022
80443		☐	High Tension Cable Median Barrier Removal	April 1, 2022	
80456	196	☒	Hot-Mix Asphalt	Jan. 1, 2024	
80446		☐	Hot-Mix Asphalt – Longitudinal Joint Sealant	Nov. 1, 2022	Aug. 1, 2023
80438		☐	Illinois Works Apprenticeship Initiative – State Funded Contracts	June 2, 2021	April 2, 2024
80045		☐	Material Transfer Device	June 15, 1999	Jan. 1, 2022
80450		☐	Mechanically Stabilized Earth Retaining Walls	Aug. 1, 2023	
80441	197	☒	Performance Graded Asphalt Binder	Jan 1, 2023	
80451	202	☒	Portland Cement Concrete	Aug. 1, 2023	
80459		☐	Preformed Plastic Pavement Marking	June 2, 2024	
3426I	203	☒	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2022
80455	204	☒	Removal and Disposal of Regulated Substances	Jan. 1, 2024	April 1, 2024
80445	206	☒	Seeding	Nov. 1, 2022	
80457	212	☒	Short Term and Temporary Pavement Markings	April 1, 2024	April 2, 2024
80448	216	☒	Source of Supply and Quality Requirements	Jan. 2, 2023	
80340		☐	Speed Display Trailer	April 2, 2014	Jan. 1, 2022
80127	217	☒	Steel Cost Adjustment	April 2, 2014	Jan. 1, 2022
80397	220	☒	Subcontractor and DBE Payment Reporting	April 2, 2018	
80391	221	☒	Subcontractor Mobilization Payments	Nov. 2, 2017	April 1, 2019
80437	222	☒	Submission of Payroll Records	April 1, 2021	Nov. 2, 2023
80435		☐	Surface Testing of Pavements – IRI	Jan. 1, 2021	Jan. 1, 2023
80410		☐	Traffic Spotters	Jan. 1, 2019	
20338	224	☒	Training Special Provisions	Oct. 15, 1975	Sept. 2, 2021
80429		☐	Ultra-Thin Bonded Wearing Course	April 1, 2020	Jan. 1, 2022
80439	227	☒	Vehicle and Equipment Warning Lights	Nov. 1, 2021	Nov. 1, 2022
80458		☐	Waterproofing Membrane System	Aug. 1, 2024	
80302	228	☒	Weekly DBE Trucking Reports	June 2, 2012	Nov. 1, 2021
80454		☐	Wood Sign Support	Nov. 1, 2023	
80427	229	☒	Work Zone Traffic Control Devices	Mar. 2, 2020	
80071		☐	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 of Materials" in effect on the date of invitation of bids, and the "Supplemental Specifications and Recurring Special Provisions" indicated on the Check Sheet included here in which apply to and govern the construction of Hazel Avenue Section 20-00108-00-PV, Village of Deerfield, Contract No. 61K74 and in case of conflict with any part or parts of said Specifications; the said Special Provisions shall take precedence and shall govern.

Hazel Avenue Improvements
Section 20-00108-00-PV
Project E4Y2(438)
Village of Deerfield
Contract No 61K74

LOCATION OF PROJECT

The project is located along Hazel Avenue from Wilmot Road to Waukegan Road (IL 43) in the Village of Deerfield, Deerfield Township, in Lake County. The project extends approximately 5,365 feet (1.016 miles) between Wilmot Road and Waukegan Road. The location of the project is within Sections 28 & 29, Township 43N, and Range 9E.

DESCRIPTION OF PROJECT

The proposed improvement entails reconstruction from Wilmot Road to Waukegan Road. The pavement width will be maintained at 24 feet wide from Wilmot Road to Wayne Avenue and widened to 22 feet wide from Wayne Avenue to Waukegan Road. New B-6.12 curb and gutter will be provided from Illinois Trail to Waukegan Road. The existing 4-foot carriage walk will be replaced with a 6-foot carriage walk and the existing 4-foot sidewalk will be replaced with 5-foot sidewalk in its current locations. The scope also includes improvements to the drainage system and replacement of the existing watermain. Other improvements will include ADA sidewalk upgrades, spot sanitary improvements, bridge deck sealing, driveway improvements, pavement markings, landscaping and all incidental and collateral work necessary to complete the improvements as shown in the plans and described herein.

AVAILABLE REPORTS (D1 LR)
Effective: July 1, 2021

☐ No project specific reports were prepared.

When applicable, the following checked reports and record information is available for Bidders' reference upon request:

☒ Record structural plans

☐ Preliminary Site Investigation (PSI) (IDOT ROW)

☒ Preliminary Site Investigation (PSI) (Local ROW)

☒ Preliminary Environmental Site Assessment (PESA) (IDOT ROW)

☒ Preliminary Environmental Site Assessment (PESA) (Local ROW)

☒ Soils/Geotechnical Report

☐ Boring Logs

☒ Pavement Cores

☐ Location Drainage Study (LDS)

☐ Hydraulic Report

☐ Noise Analysis

☒ Other: Drainage Technical Memorandum, LPC 663

Those seeking these reports should request access from:

Mr. Tyler Dickinson
Assistant Director of Public Works and Engineering
Village of Deerfield
Phone: (847)719.7463
tdickinson@deerfield.il.us

COMPLETION DATE PLUS WORKING DAYS

Revise Article 108.05 (b) of the Standard Specifications as follows:

"When a completion date plus working days is specified, the Contractor shall complete all contract items and safely open all roadways to traffic by 11:59 PM on October 31, 2025 except as specified herein.

The Contractor will be expected to complete all proposed work related to the construction of the proposed bridges and roadway during the closure by the completion date specified above. The roadway must have hot-mix asphalt surface course placed and guardrail installed before the roadway is opened to traffic by the completion date specified.

The Contractor will be allowed to complete all clean-up work and punch list items within 15 working days after the completion date for opening the roadway to traffic. Under extenuating circumstances the Engineer may direct that certain items of work, not affecting the safe opening of the roadway to traffic, may be completed within the working days allowed for clean up work and punch list items. Temporary lane closures for this work may be allowed at the discretion of the Engineer.

The contract documents will allow the roadway closure and temporary detour detailed in the plans to remain in place to the completion date identified in this special provision. The detour and road closure does not apply to the additional working days.

Article 108.09 or the Special Provision for “Failure to Complete the Work on Time”, if included in this contract, shall apply to both the completion date and the number of working days.

MAINTENANCE OF ROADWAYS (D1)
Effective: September 30, 1985
Revised: November 1, 1996

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

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

STATUS OF UTILITIES (D1)
Effective: June 1, 2016
Revised: January 1, 2020

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

UTILITIES TO BE ADJUSTED

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

Stage 1

LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue and Maple Court 21+24.75 19.38 LT	Electric	The existing utility power pole is in conflict with the proposed sidewalk and storm sewer. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue Mid Block 22+38.77 19.25 LT	Electric	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue Broadmoor Place 23+57.62 21.54 LT	Electric	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days

STAGE 1/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue Cedar Street 24+80.57 21.12 LT	Electric	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue and Cedar Street 26+04.69 18.91 LT	Electric	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue and Hemlock Street 27+25.92 19.39 LT	Electric	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue and Hemlock Street 28+47.63 19.87 LT	Electric	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue and Prairie Avenue 29+42.53 19.03 LT	Electric	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days

STAGE 1/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue and Sherdian Avenue 45+14.39 21.31 LT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue and Forest Avenue 49+57.11 21.49 LT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue and Forest Avenue 49+96.82 21.65 LT	Electric	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue Mid Block 51+58.42 22.29 LT	Electric	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue and Maple Court 21+24.75 19.38 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk and storm sewer. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days

STAGE 1/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue Mid Block 22+38.77 19.25 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue Broadmoor Place 23+57.62 21.54 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue Cedar Street 24+80.57 21.12 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue and Cedar Street 26+04.69 18.91 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue and Hemlock Street 27+25.92 19.39 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days

STAGE 1/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue and Hemlock Street 28+47.63 19.87 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue and Prairie Avenue 29+42.53 19.03 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue and Sherdian Avenue 45+14.39 21.31 LT	Communications	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue and Forest Avenue 49+57.11 21.49 LT	Communications	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue and Forest Avenue 49+96.82 21.65 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days

STAGE 1/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue Mid Block 51+58.42 22.29 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue and Maple Court 21+24.75 19.38 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk and storm sewer. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days
Hazel Avenue Mid Block 22+38.77 19.25 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days
Hazel Avenue Broadmoor Place 23+57.62 21.54 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days

STAGE 1/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue Cedar Street 24+80.57 21.12 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days
Hazel Avenue and Cedar Street 26+04.69 18.91 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days
Hazel Avenue and Hemlock Street 27+25.92 19.39 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days
Hazel Avenue and Hemlock Street 28+47.63 19.87 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days

STAGE 1/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue and Prairie Avenue 29+42.53 19.03 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days
Hazel Avenue and Forest Avenue 49+57.11 21.49 LT	Communications	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days
Hazel Avenue and Forest Avenue 49+96.82 21.65 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days
Hazel Avenue Mid Block 51+58.42 22.29 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days

Stage 2

LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue and Illinois Trail 16+40.46 20.87 RT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue Mid Block 20+24.38 19.43 RT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue and Maple Court 21+24.75 19.38 LT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue Mid Block 22+38.77 19.25 LT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue Broadmoor Place 23+57.62 21.54 LT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ComEd	75 days

STAGE 2/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue Cedar Street 24+80.57 21.12 LT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue and Cedar Street 26+04.69 18.91 LT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue and Hemlock Street 27+25.92 19.39 LT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue and Hemlock Street 28+47.63 19.87 LT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue and Prairie Avenue 29+42.53 19.03 LT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days

STAGE 2/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue and Clay Court 43+82.48 19.51 RT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue and Sherdian Avenue 45+14.39 21.31 LT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue and Alden Court 47+04.91 17.65 RT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue and Forest Avenue 49+57.11 21.49 LT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue and Forest Avenue 49+96.82 21.65 LT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days

STAGE 2/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue Mid Block 51+58.42 22.29 LT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue and Illinois Trail 16+40.46 20.87 RT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue Mid Block 20+24.38 19.43 RT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue and Maple Court 21+24.75 19.38 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue Mid Block 22+38.77 19.25 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days

STAGE 2/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue Broadmoor Place 23+57.62 21.54 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue Cedar Street 24+80.57 21.12 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue and Cedar Street 26+04.69 18.91 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue and Hemlock Street 27+25.92 19.39 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue and Hemlock Street 28+47.63 19.87 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days

STAGE 2/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue and Prairie Avenue 29+42.53 19.03 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue and Clay Court 43+82.48 19.51 RT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue and Sherdian Avenue 45+14.39 21.31 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue and Alden Court 47+04.91 17.65 RT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue and Forest Avenue 49+57.11 21.49 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days

STAGE 2/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue and Forest Avenue 49+96.82 21.65 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue Mid Block 51+58.42 22.29 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue and Maple Court 21+24.75 19.38 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk and storm sewer. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days
Hazel Avenue Mid Block 22+38.77 19.25 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days
Hazel Avenue Broadmoor Place 23+57.62 21.54 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days

STAGE 2/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue Cedar Street 24+80.57 21.12 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days
Hazel Avenue and Cedar Street 26+04.69 18.91 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days
Hazel Avenue and Hemlock Street 27+25.92 19.39 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days
Hazel Avenue and Hemlock Street 28+47.63 19.87 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days
Hazel Avenue and Prairie Avenue 29+42.53 19.03 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days

STAGE 2/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue and Forest Avenue 49+57.11 21.49 LT	Communications	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days
Hazel Avenue and Forest Avenue 49+96.82 21.65 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days
Hazel Avenue Mid Block 51+58.42 22.29 LT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days

Stage 3

LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue Mid Block 55+96.70 17.67 RT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days

STAGE 3/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue and Springfield Avenue 59+34.74 14.76 RT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue and Jewett Park Entrance 60+65.37 14.82 RT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue and Jewett Park Entrance 61+42.33 14.16 RT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue and Journal Place 62+55.45 21.17 RT	Electric	The existing utility power pole is in conflict with the proposed curb and gutter. The electric line and utility poles will be required to be relocated prior to the start of construction. Contractor to be alerted of existing cable at this location.	ComEd	75 days
Hazel Avenue Mid Block 55+96.70 17.67 RT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days

STAGE 3/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue and Springfield Avenue 59+34.74 14.76 RT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue and Jewett Park Entrance 60+65.37 14.82 RT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue and Jewett Park Entrance 61+42.33 14.16 RT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days
Hazel Avenue and Journal Place 62+55.45 21.17 RT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	ATT	30 days

STAGE 3/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue Mid Block 55+96.70 17.67 RT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days
Hazel Avenue and Springfield Avenue 59+34.74 14.76 RT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days
Hazel Avenue and Jewett Park Entrance 60+65.37 14.82 RT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days
Hazel Avenue and Jewett Park Entrance 61+42.33 14.16 RT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days

STAGE 3/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
Hazel Avenue and Journal Place 62+55.45 21.17 RT	Communications	The existing utility power pole is in conflict with the proposed sidewalk. The electric line and utility poles will be required to be relocated prior to the relocation of the communication lines. Contractor to be alerted of existing cable at this location.	COMCAST	30 days

Stage 1___54_____ Days Total Installation
Stage 2___54_____ Days Total Installation
Stage 3___27_____ Days Total Installation

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

Agency/Company Responsible to Resolve Conflict	Name of contact	Phone	E-mail address
AT&T	Hector Garcia	630-573-6414	Hg2929@att.com
ComED	Angie Williams	779-231-1064	angela.williams@comed.com
Comcast	Aaron Powers	224-229-5862	aaron_powers@comcast.com
Northshore Gas	Jay Hammer	847-263-3225	jay.hammer@northshoregasdelivery.com
Verizon/MCI	Robert Butler		ROBERT.BUTLER@VERIZON.COM
TDS MetroCom	Rich Mosley	262-754-3063	Richard.Mosley@tdstelecom.com
Rogers Communications Canada	Julie Paulson	920-395-7125	JPAULSON@GABES.COM

UTILITIES TO BE WATCHED AND PROTECTED

The areas of concern noted below have been identified by following the suggested staging plan included for the contract. The information provided is not a comprehensive list of all remaining utilities, but those which during coordination were identified as ones which might require the Department's contractor to take

into consideration when making the determination of the means and methods that would be required to construct the proposed improvement. In some instances, the contractor will be responsible to notify the owner in advance of the work to take place so necessary staffing on the owner's part can be secured.

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

Stage 1

LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY
Hazel Avenue and Wilmot Road 10+40.19, 7.77 RT 10+46.94, 3.74 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 12+40.31 4.10 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 13+57.83 4.10 RT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 21+67.31 4.00 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Maple Avenue 21+54.18, 21.16 RT TO 21+76.91, 43.29 RT	Gas	Proposed water main overlaps existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 23+16.05 4.00 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Cedar Street 24+91.23 21.16 RT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Cedar Street 25+18.55 21.16 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required.	North Shore Gas
STAGE 1/ LOCATION	**TYPE**	**DESCRIPTION**	**RESPONSIBLE AGENCY**
Hazel Avenue 27+58.39 21.16 RT	Gas	Proposed water service line in crosses with existing gas lines. Contractor to be alerted of existing gas line at this location. Protection	North Shore Gas

		may be required	
Hazel Avenue 28+19.95 21.16 RT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 28+25.71 21.16 RT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 28+37.70 21.16 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 28+51.96 21.16 RT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 29+29.95 21.16 RT	Gas	Proposed water service line in crosses with exisitng gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 32+17.01 21.16 RT	Gas	Proposed water service line in crosses with exisitng gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 32+36.64 21.16 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 33+04.96 21.16 RT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 33+10.50 21.16 RT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 33+16.80 21.16 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required.	North Shore Gas
STAGE 1/ LOCATION	**TYPE**	**DESCRIPTION**	**RESPONSIBLE AGENCY**

Hazel Avenue 33+48.92 21.16 RT	Gas	Storm sewer removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 34+55.15 21.16 RT	Gas	Proposed water service line in crosses with existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 35+35.37 21.16 RT	Gas	Proposed water service line in crosses with existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Wayne Avenue 36+44.57 16.58 RT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 36+67.00 25.26 RT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 36+78.60 25.26 RT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 36+88.88 25.26 RT	Gas	Storm sewer removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 37+18.44 25.30 RT	Gas	Proposed water service line in crosses with exisitng gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Woodward Avenue 40+08.66 25.56 RT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Woodward Avenue 40+12.22 25.56 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Woodward Avenue 40+14.25 25.56 RT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
STAGE 1/ LOCATION	**TYPE**	**DESCRIPTION**	**RESPONSIBLE AGENCY**

Woodward Avenue 40+30.44 25.56 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Woodward Avenue 40+38.29 25.56 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 40+93.75 25.63 RT	Gas	Proposed water service line in crosses with exisitng gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 41+57.37 25.69 RT	Gas	Proposed water service line in crosses with exisitng gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Clay Court 43+53.14 25.86 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Clay Court 43+55.69 25.86 RT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Clay Court 43+61.40 25.86 RT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Clay Court 43+79.11 25.86 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 44+12.84 25.92 RT	Gas	Proposed water service line in crosses with exisitng gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 44+91.87 25.99 RT	Gas	Proposed water service line in crosses with exisitng gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 45+84.74 26.07 RT	Gas	Proposed water service line in crosses with exisitng gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
STAGE 1/ LOCATION	**TYPE**	**DESCRIPTION**	**RESPONSIBLE AGENCY**

Alden Court 46+71.95 26.14 RT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Alden Court 46+78.01 26.15 RT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Forest Avenue 49+66.32 13.17 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Forest Avenue 49+99.05 26.43 RT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Forest Avenue 50+04.63 26.44 RT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Forest Avenue 50+09.31 26.44 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue and Broadmoor Place 23+66.11 4.00 RT	Telecommunications	Cable overlaps the proposed storm sewer. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and Broadmoor Place 23+66.11 4.00 RT	Telecommunications	Cable overlaps the existing storm sewer to be removed. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue Mid Block 26+52.22 4.00 RT	Telecommunications	Cable overlaps the existing storm sewer to be removed. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue Mid Block 26+52.22 4.00 RT	Telecommunications	Cable overlaps the proposed storm sewer. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue Mid Block 26+71.15 4.00 RT	Telecommunications	Cable overlaps the proposed water main. Contractor to be alerted of existing cable at this location. Protection may be required	ATT

Stage 2

LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY
Hazel Avenue and Wilmot Road 10+40.19, 7.77 RT 10+46.94, 3.74 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 12+40.31 4.10 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 13+57.83 4.10 RT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 13+60.87 4.10 RT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 13+80.18 4.00 LT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 13+80.18 7.16 LT	Gas	Proposed water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 14+14.00 21.78 LT	Gas	Proposed water service line in crosses with exisitng gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 15+09.15 21.78 LT	Gas	Proposed water service line crosses exisitng gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 16+07.08 21.78 LT	Gas	Proposed water service line crosses exisitng gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 16+56.90 34.76 LT	Gas	Storm sewer removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 16+76.92 34.76 LT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas

STAGE 2/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY
Hazel Avenue 16+84.83 34.76 LT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 16+89.75 33.63 LT	Gas	Proposed water valve crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 17+01.58 19.74 LT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue (WFNBCR) 19+93.18 23.13 LT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue (WFNBCR) 20+05.45 TO 20+46.13 24.96 LT	Gas	Proposed water service line crosses exisitng gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 21+67.32 10.00 LT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 21+67.32 7.28 LT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Broadmoor Place 23+16.05 39.14 LT TO 7.54 LT	Gas	Water main removal overlaps existing gas lines and proposed water main crosses gas line. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Praire Street 30+18.06 19.44 LT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Praire Street 30+18.06 14.71 LT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Praire Street 30+18.06 11.56 LT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas

STAGE 2/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY
Wayne Avenue 36+44.57 36.62 LT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Wayne Avenue 36+44.57 24.99 LT	Gas	Storm sewer removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Wayne Avenue 36+44.57 10.08 LT	Gas	Storm sewer removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Wayne Avenue 36+44.57 7.03 LT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hillside Avenue 38+10.81 48.98 LT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hillside Avenue 38+10.81 22.11 LT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hillside Avenue 38+10.81 16.37 LT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hillside Avenue 38+10.81 17.38 LT	Gas	Storm sewer removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hillside Avenue 38+10.81 14.84 LT	Gas	Storm sewer removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 38+10.81 4.00 LT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Oakley Avenue 41+47.85 17.07 LT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas

STAGE 2/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY
Oakley Avenue 41+47.85 15.58 LT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Oakley Avenue 41+47.90 12.58 LT	Gas	Storm sewer removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Oakley Avenue 41+47.85 8.02 LT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Oakley Avenue 41+47.85 4.00 LT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Sheridan Avenue 45+27.88 19.54 LT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Sheridan Avenue 45+27.88 15.55 LT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Sheridan Avenue 45+27.88 12.80 LT	Gas	Storm sewer removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Sheridan Avenue 45+27.88 11.74 LT	Gas	Storm sewer removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Sheridan Avenue 45+27.88 7.45 LT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Sheridan Avenue 45+27.88 4.00 LT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Forest Avenue 49+55.66 22.32 LT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas

STAGE 2/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY
Forest Avenue 49+57.47 16.29 LT	Gas	Storm sewer removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Forest Avenue 49+58.74 12.07 LT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Forest Avenue 49+59.94 7.29 LT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Forest Avenue 49+61.16 4.00 LT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Springfield Avenue 59+19.77 4.00 LT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue Mid Block 13+31.42 4.00 LT	Electric	Cable overlaps the proposed water main. Contractor to be alerted of existing cable at this location. Protection may be required	ComEd
Hazel Avenue Mid Block 13+31.42 7.95 LT	Electric	Cable overlaps the existing water main to be removed. Contractor to be alerted of existing cable at this location. Protection may be required	ComEd
Hazel Avenue and Hillside Avenue 38+03.04 24.07 LT	Electric	The existing utility power pole is adjacent to proposed sidewalk and existing water main removal. Contractor to be alerted of existing cable at this location. Protection may be required	ComEd
Hazel Avenue and Broadmoor Place 23+69.46 10.00 LT	Telecommunications	Cable overlaps the proposed water main. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and Broadmoor Place 23+68.90 7.63 LT	Telecommunications	Cable overlaps the existing water main to be removed. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue Mid Block 26+57.66 16.58 LT	Telecommunications	Cable overlaps the proposed water main. Contractor to be alerted of existing cable at this location. Protection may be required	ATT

STAGE 2/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY
Hazel Avenue Mid Block 26+71.72 16.67 LT	Telecommunications	Cable overlaps the proposed water main. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and Sheridan Avenue 45+55.79 19.72 LT	Telecommunications	Cable overlaps the proposed water main. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and Alden Court 46+92.56 22.85 LT	Telecommunications	Cable overlaps the proposed storm sewer. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and Alden Court 47+03.18 22.94 LT	Telecommunications	Cable overlaps the proposed water main. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and Alden Court 47+53.22 23.38 LT	Telecommunications	Cable overlaps the proposed water main. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and Alden Court 48+03.35 23.81 LT	Telecommunications	Cable overlaps the proposed water main. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and Alden Court 48+84.72 24.48 LT	Telecommunications	Cable overlaps the proposed water main. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and Forest Avenue 49+66.34 24.86 LT	Telecommunications	Cable overlaps the existing water main to be removed. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and Forest Avenue 49+72.18 24.89 LT	Telecommunications	Cable overlaps the proposed water main. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and Forest Avenue 49+91.26 24.97 LT	Telecommunications	Cable overlaps the proposed storm sewer. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and Forest Avenue 50+05.64 25.04 LT	Telecommunications	Cable overlaps the existing storm sewer to be removed. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and Chestnut Street 52+71.26 22.73 LT	Telecommunications	Cable overlaps the existing storm sewer to be removed. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and Chestnut Street 52+77.11 24.42 LT	Telecommunications	Cable overlaps the existing storm sewer to be removed. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and	Telecommunications	Cable overlaps the existing water	ATT

Chestnut Street 53+01.66 22.93 LT		main to be removed. Contractor to be alerted of existing cable at this location. Protection may be required	
Hazel Avenue and Chestnut Street 53+24.91 23.14 LT	Telecommunications	Cable overlaps the existing storm sewer to be removed. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and Chestnut Street 53+24.91 23.14 LT	Telecommunications	Cable overlaps the proposed storm sewer. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and Chestnut Street 53+39.71 23.26 LT	Telecommunications	Cable overlaps the existing storm sewer to be removed. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and Chestnut Street 53+53.87 1.22 LT	Telecommunications	Cable overlaps the existing water main to be removed. Contractor to be alerted of existing cable at this location. Protection may be required	ATT

Stage 3

STAGE 3/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY
Hazel Avenue and Rail Road 54+23.69 22.50 LT	Telecommunications	Cable overlaps the proposed water main. Contractor to be alerted of existing gas line at this location. Protection may be required	Rogers Communications
Hazel Avenue and Journal Place 61+42.14 6.50 LT	Telecommunications	Cable overlaps the existing water main to be removed. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and Journal Place 61+42.18 4.00 LT	Telecommunications	Cable overlaps the proposed water main. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and Journal Place 61+42.18 7.00 RT	Telecommunications	Cable overlaps the proposed storm sewer. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue and Journal Place 61+42.18 7.00 RT	Telecommunications	Cable overlaps the existing storm sewer to be removed. Contractor to be alerted of existing cable at this location. Protection may be required	ATT
Hazel Avenue 54+97.31 25.88 RT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas

STAGE 3/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY
Hazel Avenue 55+03.17 25.86 RT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Park Avenue 55+24.91 6.12 RT	Gas	Storm sewer removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Park Avenue 55+25.15 7.00 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 58+53.32 24.53 RT	Gas	Proposed water service line in crosses with exisitng gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 59+18.22 24.29 RT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Springfield Avenue 59+23.01 7.00 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Springfield Avenue 59+23.97 10.26 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 60+46.84 23.80 RT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue 60+48.99 23.79 RT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Journal Place 62+73.78 8.74 LT	Gas	Proposed water main crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Journal Place 62+68.99 3.58 RT	Gas	Water main removal crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas

STAGE 3/ LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY
Journal Place 62+64.18 16.93 RT	Gas	Proposed storm sewer crosses existing gas lines. Contractor to be alerted of existing gas line at this location. Protection may be required	North Shore Gas
Hazel Avenue and Park Avenue 53+55.78 22.50 LT	Telecommunications	Cable overlaps the proposed water main. Contractor to be alerted of existing cable at this location. Protection may be required	Comcast
Hazel Avenue and Park Avenue 53+60.48 0.70 LT	Telecommunications	Cable overlaps the existing water main to be removed. Contractor to be alerted of existing cable at this location. Protection may be required	Comcast
Hazel Avenue and Park Avenue 54+44.90 7.67 RT	Electric	Cable overlaps the existing water main to be removed. Contractor to be alerted of existing cable at this location. Protection may be required	ComEd
Hazel Avenue and Park Avenue 54+46.77 22.50 LT	Electric	Cable overlaps the proposed water main. Contractor to be alerted of existing cable at this location. Protection may be required	ComEd
Hazel Avenue and Park Avenue 55+35.07 6.65 RT	Electric	Cable overlaps the existing storm sewer to be removed. Contractor to be alerted of existing cable at this location. Protection may be required	ComEd
Hazel Avenue and Park Avenue 55+35.07 6.65 RT	Electric	Cable overlaps the proposed storm sewer. Contractor to be alerted of existing cable at this location. Protection may be required	ComEd
Hazel Avenue and Park Avenue 55+35.07 4.00 LT	Electric	Cable overlaps the proposed water main. Contractor to be alerted of existing cable at this location. Protection may be required	ComEd
Hazel Avenue and Park Avenue 55+36.20 9.14 LT	Electric	Cable overlaps the existing water main to be removed. Contractor to be alerted of existing cable at this location. Protection may be required	ComEd

Agency/Company Responsible to Resolve Conflict	Name of contact	Phone	E-mail address
AT&T	Hector Garcia	630-573-6414	Hg2929@att.com
ComED	Angie Williams	779-231-1064	angela.williams@comed.com
Comcast	Aaron Powers	224-229-5862	aaron_powers@comcast.com
Northshore Gas	Jay Hammer	847-263-3225	jay.hammer@northshoregasdelivery.com
Verizon/MCI	Robert Butler		ROBERT.BUTLER@VERIZON.COM
TDS MetroCom	Rich Mosley	262-754-3063	Richard.Mosley@tdstelecom.com
Rogers Communications Canada	Julie Paulson	920-395-7125	JPAULSON@GABES.COM

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

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

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

PUBLIC CONVENIENCE AND SAFETY (D1)
Effective: May 1, 2012
Revised: July 15, 2012

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

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

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

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

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

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

DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING, & PATCHING OPERATIONS) (D1)
Effective: January 1, 1985
Revised: March 1, 2024
886.02TS

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

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

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

Notification of Intent to Work.
Contracts such as pavement grinding or patching which result in the destruction of traffic signal detection require a notification of intent to work and an inspection. A minimum of seven (7) working days prior to the detection removal, the Contractor shall notify the Area Traffic Signal Maintenance and Operations Engineer.

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

Removal, Disposal and Salvage of Existing Traffic Signal Equipment.
The removal, disposal, and salvage of existing traffic signal equipment shall be included in the cost of this item. All material and equipment removed shall become the property of the Contractor and disposed of by the Contractor outside the State's right-of-way. No additional compensation shall be provided to the Contractor for removal, disposal or salvage expense for the work in this contract.

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

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

Replacement of the loops shall be accomplished in the following manner: The Area Traffic Signal Maintenance and Operations Engineer shall be called to approve loop locations prior to the cutting of the pavement. The Contractor may reuse the existing coilable non-metallic conduit (CNC) located between the existing handhole and the pavement if it hasn't been damaged. CNC meeting the requirements of NEC Article 353 shall be used for detector loop raceways to the handholes. All burrs shall be removed from the edges of the existing conduit which could cause damage to the new detector loop during

installation. If the existing conduit is damaged beyond repair, if it cannot be located, or if additional conduits are required for each proposed loop, the Contractor shall be required to drill through the existing pavement into the appropriate handhole and install 1 in. (25 mm) CNC. This work and the required materials shall not be paid for separately but shall be included in the pay item Detector Loop Replacement. Once suitable CNC raceways is established, the loop may be cut, installed, sealed and spliced to the twisted-shielded lead-in cable in the handhole.

All loops installed in new asphalt pavement shall be installed in the binder course and not in the surface course. The edge of pavement or the curb shall be cut with a 1/4 in. (6.3 mm) deep x 4 in. (100 mm) saw-cut to mark location of each loop lead-in.

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

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

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

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

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

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

Resistance to ground shall be a minimum of 500 mega-ohms under any conditions of weather or moisture. Inductance shall be more than 50 and less than 700 microhenries.

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

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

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

MAGNETIC DETECTOR REMOVAL AND DETECTOR LOOP INSTALLATION.
This work shall consist of the removal of existing magnetic detectors, magnetic detector lead-in cable and magnetic detection amplifiers and related control equipment wiring, installation of detector lead-in cable, detector loops, detector amplifiers and related equipment wiring. The detector loop, cable, and amplifier shall be installed according to the applicable portions of the Standard Specifications and the applicable portions of the Special Provision for “Detector Loop Replacement.” All drilling of handholes, furnishing

and installing CNC, cable splicing, trench and backfill, removal of equipment, and removing cable from conduit shall be included in this item.

Basis of Payment.

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

RECLAIMED ASPHALT PAVEMENT FOR NON-POROUS EMBANKMENT AND BACKFILL (D1)
Effective: April 1, 2001
Revised: January 1, 2007

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

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

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

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

AGGREGATE SURFACE COURSE FOR TEMPORARY ACCESS (D1)
Effective: April 1, 2001
Revised: January 2, 2007

Revise Article 402.10 of the Standard Specifications to read:

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

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

(a) Private Entrance. The minimum width shall be 12 ft (3.6 m). The minimum compacted thickness shall be 6 in. (150 mm). The maximum grade shall be eight percent, except as required to match the existing grade.

(b) Commercial Entrance. The minimum width shall be 24 ft (7.2 m). The minimum compacted thickness shall be 9 in. (230 mm). The maximum grade shall be six percent, except as required to match the existing grade.

(c) Road. The minimum width shall be 24 ft (7.2 m). The minimum compacted thickness shall be 9 in. (230 mm). The grade and elevation shall be the same as the removed pavement, except as required to meet the grade of any new pavement constructed.

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

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

Add the following to Article 402.12 of the Standard Specifications:

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

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

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

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

(a) Upon construction of the temporary access, sixty percent of the contract unit price per each, of the type constructed, will be paid.

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

HOT-MIX ASPHALT BINDER AND SURFACE COURSE (D1)
Effective: November 1, 2019
Revised: December 1, 2021

Revise Article 1004.03(c) to read:

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

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

1/ CA 16 or CA 13 may be blended with the CA 11.

2/ The coarse aggregates used shall be capable of being combined with the fine aggregates and mineral filler to meet the approved mix design and the mix requirements noted herein.

3/ The specified coarse aggregate gradations may be blended.

4/ CA 13 shall be 100 percent passing the 1/2 in. (12.5mm) sieve."

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

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

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

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

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

"Item	Article/Section
(g) Performance Graded Asphalt Binder (Note 6)	1032
(h) Fibers (Note 2)	

Note 2. A stabilizing additive such as cellulose or mineral fiber shall be added to the SMA mixture according to Illinois Modified AASHTO M 325. The stabilizing additive shall meet the Fiber

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

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

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

"MIXTURE COMPOSITION (% PASSING) [1/]												
Sieve Size	IL-19.0 mm		SMA 12.5		SMA 9.5		IL-9.5mm		IL-9.5FG		IL-4.75 mm	
	min	max	min	max	min	max	min	max	min	max	min	max
1 1/2 in (37.5 mm)												
1 in. (25 mm)		100										
3/4 in. (19 mm)	90	100		100								
1/2 in. (12.5 mm)	75	89	80	100		100		100		100		100
3/8 in. (9.5 mm)				65	90	100	90	100	90	100		100
#4 (4.75 mm)	40	60	20	30	36	50	34	69	60	75[6/]	90	100
#8 (2.36 mm)	20	42	16	24 [4/]	16	32[4/]	34 [5/]	52 [2/]	45	60[6/]	70	90
#16 (1.18 mm)	15	30					10	32	25	40	50	65
#30 (600 μm)			12	16	12	18			15	30		
#50 (300 μm)	6	15					4	15	8	15	15	30
#100 (150 μm)	4	9					3	10	6	10	10	18
#200 (75 μm)	3.0	6.0	7.0	9.0 [3/]	7.5	9.5 [3/]	4.0	6.0	4.0	6.5	7.0	9.0 [3/]
#635 (20 μm)			≤ 3.0		≤ 3.0							
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		1.0		1.0		1.0

1/ Based on percent of total aggregate weight.

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

3/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer.
4/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted above the percentage stated on the table.
5/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted below 34 percent.
6/ When the mixture is used as a binder, the maximum shall be increased by 0.5 percent passing."

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

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

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

1/ Maximum draindown shall be 0.3 percent according to Illinois Modified AASHTO T 305.

2/ The draindown shall be determined at the JMF asphalt binder content at the mixing temperature plus 30°F.

3/ Applies when specific gravity of coarse aggregate is ≥ 2.760.

4/ Applies when specific gravity of coarse aggregate is < 2.760.

5/ For surface course, the coarse aggregate can be crushed steel slag, crystalline crushed stone or crushed sandstone. For binder course, coarse aggregate shall be crushed stone (dolomite), crushed gravel, crystalline crushed stone, or crushed sandstone"

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

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

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

"If the Contractor and Engineer agree the nuclear density test method is not appropriate for the mixture, cores shall be taken at random locations determined according to the QC/QA document "Determination

of Random Density Test Site Locations". Core densities shall be determined using the Illinois Modified AASHTO T 166 or T 275 procedure."

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

	Breakdown/Intermediate Roller (one of the following)	Final Roller (one or more of the following)	Density Requirement
IL-9.5, IL-9.5FG, IL-19.0 1/	V_D, P , T_B, 3W, O_T, O_B	V_S, T_B, T_F, O_T	As specified in Section 1030
IL-4.75 and SMA 3/ 4/	T_B, 3W, O_T	T_F, 3W	As specified in Section 1030
Mixtures on Bridge Decks 2/	T_B	T_F	As specified in Articles 582.05 and 582.06.

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

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

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

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

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

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

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

ADJUSTMENTS AND RECONSTRUCTIONS (D1)
Effective: March 15, 2011
Revised: October 1, 2021

Revise the first paragraph of Article 602.04 to read:

"**602.04 Concrete.** Cast-in-place concrete for structures shall be constructed of Class SI concrete according to the applicable portions of Section 503. Cast-in-place concrete for pavement patching around adjustments and reconstructions shall be constructed of Class PP-2 concrete, unless otherwise noted in the plans, according to the applicable portions of Section 1020."

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

"Castings shall be set to the finished pavement elevation so that no subsequent adjustment will be necessary, and the space around the casting shall be filled with Class PP-2 concrete, unless otherwise noted in the plans, to the elevation of the surface of the base course or binder course. HMA surface or binder course material shall not be allowed. The pavement may be opened to traffic according to Article 701.17(e)(3)b."

Revise Article 603.05 to read:

"**603.05 Replacement of Existing Flexible Pavement.** After the castings have been adjusted, the surrounding space shall be filled with Class PP-2 concrete, unless otherwise noted in the plans, to the elevation of the surface of the base course or binder course. HMA surface or binder course material shall not be allowed. The pavement may be opened to traffic according to Article 701.17(e)(3)b."

Revise Article 603.06 to read:

"**603.06 Replacement of Existing Rigid Pavement.** After the castings have been adjusted, the pavement and HMA that was removed, shall be replaced with Class PP-2 concrete, unless otherwise noted in the plans, not less than 9 in. (225 mm) thick. The pavement may be opened to traffic according to Article 701.17(e)(3)b.

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

Revise the first sentence of Article 603.07 to read:

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

DRAINAGE AND INLET PROTECTION UNDER TRAFFIC (D1)
Effective: April 1, 2011
Revised: April 2, 2011

Add the following to Article 603.02 of the Standard Specifications:

"(i) Temporary Hot-Mix Asphalt (HMA) Ramp (Note 1) 1030
(j) Temporary Rubber Ramps (Note 2)

Note 1. The HMA shall have maximum aggregate size of 3/8 in. (95 mm).

Note 2. The rubber material shall be according to the following.

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

Revise Article 603.07 of the Standard Specifications to read:

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

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

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

(b) Temporary Rubber Ramps. Temporary rubber ramps shall only be used on roadways with permanent posted speeds of 40 mph or less and when the height of the casting to be protected meets the proper sizing requirements for the rubber ramps as shown below.

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

Placement shall be according to the manufacturer's specifications.

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

STORM SEWER ADJACENT TO OR CROSSING WATER MAIN (D1)
Effective: February 1, 1996
Revised: January 1, 2007

This work consists of constructing storm sewer adjacent to or crossing a water main, at the locations shown on the plans. The material and installation requirements shall be according to the latest edition of the "Standard Specifications for Water and Sewer Main Construction in Illinois", and the applicable portions of Section 550 of the Standard Specifications; which may include concrete collars and encasing pipe with seals if required.

Pipe materials shall meet the requirements of Sections 40 and 41-2.01 of the "Standard Specifications for Water and Sewer Main Construction in Illinois", except PVC pipe will not be allowed. Ductile-Iron pipe shall meet the minimum requirements for Thickness Class 50.

Encasing of standard type storm sewer, according to the details for "Water and Sewer Separation Requirements (Vertical Separation)" in the "STANDARD DRAWINGS" Division of the "Standard Specifications for Water and Sewer Main Construction in Illinois", may be used for storm sewers crossing water mains.

Basis of Payment: This work will be paid according to Article 550.10 of the Standard Specifications, except the pay item shall be STORM SEWER (WATER MAIN REQUIREMENTS), of the diameter specified.

ENGINEER'S FIELD OFFICE TYPE A (D1)
Effective: January 1, 2022

Revise the first paragraph of Article 670.02 to read:

670.02 Engineer's Field Office Type A (D1). Type A (D1) field offices shall have a ceiling height of not less than 7 feet and a floor space of not less than 1000 square feet with a minimum of two separate offices. The office shall also have a separate storage room capable of being locked for the storage of the nuclear measuring devices. The office shall be provided with sufficient heat, natural and artificial light, and air conditioning. Doors and windows shall be equipped with locks approved by the Engineer.

Add the following to Article 670.07 Basis of Payment.

The building or buildings, fully equipped, will be paid for at the contract unit price per calendar month or fraction thereof for ENGINEER'S FIELD OFFICE, TYPE A (D1).

TRAFFIC CONTROL AND PROTECTION (ARTERIALS) (D1)
Effective: February 1, 1996
Revised: March 1, 2011

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

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

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

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

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

TRAFFIC CONTROL PLAN (D1)
Effective: September 30, 1985
Revised: January 1, 2007

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

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

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

STANDARDS:

701006-05	OFF-RD OPERATIONS, 2L, 2W, 15’ TO 24’ FROM EDGE OF PVMT
701011-04	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701101-05	OFF-RD OPERATIONS, MULTILANE, 15’ TO 24’ FROM EDGE OF PVMT
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS – DAY ONLY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER, OR CROSSWALK CLOSURE
701901-09	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS

DETAILS:

TC-10	T.C & PROTECTION SIDE ROADS, INTERSECTIONS, & DRIVEWAYS
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-16	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
TC-22	ARTERIAL ROAD INFORMATION SIGN
TC-26	DRIVEWAY ENTRANCE SIGNING

SPECIAL PROVISIONS:

MAINTENANCE OF ROADWAYS (D1)
PUBLIC SAFETY AND CONVIENCE (D1)
TEMPORARY INFORMATION SIGNING (D1)
TRAFFIC CONTROL AND PROTECTION (ARTERIALS) (D1)
SHORT TERM AND TEMPORARY PAVEMENT MARKINGS (BDE)
VEHICLE AND EQUIPMENT WARNING LIGHTS (BDE)
WORK ZONE TRAFFIC CONTROL DEVICES (BDE)

HOT-MIX ASPHALT – MIXTURE DESIGN VERIFICATION AND PRODUCTION (D1)
Effective: January 1, 2019
Revised: December 1, 2021

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

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

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

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

1/ The compacted gyratory bricks for Hamburg wheel and I-FIT testing shall be 7.5 ± 0.5 percent air voids.

2/ If the Contractor does not possess the equipment to prepare the 160 mm tall brick(s), twice as many 115 mm tall compacted gyratory bricks will be acceptable.

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

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

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

"Mixture sampled during first day of production shall include approximately 60 lb (27 kg) of additional material for the Department to conduct Hamburg wheel testing and approximately 80 lb (36 kg) of additional material for the Department to conduct I-FIT testing. Within two working days after sampling, the Contractor shall deliver prepared samples to the District laboratory for verification testing. The required number and size of prepared samples submitted for the Hamburg wheel and I-FIT testing shall be according to the "High ESAL - Required Samples for Verification Testing" table in Article 1030.05(d)(3) above."

FRICTION AGGREGATE (D1)
Effective: January 1, 2011
Revised: December 1, 2021

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

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

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

Use	Mixture	Aggregates Allowed
Class A	Seal or Cover	Allowed Alone or in Combination [5/]: Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete
HMA Low ESAL	Stabilized Subbase or Shoulders	Allowed Alone or in Combination [5/]: Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag[1/] Crushed Concrete
HMA High ESAL Low ESAL	Binder IL-19.0 or IL-19.0L SMA Binder	Allowed Alone or in Combination [5/ 6/]: Crushed Gravel Carbonate Crushed Stone[2/] Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete[3/]
HMA High ESAL Low ESAL	C Surface and Binder IL-9.5 IL-9.5FG or IL-9.5L	Allowed Alone or in Combination [5/]: Crushed Gravel Carbonate Crushed Stone[2/] Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag[4/] Crushed Concrete[3/]

<table>
<tr><th>Use</th><th>Mixture</th><th colspan="2">Aggregates Allowed</th></tr>
<tr><td rowspan="5">HMA
High ESAL</td><td rowspan="5">D Surface and Binder
IL-9.5
or IL-9.5FG</td><td colspan="2">Allowed Alone or in Combination [5/]:

Crushed Gravel
Carbonate Crushed Stone (other than Limestone)[2/]
Crystalline Crushed Stone
Crushed Sandstone
Crushed Slag (ACBF)
Crushed Steel Slag[4/]</td></tr>
<tr><td colspan="2">Other Combinations Allowed:</td></tr>
<tr><td>Up to...</td><td>With...</td></tr>
<tr><td>25% Limestone</td><td>Dolomite</td></tr>
<tr><td>50% Limestone</td><td>Any Mixture D aggregate other than Dolomite</td></tr>
<tr><td>75% Limestone</td><td>Crushed Slag (ACBF) or Crushed Sandstone</td></tr>
<tr><td rowspan="6">HMA
High ESAL</td><td rowspan="6">E Surface
IL-9.5

SMA
Ndesign 80
Surface</td><td colspan="2">Allowed Alone or in Combination [5/ 6/]:

Crushed Gravel
Crystalline Crushed Stone
Crushed Sandstone
Crushed Slag (ACBF)
Crushed Steel Slag

No Limestone.</td></tr>
<tr><td colspan="2">Other Combinations Allowed:</td></tr>
<tr><td>Up to...</td><td>With...</td></tr>
<tr><td>50% Dolomite[2/]</td><td>Any Mixture E aggregate</td></tr>
<tr><td>75% Dolomite[2/]</td><td>Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone</td></tr>
<tr><td>75% Crushed Gravel[2/]</td><td>Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag</td></tr>
</table>

<table>
<tr><td>Use</td><td>Mixture</td><td colspan="2">Aggregates Allowed</td></tr>
<tr><td rowspan="4">HMA
High ESAL</td><td rowspan="4">F Surface
IL-9.5

SMA
Ndesign 80
Surface</td><td colspan="2"><u>Allowed Alone or in Combination</u> [5/ 6/]:

Crystalline Crushed Stone
Crushed Sandstone
Crushed Slag (ACBF)
Crushed Steel Slag
No Limestone.</td></tr>
<tr><td colspan="2"><u>Other Combinations Allowed</u>:</td></tr>
<tr><td>Up to...</td><td>With...</td></tr>
<tr><td>50% Crushed Gravel[2/] or Dolomite[2/]</td><td>Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone</td></tr>
</table>

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

PLANTING WOODY PLANTS

This work shall consist of planting woody plants as specified in Section 253 of the Standard Specifications with the following revisions:

Delete Article 253.03 Planting Time and substitute the following:

Spring Planting. This work shall be performed between March 15th and May 31st except that evergreen planting shall be performed between March 15th and April 30th in the northern zone.

Add the following to Article 253.03 (a) (2) and (b):

All plants shall be obtained from Illinois Nurserymen's Association or appropriate state chapter nurseries. All trees and shrubs shall be dug prior to leafing out (bud break) in the spring or when plants have gone dormant in the fall, except for the following species which are only to be dug prior to leafing out in the spring:

- Red Maple (Acer rubra)
- Alder (alnus spp.)
- Buckeye (Aesculus spp.)
- Birch (Betulus spp.)
- American Hornbeam (Carpinus caroliana)
- Hickory (Carya spp.)
- Eastern Redbud (Cercis spp.)
- American Yellowwood (Cladrastis kentuckea spp.)
- Corylus (Filbert spp.)
- Hawthorn (Crataegus spp.)
- Walnut (Juglans spp.)
- Sweetgum (Liquidambar spp.)
- Tuliptree (Liriodendron spp.)
- Dawn Redwood (Metasequoia spp.)
- Black Tupelo (Nyssa sylvatica)
- American Hophornbeam (Ostraya virginiana)
- Planetree (Platanus spp.)
- Poplar (Populus spp.)
- Cherry (Prunus spp.)
- Oak (Quercus spp.)
- Willow (Salix spp.)
- Sassafras (Sassafras albidum)
- Baldcypress (Taxodium distichum)
- Broadleaf Evergreens (all)
- Vines (all)

Fall Planting. This work shall be performed between October 1 and November 30 except that evergreen planting shall be performed between August 15 and October 15.

Planting dates are dependent on species of plant material and weather. Planting might begin or end prior or after above dates as approved by the Engineer. Do not plant when soil is muddy or during frost.

Add the following to Article 253.05 Transportation:

Cover plants during transport with a 70% shade mesh heavy duty tarp to prevent desiccation. Plant material transported without cover shall be automatically rejected. During loading and unloading, plants shall be handled such that stems are not stressed, scraped or broken and that root balls are kept intact.

Delete the third sentence of Article 253.07 and substitute the following:

Trees must be installed first to establish proper layout and to avoid damage to other plantings such as shrubs and perennials.

The Contractor shall be responsible for all plant layout. The layout must be performed by qualified personnel. The planting locations must be laid out as shown in the landscape plan. This will require the use of an engineer's scale to determine some dimensions. Tree locations within each planting area shall be marked with a different color stake/flag and labeled to denote the different tree species. Shrub beds limits must be painted.

All utilities shall have been marked prior to contacting the Roadside Development Unit. The Engineer will contact the Roadside Development Unit at (847) 705-4171 to approve the layout prior to installation. Allow a minimum of seven (7) working days prior to installation for approval.

Delete the first paragraph to Article 253.08 Excavation of Plant Holes and substitute with the following:

Protect structures, utilities, sidewalks, bicycle paths, knee walls, fences, pavements, utility boxes, other facilities, lawns and existing plants from damage caused by planting operations. Excavation of the planting hole may be performed by hand, machine excavator, or auger.

The excavated material shall not be stockpiled on turf, in ditches, or used to create enormous water saucer berms around newly installed trees or shrubs. Remove all excess excavated subsoil from the site and dispose as specified in Article 202.03.

Delete the second sentence of Article 253.08 Excavation of Plant Holes (a) and the third paragraph of Article 253.08(b) and substitute with the following:

Excavation of planting hole width. Planting holes for trees, shrubs, and vines shall be three times the diameter of the root mass and with 45-degree sides sloping down to the base of the root mass to encourage rapid root growth. Roots can become deformed by the edge of the hole if the hole is too small and will hinder root growth.

Planting holes dug with an auger shall have the sides cut down with a shovel to eliminate the glazed, smooth sides and create sloping sides.

Excavation of planting hole depth. The root flare shall be visible at the top of the root mass. If the trunk flare is not visible, carefully remove soil from around the trunk until the root flare is visible without damaging the roots. Remove excess soil until the top of the root mass exposes the root collar.

The root flare shall always be slightly above the surface of the surrounding soil. The depth of the hole shall be equal to the depth of the root mass minus 2" allowing the tree or shrub to sit 2" higher than the surrounding soil surface for trees.

For stability, the root mass shall sit on existing undisturbed soil. If the hole was inadvertently dug too deep, backfill and recompact the soil to the correct depth.

Excavation of planting hole on slopes. Excavate away the slope above the planting hole to create a flattened area uphill of the planting hole to prevent the uphill roots from being buried too deep. Place the excess soil on the downslope of the planting hole to extend the planting shelf to ensure roots on the downhill side of the tree remain buried. The planting hole shall be three times the diameter of the root mass and saucer shaped. The hole may be a bit elongated to fit the contour of the slope as opposed to the typical round hole on flat ground.

Add backfill to create a small berm on the downhill portion of the planting shelf to trap water and encourage movement into the soil to increase water filtration around the tree. Smooth out the slope above the plant where you have cut into the soil so the old slope and the new slope transition together smoothly.

Add the following to Article 253.08 Excavation of Plant Holes (b):

When planting shrubs in shrub beds and vines in a vine bed as shown on the plans or as directed by the Engineer, spade a planting bed edge at approximately a 45-degree angle and to a depth of approximately 3-inches around the perimeter of the shrub bed prior to placement of the mulch. Remove any debris created in the spade edging process and dispose of as specified in Article 202.03.

Delete Article 253.09 (b) Pruning and substitute with the following:

Deciduous Shrubs. Shrubs shall be pruned to remove dead, conflicting, or broken branches and shall preserve the natural form of the shrub.

Delete the third and fourth paragraphs of Article 253.10 Planting Procedures and Article 253.10 (a) and substitute the following:

Approved watering equipment shall be at the site of the work and in operational condition PRIOR TO STARTING the planting operation and DURING all planting operations OR PLANTING WILL NOT BE ALLOWED.

All plants shall be placed in a plumb position and avoid the appearance of leaning. Confirm the tree is straight from two directions prior to backfilling.

Before the plant is placed in the hole, any paper or cardboard trunk wrap shall be removed. Check that the trunk is not damaged. Any soil covering the tree's root flare shall be removed to expose the crown prior to planting.

Check the depth of the root ball in the planting hole. With the root flare exposed, the depth of the hole shall be equal to the depth of the root mass minus 2" allowing the tree or shrub to sit 2" higher than the surrounding soil surface for trees. The root flare shall always be slightly above the surface of the surrounding soil. For stability, the root ball shall sit on existing undisturbed soil. If the hole was inadvertently dug too deep, backfill and recompact the soil to the correct depth.

After the plant is place in the hole, all cords and burlap shall be removed from the trunk. Remove the wire basket from the top three quarters (3/4) of the root ball. The remaining burlap shall be loosened and scored to provide the root system quick contact with the soil. All ropes or twine shall be removed from the root ball and tree trunk. All materials shall be disposed of properly.

The plant hole shall be backfilled with the same soil that was removed from the hole. Clay soil clumps shall be broken up as much as possible. Where rocks, gravel, heavy clay or other debris are encountered, clean topsoil shall be used. Do not backfill excavation with subsoil.

The hole shall be 1/3 filled with soil and firmly packed to assure the plant remains in plumb, then saturated with water. After the water has soaked in, complete the remaining backfill in 8" lifts, tamping the topsoil to eliminate voids, and then the hole shall be saturated again. Maintain plumb during backfilling. Backfill to the edge of the root mass and do not place any soil on top of the root mass. Visible root flare shall be left exposed, uncovered by the addition of soil.

Add the following to Article 253.10 (b):

After removal of the container, inspect the root system for circling, matted or crowded roots at the container sides and bottom. Using a sharp knife or hand pruners, prune, cut, and loosen any parts of the root system requiring corrective action.

Delete the first sentence of Article 253.10(e) and substitute with the following:

Water Saucer. All plants placed individually and not specified to be bedded with other plants, shall have a water saucer constructed of soil by mounding up the soil 4-inches high x 8-inches wide outside the edge of the planting hole.

Delete Article 253.11 and substitute the following:

Individual trees, shrubs, shrub beds, and vines shall be mulched within 48 hours after being planted. No weed barrier fabric will be required for tree and shrub plantings.

The mulch shall consist of wood chips or shredded tree bark free not to exceed two (2) inches in its largest dimension, free of foreign matter, sticks, stones, and clods. Mulch shall be aged in stockpiles for a minimum of four (4) months where interior temperatures reach a minimum of 140-degrees. The mulch shall be free from inorganic materials, contaminants, fuels, invasive weed seeds, disease, harmful insects such as emerald ash borer or any other type of material detrimental to plant growth. A sample must be supplied to the Roadside Development Unit for approval prior to performing any work. Allow a minimum of seven (7) working days prior to installation for approval.

Mulch shall be applied at a depth of 4-inches around all plants within the entire mulched bed area or around each individual tree forming a minimum 5-foot diameter mulch ring around each tree. An excess of 4-inches of mulch is unacceptable and excess shall be removed. Mulch shall not be tapered so that no mulch shall be placed within 6-inches of the shrub base or trunk to allow the root flare to be exposed and shall be free of mulch contact.

Care shall be taken not to bury leaves, stems, or vines under mulch material. All finished mulch areas shall be left smooth and level to maintain uniform surface and appearance. After the mulch placement, any debris or piles of material shall be immediately removed from the right of way, including raking excess mulch out of turf areas in accordance with Article 202.03.

Delete Article 253.12 Wrapping and substitute the following:

Within 48 hours after planting, screen mesh shall be wrapped around the trunk of all deciduous trees with a caliper of 1-inch or greater. Multi-stem or clump form trees, with individual stems having a caliper of 1-inch or greater, shall have each stem wrapped separately. The screen mesh shall be secured to itself with staples or single wire strands tied to the mesh. Trees shall be wrapped at time of planting, before the installation of mulch. The lower edge of the screen wire shall be in continuous contact with the ground and shall extend up to a minimum of 36-inches or to the lowest major branch, whichever is less. Replacement plantings shall not be wrapped.

Delete Article 253.13 Bracing and substitute with the following:

Unless otherwise specified by the Engineer, within 48 hours after planting all deciduous and evergreen trees, with the exception of multi-stem or clump form specimens, over 8-feet in height shall require three 6-foot long steel posts equally spaced from each other and adjacent to the outside of the ball. The posts shall be driven vertically to a depth of 18-inches below the bottom of the hole. The anchor plate shall be aligned perpendicular to a line between the tree and the post. The tree shall be firmly attached to each post with a double guy of 14-gauge steel wire. The portion of the wire in contact with the tree shall be encased in a hose of a type and length approved by the Engineer.

During the life of the contract, within 72 hours the Contractor shall straighten any tree that deviates from a plumb position. The Contractor shall adjust backfill compaction and install or adjust bracing on the tree as necessary to maintain a plumb position. Replacement trees shall not be braced.

Delete the second sentence of the first paragraph of Article 253.14 Period of Establishment and substitute the following:

This period shall begin in April and end in November of the same year.

Delete the last sentence of the first paragraph of Article 253.15 Plant Care and substitute the following:

This may require pruning, cultivating, tightening and repairing supports, repair of wrapping, and furnishing and applying sprays as necessary to keep the plants free of insects and disease. The Contractor shall provide plant care a minimum of every two weeks, or within 3 days following notification by the Engineer. All requirements for plant care shall be considered as included in the cost of the contract.

Delete the first paragraph of Article 253.15 Plant Care (a) and substitute with the following:

During plant care additional watering shall be performed at least every two weeks during the months of May through December. The contractor shall apply a minimum of 35 gallons of water per tree, 25 gallons per large shrub, 15 gallons per small shrub, and 4 gallons per vine. The Engineer may direct the Contractor to adjust the watering rate and frequency depending upon weather conditions.

Add the following to Article 253.15 Plant Care (c):

The contractor shall correct any vine growing across the ground plane that should be growing up desired vertical element (noise wall, retaining wall, fence, knee wall, etc.). Work may include but is not limited to carefully weaving vines through fence and/or taping vines to vertical elements.

Add the following to Article 253.15 Plant Care (d):

The contractor shall inspect all trees, shrubs, and vines for pests and diseases at least every two weeks during the months of initial planting through final acceptance. Contractor must identify and monitor pest and diseases and determine action required to maintain the good appearance, health and, top performance of all plant material. Contractor shall notify the Engineer with their inspection findings and recommendations within twenty-four hours of findings. The recommendations for action by the Contractor must be reviewed and by the Engineer for approval/rejection. All approved corrective activities will be included in the cost of the contract and shall be performed within 48 hours following notification by the Engineer.

Delete Article 253.16 Method of Measurement and substitute with the following:

Trees, shrubs, evergreens, vines, and seedlings will be measured as each individual plant.

(a) This work will be measured for initial payment, in place, for plant material found to be in live and healthy condition by June 1.

(b) This work will be measured for final payment, in place, for plant material found to be in live and healthy condition upon final acceptance by the department.

Delete Article 253.17 Basis of Payment and substitute the following:

This work will be paid for at the contract unit price per each for TREES, SHRUBS, EVERGREENS, or VINES, of the species, root type, and plant size specified; and per unit for SEEDLINGS.

The unit price shall include the cost of all materials, mulch, equipment, labor, plant care, watering, and disposal required to complete the work as specified herein and to the satisfaction of the Engineer. Payment will be made according to the following schedule.

(a) Initial Payment. Upon completion of planting, mulch covering, wrapping, and bracing, 75 percent of the pay item(s) will be paid.

(b) Final Payment. After the successful completion of all required replacement plantings, clean-up work and receipt of the "Final Acceptance of Landscape Work" memorandum from the State of Illinois Bureau of Maintenance, or upon execution of a third-party bond, the remaining 25 percent of the pay item(s) will be paid.

SUPPLEMENTAL WATERING

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

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

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

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

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

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

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

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

35 gallons per tree
25 gallons per large shrub
15 gallons per small shrub

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

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

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

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

FAILURE TO COMPLETE PLANT CARE AND ESTABLISHMENT WORK ON TIME

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

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

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

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

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

TEMPORARY INFORMATION SIGNING
Effective: November 13, 1996
Revised: January 29, 2020

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

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

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

Note 1. The Contractor may use 5/8 inch (16 mm) instead of 3/4 inch (19 mm) thick plywood.

Note 2. The sign face material shall be in accordance with the Department's Fabrication of Highway Signs Policy.

Note 3. The overlay panels shall be 0.08 inch (2 mm) thick.

GENERAL CONSTRUCTION REQUIREMENTS

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

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

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

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

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

Basis Of Payment.
This work shall be paid for at the contract unit price per square foot (square meter) for TEMPORARY INFORMATION SIGNING.

PROTECTION OF EXISTING TREES

The Contractor shall be responsible for taking measures to minimize damage to the tree limbs, tree trunks, and tree roots at each work site. All such measures shall be included in the contract price for other work except that payment will be made for TEMPORARY FENCE, TREE ROOT PRUNING.

All work, materials and equipment shall conform to Section 201 and 1081 of the Standard Specifications except as modified herein.

A. Earth Saw Cut of Tree Roots (Root Pruning):

1. Whenever proposed excavation falls within a drip-line of a tree, the Contractor shall:

    a. Root prune 6-inches behind and parallel to the proposed edge of trench a neat, clean vertical cut to a minimum depth directed by the Engineer through all affected tree roots.

    b. Root prune to a maximum width of 4-inches using a reciprocating saw blade for cutting tree roots or similar cutting machine. Trenching machines will not be permitted.

    c. Exercise care not to cut any existing utilities.

    d. If during construction it becomes necessary to expose tree roots which have not been precut, the Engineer shall be notified and the Contractor shall provide a clean, vertical cut at the proper root location, nearer the tree trunk, as necessary, by means of hand-digging and trimming with chain saw or hand saw. Ripping, shredding, shearing, chopping or tearing will not be permitted.

2. Whenever curb and gutter is removed for replacement, or excavation for removal of or construction of a structure is within the drip line/root zone of a tree, the Contractor shall:

    a. Root prune 6-inches behind the curbing so as to neatly cut the tree roots.

    b. Depth of cut shall be 12 inches for curb removal and replacement and 24 inches for structural work. Any roots encountered at a greater depth shall be neatly saw cut at no additional cost.

    c. Locations where earth saw cutting of tree roots is required will be marked in the field by the Engineer.

3. All root pruning work is to be performed through the services of a licensed arborist to be approved by the Engineer.

Root pruning will be paid for at the contract unit price each for TREE ROOT PRUNING, which price shall be payment for all labor, materials and equipment.

B. Temporary Fence:

1. The Contractor shall erect a temporary fence around all trees within the construction area to establish a “tree protection zone” before any work begins or any material is delivered to the jobsite. No work is to be performed (other than root pruning), materials stored or vehicles driven or parked within the “tree protection zone”.

2. The exact location and establishment of the “tree protection zone” fence shall be approved by the Engineer prior to setting the fence.

3. The fence shall be erected on three sides of the tree at the drip-line of the tree or as determined by the Engineer.

4. All work within the “tree protection zone” shall have the Engineer’s prior approval. All slopes and other areas not regarded should be avoided so that unnecessary damage is not done to the existing turf, tree root system ground cover.

5. The grade within the “tree protection zone” shall not be changed unless approved by the Engineer prior to making said changes or performing the work.

The fence shall be similar to wood lath snow fence (48 inches high), plastic poly-type or and other type of highly visible barrier approved by the Engineer. This fence shall be properly maintained and shall remain up until final restoration, unless the Engineer directs removal otherwise. Tree fence shall be supported using T-Post style fence posts. **Utilizing re-bar as a fence post will not be permitted.**

Temporary fence will be paid for at the contract unit price per foot for TEMPORARY FENCE, which price shall include furnishing, installing, maintaining, and removing.

D. Removal of Driveway Pavement and Sidewalk:

1. In order to minimize the potential damage to the tree root system(s), the Contractor will not be allowed to operate any construction equipment or machinery within the “tree protection zone” located between the curb or edge of pavement and the right-of-way property line.

2. Sidewalk to be removed in the areas adjacent to the “tree protection zones” shall be removed with equipment operated from the street pavement. Removal shall be done by excavation equipment, or by hand, or a combination of these methods. The method of removal shall be approved by the Engineer prior to commencing any work.

3. Any pavement or pavement related work that is removed shall be immediately disposed of from the area and shall not be stockpiled or stored within the parkway area under any circumstances.

E. Backfilling:

1. Prior to placing the topsoil and/or sod, in areas outside the protection zone, the existing ground shall be disked to a depth no greater than one (1”), unless otherwise directed by the Engineer. No grading will be allowed within the drip-line of any tree unless directed by the Engineer.

F. Damages:

1. In the event that a tree not scheduled for removal is injured such that potential irreparable damage may ensure, as determined by the Roadside Development Unit, the Contractor shall be required to remove the damage tree and replace it on a three to one (3:1) basis, at his own expense. The Roadside Development Unit will select replacement trees from the pay items already established in the contract.

2. The Contractor shall place extreme importance upon the protection and care of trees and shrubs which are to remain during all times of this improvement. It is of paramount importance that the trees and shrubs which are to remain are adequately protected by the Contractor and made safe from harm and potential damage from the operations and construction of this improvement. If the Contractor is found to be in violation of storage or operations within the “tree protection zone” or construction activities not approved by the Engineer, a penalty shall be levied against the Contractor with the monies being deducted from the contract. The amount of the penalty shall be two hundred fifty dollars ($250.00) per occurrence per day.

WASHOUT BASIN

Description: The WASHOUT BASIN(s) as identified and approved by the Engineer prior to construction are used to contain concrete liquids when the chutes of concrete trucks are rinsed out after the delivery of concrete to the construction site. These washout facilities function to consolidate soils for disposal and prevent runoff liquids associated with concrete.

General Requirements:

- The Contractor must submit a plan of his/her proposed temporary concrete washout facility to the Engineer for his/her approval at least 10 days prior to the first concrete pour.
- Temporary concrete washout facilities are to be in place prior to any delivery of concrete to the construction site.
- Temporary concrete washout facilities are to be located at least 50 feet from storm drain inlets, open drainage facilities, or water bodies. Each facility is to be located away from construction traffic or access areas to prevent disturbance or tracking.
- A sign is to be installed adjacent to each temporary concrete washout facility to inform concrete equipment operations of the designated washout facility.

Design:
The type of concrete washout facilities available for use on this project (unless otherwise approved):

Prefabricated non-portable facilities (as approved by the Engineer)

Non-portable facilities:

- **Above Grade:** Constructed using barrier wall & polyethylene sheeting. Barrier walls are constructed to create a berm with a single sheet of 10-mil polyethylene sheeting which is free of holes, tears, or other defects which may compromise the impermeability of the material. Sandbags are used to hold the sheeting in place on top of the berm. Sheeting must extend over the entire basin and berm to prevent escape of material discharge.
- **Below Grade:** Constructed via excavation and the use of polyethylene sheeting and sandbags. A pit is first excavated in a designated location with a single sheet of 10-mil polyethylene sheeting which is free of holes, tears, or other defects, which may compromise the impermeability of the material. Sandbags are then used to hold the sheeting in place.

Size of Washouts:
Number and size of washout facility is to be determined by the Contractor. It is his/her responsibility to provide enough storage for the excess concrete and water produced on the target. Non-portable facilities are to have a minimum length and width of 10’ unless otherwise approved by the Engineer.

Inspection/Maintenance/Removal:

- Temporary concrete washout facilities are to be inspected by the Engineer during his/her weekly erosion and sediment control inspection per the requirements of the SWPPP. The inspector is to ensure there are no leaks, spills, and the capacity of the facility has not yet been compromised.
- Any overflowing of the washout facility onto the ground must be cleaned up and removed within 24 hours of discovery.
- If a rain or snow event is forecasted, a non-collapsing, non-water collecting cover shall be placed over the washout facility and secured to prevent accumulation and overflow of precipitation.
- Contents of each facility are not to exceed 75% of design capacity. If contents reach 75% capacity, discontinue pouring concrete into the facility until it has been cleaned out.
- Allow slurry to evaporate or remove the site in a safe manner (i.e. vacuum truck). All hardened material can then be removed or disposed of properly.
- If a lined basin is used, immediately replace the liner if it becomes damaged.
- Remove temporary concrete washout facilities when they are no longer required and restore the disturbed areas to their original condition.

- Note locations of these facilities and any changes to these locations on the SWPPP.

Basis of Payment: This work shall be paid for at the contract unit price LUMP SUM for WASHOUT BASIN, which price shall be payment in full for all material, labor, excavation, maintenance, material replacement and disposal and restoration of all basins to be utilized for this contract.

STABILIZED CONSTRUCTION ENTRANCE

Description: This work shall consist of the furnishing, installation, maintenance, and removal of all stabilized construction entrances for accessing the construction zone. The entrances shall be placed at the locations as shown in the plans and as directed by the Engineer.

General: This work shall conform with the Stabilized Construction Entrance detail shown in the plans and applicable portions of Sections 282 and 351 of the Standard Specifications. If required by the Engineer, any drainage facilities or wash racks used shall meet the requirements of the manufacturer.

It is the Contractor's responsibility to maintain the roadway in a clean condition. The Contractor shall maintain continuous surveillance and shall continuously maintain, realign or repair all stabilized construction entrances shown on the plans or as directed by the Engineer that are displaced or damaged by water, traffic, Contractor operations or any other cause. This may require periodic top dressing with additional coarse aggregate as directed by the Engineer.

Method of Measurement: STABILIZED CONSTRUCTION ENTRANCE will be measured in place per SQUARE YARD. Coarse aggregate used for maintenance of the entrance will not be measured for payment and shall be considered included in the cost of the STABILIZED CONSTRUCTION ENTRANCE. Filter fabric will not be measured for payment, but shall be included in the cost of the STABILIZED CONSTRUCTION ENTRANCE.

Basis of Payment. This work shall be paid for at the contract unit price per SQUARE YARD for STABILIZED CONSTRUCTION ENTRANCE and shall include excavation; removal and disposal of excavated materials; embankment; geotechnical fabric; furnishing, placing, compacting and disposing of coarse aggregate, drainage facilities or wash racks (Washout Basins paid for separately); and for all labor, tools and equipment necessary to construct, maintain and remove the work as specified.

FENCE REMOVAL

Description: This work shall consist of the removal of existing fencing within the project work zone at the locations shown on the plans and as directed by the Engineer. The Contractor shall safely remove all components of the fencing including gates, hinges, bolts, connections, foundations, and all other components associated with the existing fencing. The fencing shall be disposed of properly from the project site directed by the Engineer. The existing fencing material may vary. All types and materials of fencing are included in this special provision.

Construction Requirements: Prior to any fence removal, the existing fence shall be reviewed, photographed, and inventoried with concurrence by the Engineer. The inventory shall identify existing post anchorage types (concrete footings, bury depth, materials, layout, etc.) and all existing section joints, connections, and details. The current condition of the fence shall be recorded with a combination of sketches, dimensions and photographs. Once the review and inventory is complete, a plan for the removal, and eventual installation and connection of the proposed fencing shall be submitted for approval. No fence shall be removed prior to the approval of the plan of work by the Engineer.

All applicable sections of the IDOT Standard Specifications for Road and Bridge Construction shall be followed during the execution of work.

The fence shall be removed at the logical limits and following the details developed and identified in the approved plan. Any portion of the existing fence to remain deemed by the Engineer to have been damaged during the removal shall be replaced by the Contractor with no additional payment.

Method of Measurement: FENCE REMOVAL shall measured for payment in feet and measured along the top of the fence from center post to center post of the existing fence.

Basis of Payment: This work shall be paid for at the contract unit price per FOOT for FENCE REMOVAL, which price shall include all equipment, labor, and materials necessary to remove the fence, associated hardware, appurtenances, foundations, and backfill for the foundation voids.

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (PROJECT SPECIFIC)

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

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

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

Site SB-16: Cedar St to Hemlock St, Hazel Avenue, Deerfield, Lake County
Station 25+00 to Station 27+70 (CL Hazel Avenue), 29 feet RT to 29 feet LT. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(5).

Site SB-8 & SB-9: Metra Railroad, Hazel Avenue, Deerfield, Lake County
Station 53+50 to Station 54+50 (Hazel Avenue), 29 feet RT to 29 feet LT The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(5).

Site SB-10: Journal Pl & Waukegan Rd, Hazel Avenue, Deerfield, Lake County
Station 53+50 to Station 54+50 (Hazel Avenue), 29 feet RT to 29 feet LT. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(b)(1).

Site 4010-COV-2: ROW, 1000 block of Waukegan Road, Deerfield, Lake County
Station 63+00 to Station 64+00 (CL Hazel Avenue), 12 to 20 feet LT. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

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

CLASS D PATCHES, (TYPE SPECIFIED), 7 INCH (SPECIAL)

Description:
This work shall be performed in accordance with Section 442 of the Standard Specifications. The work includes saw cutting of the existing pavement, removal of the pavement, compaction of the existing aggregate subgrade, and placement of the required pavement materials.

Materials.
The patch shall be 7” thick and consist of:
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2"
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 5"

Method of Measurement:
Pavement patching will be measured for payment in place, and the area of the patch shall be computed in square yards.

Basis of Payment:
This work will be paid for at the contract unit price per square yard for CLASS D PATCHES, (OF TYPE SPECIFIEC), 7 INCH (SPECIAL), regardless of the size of the patch. Payment shall be full compensation for all materials, labor, saw cutting, pavement removal, equipment and incidentals to complete the item as shown on the details and as specified.

DEWATERING

Description.
This work consists of providing labor, tools, equipment, and materials necessary to dewater the related work areas of the Project to relatively dry conditions and maintain suitable working conditions so that the improvements may be constructed in the dry as shown in the plans and as directed by the Engineer.

Materials.
Contractor shall be responsible for the choice of the product(s) and equipment as well as "means and methods" for the Site Dewatering Work to be performed subject to the review of the Engineer. All products and "means and methods" selected shall be adequate for the intended use/application. Engineer's review does not relieve the Contractor from compliance with the requirements of the Drawings and Specifications and the requirements of this special provision.

Submittals.
Contractor shall submit to the Engineer for review a description of dewatering techniques and equipment to be used, together with detail drawings showing lengths of discharge piping and point(s) of discharge including erosion control procedures.

The Engineer's review of dewatering techniques and equipment shall in no way be construed as creating any obligation on the part of Engineer for same.

Responsibility.
The Contractor shall be solely responsible for the choice of product(s) and equipment; for the design, installation, and operation; as well as "means and methods" of performing the Work; and subsequent removal of dewatering systems and their safety and conformity with local codes, regulations and these Specifications. All product(s), equipment and "means and methods" selected shall be adequate for the intended use/application. Review by Engineer does not relieve Contractor from compliance with the requirements specified herein.

General Requirements.
The Contractor shall select the pumps he/she desires to use and the rate at which the pumps discharge. Adequate protection at the pump discharge shall be provided by the Contractor, subject to review by the Engineer. The Contractor shall ensure that downstream water quality shall not be impaired. At all times during the excavation period and until completion and acceptance of the Work at Final Inspection, ample means and equipment shall be provided with which to remove promptly and dispose of properly all water entering any excavation or any other parts of the Work.

Water pumped or drained from the work required for this Contract shall be disposed of in a safe and suitable manner without damage to adjacent property or streets or to other work under construction. Water shall not be discharged onto streets without adequate protection of the surface at the point of discharge. No water shall be discharged into sanitary sewers. No water containing settleable solids shall be discharged into storm sewers. Any and all damages caused by dewatering the work shall be promptly repaired by the Contractor. The Contractor is responsible for providing any and all labor, materials and equipment needed for the Dewatering in order to meet the scheduled completion of the project.

Method of Measurement.
This work will be measured for payment on a lump sum basis.

Basis of Payment.
This work will be paid for at the contract lump sum price for DEWATERING, which price shall include all material, equipment, labor, and disposal of material necessary to complete the work as specified herein.

PERIMETER EROSION BARRIER (SPECIAL)

Description.
This work shall include all labor, material, and equipment necessary to install Coir Roll at the locations shown on the plans and as directed by the Engineer, Designated Erosion Control Inspector, governing agency, or Owner.

Materials.
The Coir Roll shall be of 9 pound density, 12 inch diameter, 20 feet long coir log polynet. The ends of the coir log shall be jointed together by twine. The Coir Roll shall be secured using 2”x2”x24” wood stakes driven into the ground a minimum ten (10) inches deep and located every three (3) feet of length.

This work will be measured in place for at the contract unit price per foot for PERIMETER EROSION BARRIER (SPECIAL), which shall include all labor, material, and equipment required to complete the work as specified herein.

CASING PIPE, OPEN CUT, 24" PVC

Description.
The Contractor shall furnish and install PVC casing pipe at locations shown on the plans or where required by the Engineer to meet the water and sewer separation requirements of Section 41-2.01 of the Standard Specifications for Water and Sewer Main Construction in Illinois, current edition. Water main shall be installed within the casing using casing spacers with restraints. A minimum of 3 spacers shall be required for each section of main within the casing.

The Contractor shall be required to open cut the ground to complete the installation. Excavation and proper disposal of materials required to remove the vault will be included in this work and shall be disposed of per Article 202.03.

Materials.
PVC-SDR-21 pipe shall be used for all casing pipe, and the ends shall be sealed by a watertight masonry cap or a method approved by the Engineer.

Method of Measurement.
PVC casing pipe will be measured for payment in place in feet.

Basis of Payment.
This work will be paid for at the contract unit price per linear foot for CASING PIPE, OPEN CUT, 24" PVC. The contract unit price shall include the costs for all work, including but not limited to the costs for labor, materials, casing pipe, casing spacers, supplies, end seals and equipment. Payment for water main shall be paid separately at the contract unit prices for DUCTILE IRON WATER MAIN.

PVC CASING PIPE, 18”

Description.
The Contractor shall furnish and install PVC casing pipe at locations shown on the plans or where required by the Engineer to meet the water and sewer separation requirements of Section 41-2.01 of the Standard Specifications for Water and Sewer Main Construction in Illinois, current edition. Water main shall be installed within the casing using casing spacers with restraints. A minimum of 3 spacers shall be required for each section of main within the casing.

The Contractor shall be required to open cut the ground to complete the installation. Excavation and proper disposal of materials required to remove the vault will be included in this work and shall be disposed of per Article 202.03.

Materials.
PVC-SDR-21 pipe shall be used for all casing pipe, and the ends shall be sealed by a watertight masonry cap or a method approved by the Engineer.

Method of Measurement.
PVC casing pipe will be measured for payment in place in feet.

Basis of Payment.
This work will be paid for at the contract unit price per linear foot for PVC CASING PIPE, 18”. The contract unit price shall include the costs for all work, including but not limited to the costs for labor, materials, casing pipe, casing spacers, supplies, end seals and equipment. Payment for water main shall be paid separately at the contract unit prices for DUCTILE IRON WATER MAIN.

VALVE VAULTS TO BE ABANDONED

Description.
This work shall consist of abandoning valve vaults, and removing water valves, piping, and appurtenances at locations indicated on the Plans or directed by the Engineer in accordance with the applicable requirements of Section 605 in the IDOT Standard Specifications and the applicable portions of Section 561 of the Standard Specifications and Section 42 of the Water and Sewer Specification and as modified herein:

General Requirements.
All water main shut-downs shall be coordinated with the Village of Deerfield.

At a minimum, the Contractor shall remove the top 3' of the vault (minimum) including the lid, frame, cone, barrel, and all appurtenances. The lid and frame shall be salvaged and delivered to the Village. If required, any water main openings shall be securely sealed with a one (1) foot minimum length concrete mortar plug.

Excavation and proper disposal of materials required to remove the vault will be included in this work and shall be disposed of per Article 202.03. The bottom of the vault shall be partially broken out before being backfilled and compacted to grade. The remainder of the excavated area shall be backfilled in accordance with Section 208. All work will be included in the cost of the pay item, and no further compensation will be provided.

Method of Measurement.
This work shall be measured per each valve vault to be removed.

Basis of Payment.
This work shall be paid for at the contract unit price EACH for VALVE VAULTS TO BE ABANDONED which price shall include removing and properly disposing of the existing structure, pipe sealing, excavation, native backfill and all labor, equipment, and materials necessary to perform said work. Salvaging and return of any materials will be included in this pay item.

REMOVE AND REINSTALL BRICK PAVER

Description
This work will shall consist of the removal for salvage and stockpiling for reuse concrete or brick pavers and paver edge restraints as shown on the plans or as directed by the Engineer. The pavers and edge restraints shall be stockpiled at a location where they are secure from theft or vandalism.

Any excess brick pavers and edge restraints not needed or not reusable (as determined by the Engineer) shall be disposed of offsite.

For reinstalling brick pavers, the contractor shall adhere to the following:

Installation
The bricks or pavers shall be laid in the pattern the bricks were laid prior to disturbance with a joint width from 1/8 to 1/4 in. (3 to 6 mm) on all sides – or per manufacturer's recommendation whichever governs. Whole bricks or pavers shall be laid first, starting from an exact edge or from the centerline of the pavement, followed by cut bricks or pavers. Cut bricks or pavers shall be at least 33 percent of the whole unit size. After the entire pavement or sidewalk has been laid, it shall be set into the compacted bedding course by one pass of the vibrator/compactor. Vibration/compaction shall stop within 3 ft (1 m) of any unrestrained edge. For pavement, construction equipment shall not be driven on the new surface until the joints have been filled. A ¾" preformed expansion joint is required at the brick edge where it meets existing pavement.

Joint Filling
Fine aggregate for joint filling shall be spread over the pavement and hand broomed into the joints. The aggregate shall then be worked down into the joints with multiple passes of the vibrator/compactor. Each pass shall be alternated 90 degrees from the previous pass. This process shall be repeated until the joints are completely filled. Excess fine aggregate shall be removed by hand brooming. All bricks and pavers within 6 ft (1.8 m) of the laying face shall be compacted and the joints completely filled with sand at the end of each workday. For pavement, final rolling shall be completed with a 5 – 10 ton (4.5 – 9 metric ton) static pneumatic-tired roller.

Smoothness
For pavement, the completed surface will be tested for smoothness with a 16 ft (5 m) straightedge. Surface variations of the mainline pavement shall not exceed 3/16 in. (5 mm).

Edge Restraint
If in satisfactory condition, the Contractor shall reuse the existing edge restraints along non-paved edges. If it is determined that the existing edge restraint cannot be reused, a new flexible or rigid plastic restraint shall be installed. This shall be considered included in the cost of the contract.

Method of Measurement & Basis of Payment
This work, including all time, materials (including fine aggregate for joint filling, preformed expansion joint, edge restraints, etc.) shall be paid for at the contract unit price per SQUARE FOOT for REMOVE AND REINSTALL BRICK PAVER. Cost of additional bricks to replace any damaged or unusable bricks shall be considered included in this pay item.

WATERMAIN TO BE ABANDONED, [SIZE SPECIFIED]

Description
This work shall be performed in accordance with Specification for Water and Sewer Main Construction in Illinois, and Sections 561, 562 and 563 of the Standard Specifications except as modified herein.

The work shall include all labor, equipment, and material necessary to abandon the existing watermain, cut and cap/plug any existing lines. Contractor shall cut and cap it to the approval of the Engineer. The method of cutting and capping watermain shall be approved by the Engineer before start of the work. The excavated areas that are within 2-feet of proposed paved areas shall be backfilled with trench backfill material.

Method of Measurement & Basis of Payment:
This work shall be paid for at the contract unit price per Foot for WATERMAIN TO BE ABANDONED for all diameter which price shall include all labor, equipment and materials necessary to perform the work as specified including excavation, dewatering, cutting and removing sections of pipe, capping or plugging pipes, and backfilling with earth or trench backfill material, removal and disposal of surplus excavated material, and clean up.

WATERMAIN REMOVAL, [SIZE SPECIFIED]

Description.
This work shall consist of the removal of portions of the existing water main and capping of the portions that are to remain in place. This work shall be performed at locations shown on the plans and/or subject to the review of the ENGINEER.

All water shut downs shall be coordinated with the Village of Deerfield Public Works Department.

Excavation required for water main removal shall be performed in accordance with the applicable portion of the Special Provision “Ductile Iron Pipe Water Main” included herein. Water main removal shall end either at a joint or at a location where the existing pipe has been saw cut so as to provided a smooth, even surface so as to allow a watertight joint. After removal of the existing pipe, the integrity of that portion which is to remain in place shall be checked to insure that the pipe end has not been damaged. Additional removal required by non-compliance with this Special Provision will be performed at the CONTRACTOR’S expense and no additional compensation will be allowed. The existing water main shall be capped at all locations where removal is specified. The valves that control the existing water distribution system may not be adequate to completely shut down the system and the CONTRACTOR should expect some residual pressure to be preset when the cap is installed.

If the excavation required for the removal operation falls within a paved area (existing or proposed), it shall be backfilled with trench backfill. This work shall be performed in accordance with the applicable requirements of the Special Provision “TRENCH BACKFILL” included herein. Trench backfill will not be measured for payment but shall be considered included in the contract unit price per lineal foot for water main removal.

Method of Measurement.
This work will be measured at the contract unit price per lineal foot for WATERMAIN REMOVAL, of the diameter specified, measured as removed.

Basis of Payment.
This price shall include excavation, capping of existing, removal of water main at the contract unit price per lineal foot for WATERMAIN REMOVAL, of the diameter specified, and backfill as specified, which price shall be payment in full for all labor, equipment, trench backfill and material necessary to complete the work as specified herein.

WATER MAIN LINE STOP, [SIZE SPECIFIED]

Description.
This work shall consist of the placement of a self-contained unit of the size indicated on the plans for the purpose of abandoning a section of water main without interruption of service to that section of main that is to remain active.

General.
The line stop unit shall be a self-contained hydraulic (hand pump operated) ram. The line stopping device shall be of such a design that when hydraulic pressure is applied, the rubber will expand and conform to the inside diameter of the pipe and tuberculation inside the main (if any) will be moved outside of the sealing area. The line stop shall be of the “Short Stop” variety which will require removing only the top of the pipe during operation. All fittings shall employ an inside diameter thread, screw-type connection. After insertion of the plug, a screw-on cap shall be used and bolted down. The system shall be capable of containing a water pressure of 150 psi. Shop drawings for line stop casing pipe shall be submitted for approval by the Engineer prior to delivery to the job site.

Basis of Payment.
This work will be paid for at the contract unit price each for WATER MAIN LINE STOP, of the diameter specified, which price shall be payment in full for all excavation, legal disposal of excavated material and trench backfill.

BRIDGE DECK CONCRETE SEALER

Replace Section 587 of the Standard Specifications with the following:

Description: This work shall consist of the surface preparation and application of a concrete sealer upon the entire top surface of the concrete deck, tops and vertical faces of the parapets, vertical and top surfaces of raised medians, top surface of sidewalks when present, top surfaces of abutment bearing seats and piers, of the structure, as outlined in the contract.

Materials: Materials shall be according to the following.

Item	Article/Section
(a) Concrete Sealer …….....	1026

Concrete sealers shall be Penetrating Sealers from the Department's approved list of concrete sealers.

CONSTRUCTION REQUIREMENTS

General: This work shall be according to applicable portions of Section 587 of the Standard Specifications.

Surfaces which are to be sealed shall be thoroughly cleaned by brooming and blowing off with high pressure air. Mechanical scraping may also be required to assist in the removal of mud and other foreign material. The use of chemicals and other cleaning compounds to facilitate the removal of foreign materials shall be approved by the manufacturer or its representative before use. Traffic shall not be allowed on the cleaned surface prior to treatment. Cleaning and application equipment shall be fitted with suitable traps, filters, drip pans, and other devices in order to prevent oil and other foreign material from being deposited on the surface.

Deck drains shall be temporarily plugged before the bridge deck concrete sealer is applied to control run off. The material used to plug the drains shall be removed and disposed of upon the completion of the sealing treatment.

Existing pavement markings shall be temporarily covered prior to the application of the bridge deck concrete sealer. The temporary covering material used shall be such that it will not affect the marking's retroreflectivity when removed. After application of the bridge deck concrete sealer and prior to opening to traffic, all temporary coverings shall be removed.

For new concrete, sealing shall be performed after all grinding and/or saw cut grooving is completed and before the deck is marked and open to traffic.

The concrete surface moisture condition state shall be dry. Pavement moisture shall be checked by the following procedure. Tape the edges of a square foot of plastic to the pavement surface. Allow the plastic to stand for 15 minutes. After 15 minutes, observe the plastic for drops of moisture. If moisture is present and the drop sizes are larger than a pencil eraser, the pavement moisture is too high and bridge deck concrete sealer shall not be applied. Do not apply when inclement weather is anticipated within 12 hours.

Bridge deck surfaces shall be flooded using a distribution sprayer, roller, brush or broom. Distribution sprayers shall include a skirting system to control overspray. Material shall be brushed or squeegeed for even distribution. When two applications are required, let the surface absorb the sealer and follow-up immediately with a second application before the surface dries; wet on wet method. Redistribute any puddles or free standing material. The concrete sealer shall be applied according to the manufacturer's instructions, and information provided on the approved list of concrete sealers. The final total coverage rate shall not exceed 400 sq.ft./gal.

Traffic will be allowed on the deck only after a treated area does not track.

Method of Measurement: The quantity shall be the actual coverage area in Square Foot of surfaces treated and shall include all surface preparation, material, and application costs.

Basis of Payment: Payment for completed work shall be made at the contract unit price per Square Foot for BRIDGE DECK CONCRETE SEALER which price shall be payment in full to complete the work as described herein.

SANITARY MANHOLES TO BE ADJUSTED

Description:
This work shall consist of adjusting sanitary manholes to grade. The work will be done in accordance with the applicable portions of Section 602 of the Standard Specifications, and the following.

Construction Requirements:
In addition to the requirements of the Standard Specifications, all sanitary manholes shall include the installation of an external chimney seal. The chimney seal and method of installation shall be approved by the Engineer.

Prior to making the final grade adjustment of the frame, all joint surfaces shall be made free of dirt, stones and debris by wire brushing each surface. Broken concrete or other construction debris shall not be used to shim the adjusting rings or frame. The maximum total height of the adjusting rings shall be 8 inches per structure.

Concrete adjustment rings less than 4 inches thick shall not be allowed. High Density Polyethylene (HDPE) plastic adjusting rings and ring wedges shall be used for all adjustments less than 4” or in combination with 4 inch minimum concrete adjustment rings. Bricks shall not be used.

Basis of Payment:
This work will be paid for at the contract unit price per EACH for SANITARY MANHOLES TO BE ADJUSTED. This work price shall include resetting the frame with grate or lid, and excavation and backfill. The unit price shall include all labor, equipment and materials necessary to complete the work.

EXPLORATION TRENCH (SPECIAL)

Description:
This work shall be performed according to Article 611.03 and Section 213 of the Standard Specifications except as modified herein. This item shall consist of excavating a trench at locations designated by the Engineer for the purpose of locating existing water or sanitary service lines or other underground facilities within the limits of the proposed improvement.

General:
Exploration Trench work will be done with hydro excavation equipment, unless otherwise directed by the Engineer. The trench shall be deep enough to expose the line but not more than one foot deeper than the line, and the width of the trench shall be sufficient to allow proper investigation to determine if the water or sanitary service line needs to be relocated or replaced.
The exploration trench shall be backfilled with gradation CA 6 stone, the cost of which shall be included in the item of EXPLORATION TRENCH (SPECIAL).

Method of Measurement:
An estimated length of exploration trench that will be measured FOOT has been shown in the summary of quantities to establish a unit price only. Payment shall be based on the actual length of trench explored measured per FOOT without a change in unit price because of adjustment in plan quantities.

Basis of Payment:
This work will be paid for at the contract unit price per FOOT for EXPLORATION TRENCH (SPECIAL), regardless of the depth required, and no extra compensation will be allowed for any delays, inconveniences or damages sustained by the Contractor in performing the work.

VALVE VAULTS TO BE REMOVED

Description.
This work shall consist of the removal and disposal of existing water valves, vaults and boxes at locations shown on the plans or as directed by the Engineer.

General.
All water shut downs shall be coordinated with the Village of Deerfield. The excavation left behind may be filled with trench backfill material in accordance with Section 208 of the Standard Specifications. All work and materials necessary to backfill will be incidental to this valve vault removal pay item and no further compensation will be provided.

Method of Measurement.
This work will be paid for at the contract unit price per EACH for VALVE VAULTS TO BE REMOVED.

Basis of Payment.
This work will be paid for at the contract unit price per EACH for VALVE VAULTS TO BE REMOVED which price shall include all labor, equipment, trench backfill, and materials necessary to perform said work.

HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 3”

Description.
This work shall consist of the construction of new residential driveway pavement in accordance with Sections 406, and 423 of the Standard Specifications, Village detail included in the plans and as specified herein.

The HMA driveway shall be in accordance with Section 406 and shall be HMA surface Course Mix D, N50 with a thickness of 3”.

Any existing pavement damaged adjacent to the new driveway shall be replaced in-kind at no additional cost to the Village.

The Contractor shall machine-saw a perpendicular clean joint between that portion of the driveway to be removed and that which is to remain in place. If the Contractor removes or damages the existing driveway outside the limits designated by the Engineer for removal and replacement, the Contractor will be required to remove and replace that portion at his own expense to the satisfaction of the Engineer.

Method of Measurement & Basis of Payment.
Measurement shall be per Article 423.10. This work shall be paid at the contract unit price per SQUARE YARD for HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 3”, of the material specified. AGGREGATE BASE COURSE, TYPE B, shall be paid for separately.

HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 4”

Description.
This work shall consist of the construction of new commercial driveway pavement in accordance with Sections 406, and 423 of the Standard Specifications, Village detail included in the plans and as specified herein.

The HMA driveway shall be in accordance with Section 406 and shall be HMA surface Course Mix D, N50 with a thickness of 4”.

Any existing pavement damaged adjacent to the new driveway shall be replaced in-kind at no additional cost to the Village.

The Contractor shall machine-saw a perpendicular clean joint between that portion of the driveway to be removed and that which is to remain in place. If the Contractor removes or damages the existing driveway outside the limits designated by the Engineer for removal and replacement, the Contractor will be required to remove and replace that portion at his own expense to the satisfaction of the Engineer.

Method of Measurement & Basis of Payment.
Measurement shall be per Article 423.10. This work shall be paid at the contract unit price per SQUARE YARD for HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 4”, of the material specified. AGGREGATE BASE COURSE, TYPE B, shall be paid for separately.

RELOCATE EXISTING LIGHT POLE

Description.
This work shall consist of removing an existing light pole, removing existing foundation, salvaging pole and luminaire, installing new foundation, install new pole and luminaire, installing new conduit to meet existing conduit, and running new electrical cable to first existing light pole upstream to splice in as shown on the construction plans.

The light pole and fixtures shall be removed in such a manner that it will be available for reuse, if possible. The contractor will coordinate with the Engineer to determine an acceptable site for the relocation of the light pole if the location shown on the plans is deemed unfit. The contractor will be required to install and stabilize the light pole and fixtures to a condition equal to or greater than the existing condition.

Existing foundations shall be removed a minimum of 2 foot below the proposed grade.

Any components damaged by the Contractor shall be replaced in-kind at his/her own expense.

The Contractor shall furnish and install a new foundation for each light pole unit per the detail shown in the plans.

The Contractor shall furnish and install a new light pole at each location if the existing light pole is deemed unfit for relocation by the Engineer.

The existing conduits will be intercepted underground and extended to the new light pole location, a new foundation will be provided in accordance with Section 836 of the Standard Specifications and the details shown in the plans, and the existing wiring will be removed and replaced entirely from the upstream and downstream light poles to remain. Underground splicing of existing cabling will not be acceptable. All work to complete this will be in accordance with Section 825 of the Standard Specifications, the plans, and as directed by the Engineer.

Materials:
The materials shall be in accordance with Article 825 of the Standard Specifications and plan details. The Contractor shall submit shop drawings to the Engineer for approval.

Method of Measurement and Basis of Payment.

This work will be paid for at the contract unit price per EACH for RELOCATE EXISTING LIGHT POLE which price shall include new conduit, electrical cable, foundations, light pole units, relocation of the existing light pole, splicing of electrical cable, excavation and backfill necessary for the conduit and foundations, removal of the existing foundations, all labor, equipment, trench backfill, and materials necessary to perform said work.

DUCTILE IRON WATER MAIN, [SIZE SPECIFIED]

Description.
Work includes furnishing and installing ductile iron water main as shown on the plans.

Materials.
The material shall be Class 52 Cement-Lined Ductile Iron Water Main, pressure class 200 in conformance of ANSI/AWWA standards. All pipes furnished shall be in 18 and 20 foot nominal lengths. Cutting of water main to facilitate construction shall be considered included in the unit price per foot of water main. Cement mortar lining shall conform with the latest revision of ANSI/AWWA standards.

All pipe fittings shall be mechanical joint class 350 compact fittings and shall be cement lined in accordance with ANSI / AWWA. All underground fittings shall be ductile iron. Bolts on all fittings (with the exception of hydrant fittings, locations where connection of the new water main system connects to the existing system and where threaded rods are used) shall be high strength, low alloy steel “Cor-ten” T-bolt as approved by Village. Connections to existing water main piping (existing system) shall be by means of mechanical joints with Grade #304 stainless steel bolts and Grade #300 stainless steel series nuts to conform to ASTM A193 and ASTM A194 or approved push-type joints. The mechanical and push - on joints shall meet ANSI A21.11 (AWWA C111). Where threaded rods are required, they shall be stainless steel Grade #304 with Grade #300 nuts. Fittings shall meet ANSI 21.10 (AWWA C110). Fittings shall have distinctly cast on them pressure ratings, nominal diameters of openings and the number of degrees or fraction of the circle on the bends. Ductile Iron fittings shall have the letters “DI” or “Ductile” cast on them. Cast letters and figures shall be on the outside body of the fitting set forth in the latest revision of ANSI/AWWA specifications. All jointing materials shall be as furnished by manufacturer of pipe and fittings and as specified above. All jointing materials shall be in accordance with ANSI/AWWA. **Any elbows required for placement of hydrant shall be included in the cost of this item.**

Bedding, haunching and initial backfill to 12 inches above the top of pipe, excavation, hauling, and disposal of excess material is included in the cost of this item. In areas where the water main is in non-paved areas, backfilling the trench with native materials is included in the cost of this pay item. Water main shall follow lines and grades per the plan. Testing shall be performed according to the requirements set forth in these specifications and as directed by the Engineer.

All ductile iron pipe and fittings shall be zinc coated. The coating materials shall be metallic zinc wire with a zinc content of at least 99.99% by mass, and bituminous paint topcoat compatible with zinc. The mean mass of the metallic zinc coating shall be a nominal of 200 grams per square meter with a minimum of 170 grams per square meter when measured in accordance with the section titled “Test Method for Determining Zinc Mass” of this specification. The mass of the zinc coating shall be verified at the beginning of each shift, at changes to application equipment settings, and at sufficiently frequent intervals to verify conformance to the mass requirements. Results shall be documented and kept on file for a period of one year and the results shall be provided to the Village.

The pipe surface shall be dry and free from dirt, oil, grease, asphalt, loose rust, or any non-adhering particles or foreign material. The metallic zinc shall be applied to the as-cast annealed external pipe surface, or to a blast cleaned or wire brushed surface, at the manufacturer’s discretion. The metallic zinc coating shall be applied by an arc spray thermal spray process in which the metallic zinc is heated to a molted state and projected in small droplets by clean and dry compressed air onto the external pipe surface. The metallic zinc coating shall cover the outside exterior pipe surface and shall be free from bare patches or areas with lack of adhesion which reveals bare iron pipe surface. A spiraled appearance is permissible provided the zinc coating masses comply with the requirements described above. Damaged areas of the zinc coating caused by handling are acceptable, provided the area of damage is less than 5 cm squared per square meter and that the minor dimension of the damaged area does not exceed 5mm. Greater areas of damage shall be repaired utilizing either 1) metallic zinc spray complying with this specification, or 2) application of a zinc-rich paint containing more than 85% zinc by mass in the dried film.

After zinc coating, the pipe shall be given a finishing layer of bituminous paint topcoat compatible with zinc. Application of the finishing layer may be done by spray, brush, or roller at the manufacturer's discretion. It shall uniformly cover the zinc coating and be free from bare patches or significant lack of adhesion. Repairs to the finishing layer shall be in accordance with the manufacturer's recommendations. The mean dry film thickness of the finishing layer shall not be less than 50 µm (2 mils) and to avoid blistering and permit proper performance of the zinc coating, shall not exceed 250 µm (10 mils).

Concrete thrust blocks, as shown on the plans and/or directed by the Engineer, shall be constructed at plugs, tees, and bends of 3000 psi concrete in accordance with section 41-2.09 of the "Standard Specifications for Water and Sewer Main Construction in Illinois", latest edition, and Village of Palatine Standards. The concrete thrust blocks shall completely fill the space between the bends or fittings and the walls of the trench from 6 inches below the fittings to 12 inches above the fitting with no possible interference with the making or remaking of the joints. Where bends of 10 degrees and larger are used and at fire hydrant tees, all fittings shall use "Megalug" restraint. This work shall be included in the unit price of DUCTILE IRON WATER MAIN [SIZE SPECIFIED]

WATER MAIN TESTING

Contractor shall install new water main but not install corporation stops, service lines, curb stops, or service boxes until after conducting pressure test, leakage test, disinfection of the new water main, flush the main, and acceptance for putting the new main into service. Finish by installing corporation stops, service lines, curb stops, and service boxes, and test and disinfect prior to connection to existing service lines. All testing including all labor, materials, tools and equipment necessary to perform the pressure and leakage tests shall be included in the cost of this item.

The Contractor is required to use a water meter to get the water from the Village. The Contractor shall obtain the meter from the Village of Palatine Public Works facility at 148 W. Illinois Avenue: 874.705.5200 and will be responsible to pay the established deposit of $1,200.00. In addition, for any water usage, normal Village rates will apply.

The Contractor shall perform pressure and leakage tests satisfactorily prior to requesting the Engineer witness the official test. The Contractor shall notify the Engineer and Village 48 hours prior to initiation of any testing. The Engineer and Village must be present for all testing. Depending on traffic conditions, public hazard, or other reasons, the Engineer may direct when to conduct the tests, and may order the tests to be made in relatively short sections of water main.

TESTS REQUIRED:

1. Hydrostatic tests:
   a) Devise a method for disposal of wastewater from hydrostatic tests, and for disinfection, as approved in advance by the Engineer.
2. Pressure tests:
   a) Subject the new water mains, including valves and hydrants, to a hydrostatic pressure of 150 PSI.
   b) Hold the test pressure for a duration of two hours without pressure loss of further pressure application.
   c) Carefully examine exposed pipe, joints, fittings, and valves.
   d) Replace or remake joints showing visible leakage.
   e) Remove cracked pipe, defective pipe, and cracked or defective joints, fittings, and valves. Replace with sound material and repeat the test until results are satisfactory.
   f) Make repair and replacement without additional cost to the Village.
   g) Use only solid stainless full-body repair clamps as approved by the Engineer.
3. Leakage Test: Conduct a metered leakage test after the pressure test has been satisfactorily completed.

a) Duration of each leakage test: At least 24 hours.
b) During the test, subject water lines to a normal water pressure of the Village's water system.
c) Install water meter approved by the Engineer. Provide double check valve assembly between water meter and existing water main.
d) Maximum allowable leakage: As recorded by a meter approved by the Engineer, with leakage to not exceed the number of gallons per hour (GPH) as determined by the following formula:

In inch-pound units,

$$L = \frac{SD\sqrt{P}}{148{,}000}$$

Where:
L = Testing (leakage) allowance (makeup water), in gallons per hour
S = Length of pipe tested, in feet
D = Nominal diameter of the pipe, in inches
P = Average test pressure during the hydrostatic test, in pounds per square inch (guage)

Should any test of pipe disclose leakage greater than the maximum allowable amount, locate and repair the defective joint or joints and then repeat the 24-hour metered leakage test until leakage is within the specified allowance.

This work shall be included in the cost of this item. No additional compensation will be provided for any required re-testing.

PRELIMINARY FLUSHING

Prior to disinfection, flush main as thoroughly as possible.

1. Flush main until water runs clear.
2. Provide a minimum flushing velocity of 2.5 fps in the water main.
3. Coordinate time of flushing with the Village and Engineer, at least 48 hours in advance of flushing. Do not initiate flushing without Village's permission.

This work shall be included in the cost of this item. No additional compensation will be provided regardless of the amount of flushing required.

DISINFECTION

After work on the new watermain work has been satisfactorily completed, including pressure and leakage testing, the Contractor shall disinfect the work in accordance with the latest revision of AWWA Standard C651 and Standard Specifications for Water and Sewer Construction in Illinois.

1. Forms of applied chlorine:
    a. Apply chlorine by gas feed or solution feed chlorinator, as approved by the Village.
    b. Provide effective diffusion of the gas or solution into the water within the water main.
    c. Provide means for preventing the backflow of water into the feeder.
2. Requirement of chlorine:
    a. Initial chlorine solution in pipe: at least 50 mg/l, but not more than 100 mg/l.
    b. Retain the disinfecting solutions in the work for at least 24 hours.
    c. Chlorine residual after the retention period: at least 25 mg/l
3. Flushing and testing:
    a. Following chlorination, flush treated water thoroughly from the water mains until the chlorine concentration in the water flowing from the main is no higher than generally prevailing in the Village's system or less than 1 mg/l.

   b. After flushing, collect two water samples on successive days at least 24 hours apart in sterile bottles treated with sodium thiosulfate. Notify the Engineer and the Village to witness sample collection.
   c. Deliver the samples to a State approved laboratory for bacteriological analysis.
   d. Should the initial disinfection result in an unsatisfactory bacterial test, repeat the chlorination procedure until satisfactory results are obtained.
   e. The Village will provide the water for the initial flushing and testing only.
   f. Compensate the Village for water used in subsequent flushing and testing.
4. Swabbing:
   a. Flush and swab the piping, valves, and fittings that must be placed in service immediately and cannot be disinfected by the above specified methods with five percent solution of calcium hypochlorite prior to assembly.
   b. Secure the Engineer's approval before applying this method of disinfection.

This work shall be included in the cost of this item. No additional compensation will be provided regardless of the number of times the main must be disinfected.

DECHLORINATION

The Contractor shall comply with AWWA C651-14 requirements to neutralize the residual chlorine in new water mains. After new water mains have passed disinfection requirements, utilize portable diffusing dechlorinators that utilize sulfur dioxide or other chemicals listed in Appendix C of AWWA C651 to lower chlorine residuals prior to discharge to the Drainage system. Lower concentration to 1 mg/l or less. Dechlorination is required of the disinfecting solution before being released to the storm sewers.

This work shall be included in the cost of this item.

Method of Measurement, & Basis of Payment:
This work as described above, shall be paid for at the Contract Unit price per foot for DUCTILE IRON WATER MAIN, of the diameter specified, which price shall be payment in full for all labor, materials, including all fittings (bends, wyes, tees, reducers, plugs, casing pipe), pipe, polyethylene encasement, thrust blocks, Mega-lugs, chlorination, and equipment required for a complete and operational installation, and removal and disposal of excavated material. The installation of fittings called out on the plans shall be considered incidental to the DUCTILE IRON WATER MAIN which shall include all materials, labor and equipment to connect the fittings to the water main pipe and shall include all work and materials associated with construction of the thrust block (if applicable). All fasteners and Retainer glands used at these bends, tees and at water valves are incidental to this item and will not be paid separately. The installation of additional fittings needed due to unforeseen conditions and not shown on the plans shall not be paid separately but included in the cost of the watermain. All fasteners and retainer glands used at these additional fittings are incidental to this item and will not be paid separately.

The Contractor shall pull-back the water main for the length shown in the plans. Following successful pull-back of the water main, the Contractor shall test the main in accordance with the special provision DUCTILE IRON WATER MAIN. Connection of the drilled water main to the proposed open cut watermain or valves shall be included in the cost of DUCTILE IRON WATERMAIN. This work shall include excavating down to the proposed main to make the connection to the valve and the subsequent filling of the excavation.

Payment for concrete thrust blocking or retainer glands will not be measured separately for payment but shall be INCLUDED in the cost of the DUCTILE IRON WATER MAIN.

Trench Backfill will be paid for separately.

HORIZONTALLY DIRECTIONAL DRILL, HDPE WATER MAIN, 12”

Description:
This work shall be performed in accordance with Section 561 of the Standard Specifications and Section 41 of the Water and Sewer Specifications with the following alterations. This work shall consist of Constructing an 12” water main using the horizontal directional drilling method, where shown on the plans and at the direction of the Engineer.

Materials:
Materials shall be according to the following: HDPE and all piping system components shall be the products of one manufacturer and shall conform to the latest edition of AWWA C906, ASTM DI248, ASTM D3350, and ASTM F714. Piping and Bends shall be extruded from a polyethylene compound and shall conform to the following requirements:

1. The polyethylene resin shall meet or exceed the requirements of ASTM D3350 for PE 3408 material with a cell classification of 335434C, or better.

2. The polyethylene compound shall be suitably protected against degradation by ultraviolet light by means of carbon black, well dispersed by precompounding in a concentration of not less than 2 percent.

3. The maximum allowable hoop stress shall be 800 psi at 73.4 degrees F.

4. The pipe manufacturer shall be listed with the Plastic Pipe Institute as meeting the recipe and mixing requirements of the resin manufacturer for the resin used to manufacture the pipe in this project.

5. Joining shall be performed by thermal butt-fusion in accordance with the manufacturer’s recommendations.

6. Water pipe exterior shall be blue in color or contain blue striping.

7. Standard dimensional ratio shall be SDR 11.

General:
Prior to beginning work, the Contractor shall submit to the Engineer a work plan detailing the procedure and schedule to be used to execute the project. The work plan shall include a description of all equipment to be used, down-hole tools, a list of personnel and their qualifications and experience (including back-up personnel in the event that an individual is unavailable), list of subcontractors, a schedule of work activity, a safety plan (including MSDS of any potentially hazardous substances to be used), and environmental protection plan and contingency plans for possible problems. Work plans shall be comprehensive,

Specifications on material to be used shall be submitted to the Engineer and the material shall include the pipe, fitting, drilling mud, drilling additives and any other item, which is to be an installed component of the project or used during construction.

All personnel shall be fully trained in their respective duties as part of the directional drilling crew and in safety. The Contractor must show job history and reference list of equal or greater size and length of piping involved. The Supervisor must have at least three years directional drilling experience. A competent and experienced supervisor representing the drilling Contractor shall be present at all times during the actual drilling operations. A responsible representative who is thoroughly familiar with the equipment and type of work to be performed must be in direct charge and control of the operation at all times.

The bore path alignment and design for the horizontal directional drilling shall be based on the plans and other factors, including the pipe bell and barrel diameters, the optimum individual pipe length, bore path inside diameter, and maximum deflection capabilities of the joint. The bore path shall be designed by the drilling Contractor to ensure that pipe joints do not deflect more than 50% of the manufacturer's recommended maximum deflection.

Prior to the start of drilling, reaming and pipe placement operations, the Contractor shall properly locate and identify all existing utilities in proximity to the pipe alignment. The Contractor shall confirm the alignment of all critical utilities. If a utility needs to be exposed to confirm its locations, this work shall be paid for as EXPLORATION TRENCH, SPECIAL. The plans show existing utilities that are believed to be near the directional drill alignment. There is no guarantee that these utilities are located as shown or that other utilities may not be present.

The work site, within the right-of-way, shall be graded or filled to provide a level working area for the drilling equipment. No alterations beyond what is required for operations are to be made. The cost of this work shall be included in the pay item HORIZONTALLY DIRECTIONAL DRILL, HDPE WATER MAIN, 12" at the direction of the ENGINEER.

The entire drill path shall be accurately surveyed with entry and exit stakes placed in the appropriate locations. If the Contractor is using a magnetic guidance system, the drill path shall be surveyed for any surface geomagnetic variations or anomalies.

The Contractor shall adhere to all applicable state, federal and local safety regulations and all operations shall be conducted in a safe manner.

The watermain shall be installed at the profile elevations shown in the plans. The profile elevation may be altered in the field to a minimum depth of 6 feet below the proposed surface elevation if it is verified by the Engineer that the bottom of existing sanitary services crossing the watermain will be 18" above the top of the watermain or that the top of the sanitary services will be 18" below the bottom of the watermain. The pilot hole shall be drilled on the bore path alignment with no deviations greater than 5% of depth over a length of 100'. In the event that the pilot does deviate from the bore path more than 5% of depth in 100', the Contractor shall notify the Engineer. The Engineer may require the Contractor to pull-back and re-drill from the location along the bore path before the deviation. The re-drilling will not be paid for, but will be at the Contractor's cost.

Upon successful completion of the pilot hole, the Contractor shall ream the bore hole to a minimum of 25% greater than the outside diameter of the pipe bell for straight pulls and 50% greater for curved or radius pulls, using the appropriate tools. The Contractor shall have the option to pre-ream or ream and pull back pipe in one operation if conditions allow. The Contractor shall not attempt to ream at one time more than the drilling equipment and mud system are designed to safely handle.

After completing the reaming bore hole to the required diameter, the Contractor shall pull the pipe through the bore hole. In front of the pipe shall be a swivel to isolate the water main from the boring machine. Once pull-back operations have commenced, operations must continue without interruption until the pipe is completely pulled into the bore hole. During pull-back operations, the Contractor shall not apply more than the maximum safe pipe pull force at any time. In the event the pipe becomes stuck, the Contractor shall notify the Engineer. The Engineer, Contractor, and Village shall discuss options and then the work shall proceed according to the agreed upon option.

In the event of a drilling fluid fracture, inadvertent returns or returns loss occurs during pilot hole drilling operations, the Contractor shall cease operations and shall discuss corrective options with the Engineer, Village and reference the Lake County Stormwater Management Commission Directional Drilling Contingency Plan.

Only the cartridge assembly method will be allowed on this project. This method is defined as the assembling of individual sections of flexible restrained joint ductile iron pipe in a secured entry and assembly pit. The pipe sections are assembled individually and then progressively pulled into the bore path a distance equivalent to a single pipe section. This assembly-pull process is repeated for each pipe length until the entire line is pulled through the bore path to the exit point.

The cartridge method involves excavating a safe entry and assembly pit and then connecting the joints during pulling installation one at a time in the entry pit. The invert of the entry/assembly pit shall be excavated to allow for the pipe to be assembled in an essentially straight alignment prior to entering the bore path. The entry/assembly pit shall be located adjacent to the existing valve and vault to which the proposed water main will be connected.

The Contractor shall be responsible for the proper assembly of all pipe and appurtenances in accordance with the manufacturer's written installation procedure and as supplemented by these guidelines. Prior to joint assembly, all joints and joint components shall be thoroughly cleaned and examined to ensure proper assembly and performance. In the event that the Contractor is not experienced with the assembly of the type of flexible restrained joint being used, it shall be the responsibility of the Contractor to contact a factory-trained representative for recommendations on the proper and efficient installation of the joint.

Using only tube-type polyethylene casing pipe, the polyethylene encasement shall be placed onto the barrel of the pipe and firmly secured as recommended in AWWA C105 Method A and for installations below the water table or underwater. The Contractor shall also ensure that all excess material is folded longitudinally and secured tightly to the pipe barrel by circumferential wraps of tape applied at intervals of approximately 2'. After engaging the spigot into the bell, the following sequence shall be used for specially securing and completing the polyethylene encasement at the pipe joints. This sequence shall be followed so that the final overlap is made opposite to the direction of the pull, preventing any catching of the edge and minimizing any collection of drilling fluids inside the wrap. For each layer of polyethylene encasement the Contractor shall always complete the joint by first overlapping the end of the tube from the spigot end over the bell and secure the end of the tube onto the pipe barrel, beyond the point where the barrel begins to flare to form the bell, with sufficient circumferential wraps of tape that will assist in resisting movement of the polyethylene encasement along the pipe barrel. The polyethylene encasement from the pipe closest to the horizontal directional drilling machine shall then be overlapped over the bell and secured to the barrel on the spigot end of the most recently installed pipe with circumferential wraps of tape. The Contractor shall apply one final, tight circumferential wrap a few inches from the bell face on the barrel of the pipe closest to the horizontal directional drilling machine.

The Contractor shall pull-back the water main for the length shown in the plans. Following successful pull-back of the water main, the Contractor shall test the main in accordance with the special provision DUCTILE IRON WATER MAIN. Connection of the drilled water main to the proposed open cut watermain or valves shall be included in the cost of DUCTILE IRON WATERMAIN. This work shall include excavating down to the proposed main to make the connection to the valve and the subsequent filling of the excavation.

Following the drilling operations, the Contractor shall de-mobilize the equipment and restore the work-site area to the original rough grading.

The Contractor shall maintain a daily record of the drilling operations and a guidance system log with a copy given to the Engineer at the completion of the boring.

Method of Measurement:

This work will be measured for payment in place in feet of watermain installed. The additional length required for the bore hole to reach the required depth will not be measured or paid for.

Basis of Payment.

This work will be paid for at the contract unit price per foot for HORIZONTALLY DIRECTIONAL DRILL, HDPE WATER MAIN, 12", which price shall include all labor, equipment, excavation, backfilling, and removal of spoils. The installation of fittings called out on the plans shall be considered incidental to the HORIZONTALLY DIRECTIONAL DRILL, HDPE WATER MAIN, 12" which shall include all materials, labor and equipment to connect the fittings to the water main pipe and shall include all work and materials associated with construction of the thrust block (if applicable). All fasteners and Retainer glands used at these bends, tees and at water valves are incidental to this item and will not be paid separately. The installation of additional fittings needed due to unforeseen conditions and not shown on the plans shall not be paid separately but included in the cost of the watermain. All fasteners and retainer glands used at these additional fittings are incidental to this item and will not be paid separately.

When the work pit or receiving pit is in an area that will be subject to traffic in subsequent construction stages or after construction is complete, the cost for granular trench backfill material as indicated on the plans or as directed by the Engineer will not be measured separately for payment but shall be INCLUDED in the cost of the HORIZONTALLY DIRECTIONAL DRILL, HDPE WATER MAIN, 12".

Payment for concrete thrust blocking or retainer glands will not be measured separately for payment but shall be INCLUDED in the cost of the HORIZONTALLY DIRECTIONAL DRILL, HDPE WATER MAIN, 12".

Restoration of the area shall be paid by the applicable restoration pay items.

WATER VALVES, [SIZE SPECIFIED]

Description:
This work shall consist of the furnishing and installation of valves at locations as shown on the plans and as directed by the Engineer. The work shall be constructed in accordance with the applicable sections of the “Standard Specifications for Water and Sewer Main Construction in Illinois”, latest edition and the Village of Deerfield’s Standards.

General:
This work shall be performed in accordance with the applicable portions of Section 561 of the Standard Specifications and Section 42 of the Standard Specifications for Water and Sewer Main Construction in Illinois.

Valves are to be Waterous RWGV1 Series 2500 right-hand closing resilient wedge gate valves

Method of Measurement:
This work will be measured at the contract unit of EACH water valve installed.

Basis of Payment:
This work shall be paid for at the contract unit price per each for WATER VALVES, of the size specified, which price shall include all labor, equipment, and materials necessary to perform said work.

WATER SERVICE LINE 1 ½"

Description:
This work shall be performed in accordance with the details in the plans and Section 562 of the Standard Specifications and with applicable portions of Section 41 of the Water and Sewer Specifications with the following alterations.

General:
This work shall consist of the disconnection and disposal of the existing water services between the water main and the meter pit or buffalo box, removal of the existing buffalo box or meter pit, installation of a new 1.5" water service and buffalo box or meter and connection of the new water services to the new water main, new buffalo box, and existing meter pit.

Existing service may be lead piping. Contractor is to provide the Village of Deerfield a list of all properties where lead services are encountered.

Work shall include the installation of a new 1.5" corporation stop and tap connection to the water main, tapping sleeve, any necessary 1.5" copper tubing, the curb box and curb stop, connections and all fittings, including reducer necessary to reconnect the existing water service (at the property line) to the water main, in accordance with the Village's water service detail, or as directed by the Engineer as specified herein. This work shall be performed in accordance with the applicable sections of the "Standard Specifications for Water and Sewer Construction in Illinois" and all local codes and ordinances. Where existing service is under trees, service will be re-located (with Village approval) if possible; otherwise service is to be augured under tree, which is included in the cost.

Services shall be installed at a minimum depth to top of pipe of 6 feet, and with a minimum vertical separation from sewers of 18 inches.

Copper pipe shall be copper water tube, Type K, soft temper, for underground service, conforming to ASTM B-88 and B-251. The pipe shall be marked with the manufactures' name or trademark and a mark indicative of the type of pipe. The outside diameter of the pipe shall conform to ASTM B-251, table 2.

Buffalo boxes in driveways and sidewalks shall be adjusted as needed when work is done. The cost of adjusting the buffalo boxes is incidental to the contract.

Existing meter pits shall remain in place, and a new buffalo box shall be provided near the meter pit and connected to the existing meter pit.

Method of Measurement:
Water service lines shall be measured from the water main to the buffalo box and will be measured for payment as FOOT for WATER SERVICE LINE 1 ½".

Basis of Payment:
This item shall be paid for at the contract unit price per FOOT for WATER SERVICE LINE 1 ½", which price shall be payment in full for performing all work as specified herein and as shown on the detail, including all labor, materials, including excavation, auguring if necessary, disposal of materials, tapping sleeve, corporation stop, copper pipe, curb stop and curb box, necessary connector and any required final curb box adjustments to finished elevations, backfilling including granular trench backfill material for a complete water service operation installation.

Compacted granular trench backfilling (FA-6, fine clean brown beach sand) of all trenches in parkways shall exceed up to 4 inches below the finished grade to allow for topsoil and sod.

FIRE HYDRANTS TO BE REMOVED

Description:
This item shall include full compensation for cost of removal and disposal of the complete fire hydrant and auxiliary valve assembly and connecting water main, excavation, plugging of abandoned main at the hydrant tee, hauling, disposal of excess material, backfill, temporary restoration of disturbed area but not including permanent restoration, cleanup and work incidental to fire hydrant removal but not specifically included in other unit prices.

Method of Measurement, & Basis of Payment.
This work shall be paid for and measured per EACH for FIRE HYDRANTS TO BE REMOVED.

FIRE HYDRANT WITH AUXILLIARY VAVLE AND VALVE BOX

Description:
This item shall consist of furnishing fire hydrants or fire hydrants with auxiliary valves and valve boxes and installing them at the locations shown on the plans and in accordance with the Standard Specifications for Water and Sewer Main Construction in Illinois.

General:
All new fire hydrants shall be equipped with a breakaway flange and shall have two (2) 2 ¼ inch hose nozzles and one (1) 4 ½ inch pumper nozzle, painted red with acrylic paint. All fire hydrants shall be Waterous. All fire hydrants shall be equipped with an auxiliary valve and cast iron valve box. The auxiliary valve shall be six inch (6”) ductile iron water pipe conforming to AWWA Standard C151, C111, and C104. The valve boxes shall be of the adjustable type, shall be set at finished grade, and shall have the valve box covers stamped “Water”.

A minimum of ¼ cubic yard of coarse aggregate, CA-7 washed bank run gravel (two foot (2’) minimum with geotechnical fabric), shall be placed at and around the base of the hydrant to insure proper drainage of the hydrant after use. The hydrant shall be set on concrete blocks to insure firm bearing for the hydrant base.

Method of Measurement:
This work shall be measured per EACH fire hydrant with auxiliary valve and box complete, including all appurtenances, at each location. Six (6) inch watermain connection pipe as specified shall be measured and paid for separately.

Basis of Payment:
This work shall be paid for at the contract unit price per each for FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX which price shall include furnishing and installing the fire hydrant with auxiliary valve and box, all labor, equipment, drainage stone, thrust block, fittings, connections to the existing watermain, all appurtenances and backfilling necessary to complete the work.

DOMESTIC METER VAULTS

Description:
This work shall consist of furnishing and installing water meter vaults at the locations indicated in the plans or as directed by the Engineer. In addition to this special provision, this work shall be in accordance with the Village of Deerfield Required Improvements, Engineering Design Standards, and Standard Details and the details included in the plans.

All valves shall be iron body, resilient seated, bronze mounted, nonrising stem gate valves conforming to AWWA C-500. Valves shall be Mueller or Ford.

At least 30 calendar days prior to installation of water mains covered in these specifications, the Contractor shall submit to the Engineer shop drawings of all items to be installed. The manufacturer's catalog description of all fittings and other related items shall also be submitted for review and approval.

Basis of Payment:
This work will be paid for at the contract unit price per each for DOMESTIC METER VAULTS.

SANITARY SEWER REMOVAL, [SIZE SPECIFIED] OR SANITARY SEWER, PVC, [SIZE SPECIFIED]

Description:
This work shall conform to Section 550 of the Standard Specifications and to the Standard Specifications for Water and Sewer Main Construction in Illinois. This work shall consist of removing a portion of existing sanitary sewer and replacing the removed portion with new PVC sewer pipe at the same location. This work shall be completed at the locations shown on the plans or as directed by the Engineer. Testing shall conform to the Standard Specifications for Water and Sewer Main Construction in Illinois at the direction of the Engineer.

General:
The Contractor shall first saw cut for the point repair. The Contractor shall excavate and expose the existing sanitary sewer at these locations to determine the exact limits of removal and replacement and sizes of lateral connections. The cost for the exploratory excavation will not be paid for separately but shall be considered included in the contract unit price for SANITARY SEWER REMOVAL of the diameter specified.

All tee replacements and up to four feet of the service lateral shall be incidental to the point repair. All pipes, tees and other fittings shall be SDR 26.

All trenches located within 2’ of proposed pavement, curb & gutter or sidewalk shall be backfilled in accordance with TRENCH BACKFILL of these specifications. Trench backfill shall not be measured and paid for separately but included in the cost of SANITARY SEWER, PVC, of the size specified.

Construction Requirements:
The excavation, bedding, pipe laying, backfilling, and clean up shall be completed in accordance with the applicable portions of Divisions II and III of the Standard Specifications for Water and Sewer Main Construction in Illinois. The bedding for the pipe shall be CA-11 or CA-13 coarse aggregate, and shall be placed from 6" below the pipe to 12" over the top of the pipe. The cost for the bedding shall be incidental to the contract unit price for SANITARY SEWER, PVC of the diameter specified.

The existing sanitary sewer shall be replaced with polyvinyl chloride (PVC) pipe conforming to ASTM D1784 (AWWA Standard SDR 26-3034) with Elastomeric seals (gasket) conforming to ASTM-F477. The Standard Dimension Ratio (SDR) for the PVC sewer pipe shall be 26-3034. The pipe shall have push-on joints.

Connections to existing sanitary sewer pipe shall be made with non-shear band couplings subject to the review of the Engineer. The couplings shall be equipped with stainless steel bands.

The Contractor shall maintain flow through the existing sanitary sewers within the project limits during the construction of the proposed sanitary sewer, as noted below. Flow must be maintained at all times, unless otherwise approved by the Village. Based on the flow within the sewers, this work may need to be performed during overnight hours or on weekend days. No additional compensation shall be allowed for work during these hours.

At the preconstruction meeting, the Contractor shall submit his plan for the construction of the proposed sewer, the connections to the existing sewers, and how the existing flow will be maintained. Prior to starting any work on the sanitary sewer, the Contractor shall obtain approval of the plan from the Village. Forty-eight hours advance notice is required prior to beginning any sanitary sewer work.

The Contractor shall provide all labor, equipment, supervision, and materials necessary to control flows via bypass pumping through a section or sections of pipe designated for replacement. The Contractor shall be responsible for controlling and maintaining all flows within the sewer system during this work. The Contractor may drain flows by pipes, chases, fluming, bypass pumping, or other appropriate methods approved by the Village. When bypass piping is required to cross pavement where traffic will be crossing

the pipe, ramping meeting the approval of the Engineer shall be installed by the Contractor. A W8-1(O) “Bump” sign shall be installed in advance of the ramping.

Precautions shall be taken to ensure that flow control and dewatering operations shall not cause flooding or damage to public or private properties. In the event flooding or damage occurs, the Contractor shall make provisions to correct such damage at no additional cost to the Contract.

The Contractor shall be responsible for any damages to public or private property, overflows from the sewer system and violations resulting in fines as a result of the dewatering/bypass operation.

The bypass shall be made by diversion of the flow from an existing upstream location, around the section(s) to be taken from service for inspection or rehabilitation, to an existing downstream location. The bypass system shall be of adequate capacity to handle all flows, including wet weather related flows. If bypass pumping is utilized by the Contractor to control flows, the Contractor shall be responsible for monitoring the bypass pumping operation at all times until the work is complete. The location of pump(s), force main, discharge point, pumping rates, etc., shall be approved by the Engineer.

The Contractor shall prepare a detailed Flow Control Plan that describes the measures to be used to control flows. The Contractor shall submit the Plan to the Engineer for review prior to beginning any flow control work. The Contractor’s Plan shall include, but not necessarily be limited to, the following:

- Stand-by/back-up pump set for the bypass application.
- Detail plan for 24-hour monitoring.
- Fueling of pump sets on demand.
- Location of flow diversion structures, collapsible sewer plugs, dams, pumps,
- and related materials and equipment.
- Sewer plug method and type of plugs or gates to be used.
- Key operational control factors, (i.e. maximum flow elevations upstream of
- dams).
- Pump sizes and flow rates.
- Destination of bypassed flows, including routing of force mains and
- provisions for vehicular and pedestrian traffic as necessary.
- Wet weather event procedures.
- Staging areas for the pumps.
- Number, size, material, locations, and method of installation of suction piping.
- Bypass pump sizes, capacity, number of each size to be on site, and power
- requirements.
- Calculations of static lift, friction loss, and flow velocity.
- Stand-by power.
- Downstream discharge plan.
- Method of noise control for each pump.
- Temporary pipe supports and anchoring required.
- Heavy equipment needed for installation of pumps and piping.

The number and size of pumps utilized in bypass pumping shall be such that if the largest pump is out of service, bypass flows will be maintained during the bypass operation. Bypass pumping equipment shall include pumps, conduits, engines, and related equipment necessary to divert the flow or sewage around the section in which work is to be performed. In addition, the Contactor shall maintain at the same location and in operable condition, duplicate equipment to be used in case there is equipment failure. In this event, the Contractor shall promptly repair or replace the failed equipment to the satisfaction of the Village.

The bypass system shall be of sufficient capacity to handle the peak flow of the pipe. The Contractor shall provide the necessary labor and supervision to set up and operate the pumping and bypassing system. The Contractor shall comply with any local sound ordinance. The equipment shall be manned continuously. During bypass pumping operations, the Contractor shall provide the necessary labor to

continually monitor the operation and ensure uninterrupted and sufficient pumping at all times. The bypass pumping system shall be fueled every 24 hours or when the fuel tank reaches one quarter full, whichever comes first.

The Contractor shall provide all materials and labor as necessary to maintain flows in the existing sewer interceptor and all collector and lateral lines at all times and under all weather conditions. Interruption of flows will not be permitted. Overflows from bypass operations will not be permitted to enter into any streams or bodies of water. The Contractor will be solely responsible for any legal actions taken by the federal or state regulatory agencies if such overflows occur during construction.

The Contractor shall relocate the temporary bypass piping as required to construct the proposed improvements.

Engine driven equipment for bypass pumping equipment shall have “critical grade mufflers.” The enclosure shall be portable in order to allow the enclosure to be moved when bypass pumping equipment is moved. These conditions are subject to any other additional stipulations that may be required by local sound ordinances.

Basis of Payment:

This sanitary sewer removal work will be measured and paid for at the contract unit price per foot for SANITARY SEWER REMOVAL, of the diameter specified. This sanitary sewer installation work will be measured and paid for at the contract unit price per foot for SANITARY SEWER, PVC , of the diameter specified.

The contract unit price shall include all labor, material, and equipment necessary to complete the work as specified. It is the Contractor’s responsibility to verify existing depths. No additional compensation will be made for variances in the depth of the sewer pipe.

Any additional or overage footage from the scheduled repair that is required to complete the work will not be paid for separately.

MANHOLES, TYPE A, 10' DIAMETER, TYPE 1 FRAME, CLOSED LID

Description:
This work shall be done in accordance with Sections 602 of the Standard Specifications for Road and Bridge Construction and Highway Standards 602406 and 604001.

This work shall consist of furnishing and installing manholes with a Type 1 Frame and Closed Lid. Temporary manhole plating required between construction stages will not be paid for separately and shall be included in The Manholes, Type A, 10' Diameter, Type 1 Frame, Closed Lid.

Basis of Payment:
This work shall be paid for at the contract unit price per EACH for MANHOLES, TYPE A, 10' DIAMETER, TYPE 1 FRAME, CLOSED LID, which price shall include all labor, materials, and equipment necessary to complete the work.

STEEL CASING PIPE, BORED AND JACKED, 24”

The following special provision outlines the requirements to complete a trenchless installation of a 24” Steel Casing pipe.

1.01 DESCRIPTION OF WORK

A. Excavate launch and receiving pits.

B. Install casing pipe.

C. Install carrier pipe.

D. Backfill excavations.

F. Possible methods of trenchless installation:

1. Auger Boring: A boring method that utilizes a rotating cutting head to form the bore and a series of rotating augers inside a casing pipe to remove the spoil.

2. Microtunneling: A boring method that consists of a remotely controlled pipe jacking operation utilizing a tunnel-boring machine. Personnel entry is not required.

3. Pipe Jacking: A jacking method in which pipe is pushed into the ground with hydraulic rams while soil is simultaneously excavated. Excavation is normally completed with a tunnel boring machine. This method requires personnel to enter the tunnel during the excavation process.

1.02 SUBMITTALS

A. Proposed installation methods and equipment.

B. Construction Sequence and Work Area Plan

C. Project Record Drawings

D. Contractor will provide Material Certifications to the Resident Engineer

1.03 DELIVERY, STORAGE, AND HANDLING

A. Deliver only materials that fully conform to these specifications, or for which submittals have been provided to Jurisdictional Engineer and approved for use.

B. Store delivered materials and excavated materials in locations that will not interfere with operations or public use of adjacent streets and minimize environmental damage.

C. Grade and shape stockpiles for drainage and protect adjacent areas from runoff. Provide erosion control around stockpiles.

D. Remove unsuitable and excess materials from the site.

1.04 SCHEDULING AND CONFLICTS

A. Construction Sequence:

1. Attend a preconstruction meeting.

2. Submit plan for construction sequence and schedule prior to commencing construction.

B. Conflict Avoidance:

1. Expose possible conflicts in advance of construction, such as utility lines and drainage structures. Verify elevations and locations of each and verify clearance for proposed construction. Notify Engineer of conflicts discovered or changes needed to accommodate unknown or changed conditions.

1.05 SPECIAL REQUIREMENTS

A. Stop Work: Stop work and notify Engineer immediately if contaminated soils, historical artifacts, or other environmental or historic items are encountered.

B. Use of Explosives: No explosives will be permitted.

PART 2 - PRODUCTS

2.01 CASING PIPE

A. Steel Casing Pipe: Must be leak-proof conforming to the requirements of ASTM A139 Grade B. Minimum yield strength of 35,000 psi, equipped with grout holes.

B. Joints:

Comply with American Welding Society Code of Arc and Gas Welding in Building Construction. Fully weld all joints with full penetrating weld in conformance with AWWA C206.

C. Casing Pipe Diameter: Minimum inside diameter (24”) as shown on the plans.

D. Steel Casing Pipe Minimum Wall Thickness:

NOMINAL DIAMETER	WALL THICKNESS, MINIMUM (INCHES)	
	UNDER HIGHWAY	UNDER RAILROAD
6 thru 14<	0.188	0.25000
16	0.188	0.28125
18	0.25	0.31250
20	0.25	0.34375
22	0.25	0.34375
24	0.281	0.37500
26	0.281	0.40625

28	0.312	0.43750
30	0.312	0.46875
32	0.312	0.50000
34	0.312	0.53125
36	0.344	0.53125
38	0.344	0.56250
40	0.344	0.59375
42	0.344	0.62500
44	0.344	0.65625
46	0.344	0.65625
48	0.344	0.68750
50	Sizes greater than 48" diameter will be specified in the documents.	0.71875
52		0.75000
54		0.78125
56		0.81250
58		0.81250
60		0.84375
62		0.87500
64		0.90625
66		0.93750
68		0.93750
70		0.96875
72		1.00000

2.03 CASING SPACERS

A. Use manufactured casing spacers to position carrier pipe in casing. Wood skids will not be allowed.

B. Recommended:

12” DIP x 24” Steel Casing CASCADE Casing Spacers, XX” Wide

Otherwise Contractor may use the following material requirements for casing spacers:

1. HDPE Band/Panel and Riser: ASTM D 638.

2. Stainless Steel or Carbon Steel Band/Panel and Riser: Type 304 stainless steel per ASTM A 240 or carbon steel per ASTM A 36.

a. Liner: Elastomeric PVC per ASTM D 149.

b. Spacer Skid/Runner: Abrasion resistant polymer or ultra high molecular weight polyethylene with a low coefficient of friction.

c. Fasteners: Type 304 stainless steel per ASTM A 193.

2.04 CASING END SEAL

A. Manufactured synthetic rubber casing end seal with minimum 1/8 inch thickness and stainless steel bands and fasteners.

PART 3 - EXECUTION

3.01 PREPARATION

A. Locate, mark, and protect existing utilities and facilities in the work area.

B. Identify owners of utilities on or near the site, and notify them of operations to occur.

C. Protect existing facilities and landscaping features or replace as shown on the plans.

D. Protect bench marks, control points, and land survey monumentation or replace at Contractor's expense.

E. Select a method of installation that is appropriate for the soil conditions anticipated; will allow the pipe to be installed to the desired line and grade within the specified tolerances; and will prevent heaving or settlement of the ground surface or damage to nearby facilities.

3.02 EXCAVATION

A. Notify Engineer prior to the start of tunneling activities.

B. Excavated material shall be hauled off site and disposed of.

C. Excavate the pits as necessary to safely and properly perform the work.

3.03 SHEETING, SHORING, AND BRACING

Provide and install sheeting, shoring, and bracing or trench boxes as required to safely perform work, protect nearby structures, and work under construction. No additional compensation will be provided for sheeting, shoring and bracing.

3.04 DEWATERING

Keep tunnel and pit subgrades continuously free from standing groundwater and surface waters during operations.

Conduct dewatering prior to the start of tunneling to a minimum of 1 foot below tunnel invert or use a tunneling method that prevents groundwater flow into the tunnel.

Design tunneling equipment together with the cuttings removal system to control groundwater from entering the tunnel.

Direct discharge from dewatering operations into approved receiving location in accordance with all applicable regulatory requirements.

3.05 TRENCHLESS INSTALLATION

A. General:

1. Install pipes by boring, jacking, or tunneling only where required by the plans.

2. Install pipe at line and grade that:

a. Will permit the carrier pipe to be installed at its true starting elevation and grade within a maximum alignment deviation of the pipe centerline as specified in the contract documents.

b. Deviation tolerances are as follows:

1) Gravity Pipe:
Horizontally: ± 1.0 foot from plan layout
Vertically: ± 2 inches from plan defined elevations – backpitching not allowed.

c. Greater deviation or interference with other identified facilities may be cause for rejection.

4. Provide any additional fittings, manholes, or appurtenances needed to accommodate any horizontal or vertical misalignment at no added cost to the contract.

5. Contractor shall be allowed to correct errors in grade of a casing pipe in order to achieve design grade of the carrier pipe by pouring an invert in the casing pipe, or by shimming the carrier pipe to a uniform grade, provided adequate clearance remains for proper installation of the carrier pipe.

6. Replace rejected tunnels at the Contractor's expense. This will include any additional fittings, manholes, or appurtenances needed to replace the rejected work.

B. Casing Pipe Installation:

1. Install pipe by auger boring, pipe jacking, or microtunneling. Only methods that displace excess soil, rather than removing it will be permitted.

2. Water jetting will not be allowed.

3. Use a jacking collar, timbers, and other means as necessary to protect the driven end of the pipe from damage.

4. Fully support borehole at all times to prevent collapse. Insert pipe as earth is removed, or support bore with drilling fluid.

5. Fully weld all joints.

C. Carrier Pipe Installation Through Casing:

1. Clean dirt and debris from the casing pipe after installation.

2. Install casing spacers to pipe sections as necessary to support pipe barrel according to pipe manufacturer's recommendation.

a. Space according to pipe manufacturer's recommendation. As a minimum, place a spacer within 1 foot of each side of the joint and a maximum spacing of 6 feet.

b. Do not allow pipe to be supported by joint bells.

c. Lubricate casing spacers with drilling mud or flax soap. Do not use petroleum-based lubricants or oils.

3. Ensure that thrust loads will not damage carrier pipe joints. Provide thrust collars between joint shoulders of concrete pipe.

4. Provide timbers for sufficient cushioning between the end of the pipe pushed and the jacking equipment to prevent damage to the pipe. Do not allow steel jack face to thrust against unprotected pipe end.

5. Position jacks so the resulting force is applied along the centerline of the pipe and the force is applied evenly to the entire end of the pipe.

6. Assemble pipe joints in the jacking pit before pushing the carrier pipe into the casing.

7. Close end of casing pipe around the carrier pipe with a casing end seal.

METHOD OF MEASUREMENT AND BASIS OF PAMENT

All measurements for payments will be made by the Resident Engineer.

A. Boring, Jacking, or Tunneling with Casing Pipe: Measurement of the length of casing pipe and carrier pipe properly installed will be along the centerline of the casing by FOOT installed. **Payment will be made for both the carrier pipe and casing pipe as a combined single unit** for the appropriate method of installation as well as all required casing spacers, annular space fillers, levels, backfill, casing end seals, and other appurtenances necessary to complete the work.

Excavation for launch or reception pits or other construction excavations shall not be measured and paid for separately but included in the cost of STEEL CASING PIPE, BORED AND JACKED, 24”. All excavation located within 2’ of proposed pavement, curb & gutter or sidewalk shall be backfilled in accordance with TRENCH BACKFILL of these specifications. Trench backfill shall not be measured and paid for separately but included in the cost of STEEL CASING PIPE, BORED AND JACKED, 24”. Surface restoration will be conducted as indicated on the plans (patching, sodding, etc.).

CASING PIPE,42”

The following special provision outlines the requirements to complete the installation of the Casing Pipe, 42” around the existing 36” RCP sanitary sewer in the proposed conflict manhole.

1.01 DESCRIPTION OF WORK

A. Install casing pipe.

1.02 SUBMITTALS

A. Proposed installation methods and equipment.

B. Project Record Drawings

D. Contractor will provide Material Certifications to the Resident Engineer

1.03 DELIVERY, STORAGE, AND HANDLING

A. Deliver only materials that fully conform to these specifications, or for which submittals have been provided to Jurisdictional Engineer and approved for use.

B. Store delivered materials and excavated materials in locations that will not interfere with operations or public use of adjacent streets and minimize environmental damage.

C. Grade and shape stockpiles for drainage and protect adjacent areas from runoff. Provide erosion control around stockpiles.

D. Remove unsuitable and excess materials from the site.

PART 2 - PRODUCTS

2.01 CASING PIPE

A. Steel Casing Pipe: Must be leak-proof conforming to the requirements of ASTM A139 Grade B. Minimum yield strength of 35,000 psi, equipped with grout holes.

B. Joints:

Comply with American Welding Society Code of Arc and Gas Welding in Building Construction. Fully weld all joints with full penetrating weld in conformance with AWWA C206.

C. Casing Pipe Diameter: Minimum inside diameter (42”) as shown on the plans.

D. Steel Casing Pipe Minimum Wall Thickness:

NOMINAL DIAMETER	WALL THICKNESS, MINIMUM (INCHES)	
	UNDER HIGHWAY	UNDER RAILROAD
6 thru 14<	0.188	0.25000
16	0.188	0.28125
18	0.25	0.31250
20	0.25	0.34375
22	0.25	0.34375
24	0.281	0.37500
26	0.281	0.40625
28	0.312	0.43750
30	0.312	0.46875
32	0.312	0.50000
34	0.312	0.53125
36	0.344	0.53125
38	0.344	0.56250
40	0.344	0.59375
42	0.344	0.62500
44	0.344	0.65625
46	0.344	0.65625
48	0.344	0.68750
50	Sizes greater than 48" diameter will be specified in the documents.	0.71875
52		0.75000
54		0.78125
56		0.81250
58		0.81250
60		0.84375
62		0.87500
64		0.90625
66		0.93750
68		0.93750
70		0.96875
72		1.00000

2.03 CASING SPACERS

A. Use manufactured casing spacers to position carrier pipe in casing. Wood skids will not be allowed.

Otherwise Contractor may use the following material requirements for casing spacers:

1. HDPE Band/Panel and Riser: ASTM D 638.

2. Stainless Steel or Carbon Steel Band/Panel and Riser: Type 304 stainless steel per ASTM A 240 or carbon steel per ASTM A 36.

a. Liner: Elastomeric PVC per ASTM D 149.

b. Spacer Skid/Runner: Abrasion resistant polymer or ultra high molecular weight polyethylene with a low coefficient of friction.

c. Fasteners: Type 304 stainless steel per ASTM A 193.

2.04 CASING END SEAL

A. Manufactured synthetic rubber casing end seal with minimum 1/8 inch thickness and stainless steel bands and fasteners.

METHOD OF MEASUREMENT AND BASIS OF PAMENT

All measurements for payments will be made by the Resident Engineer.

Measurement of the length of casing pipe properly installed will be along the centerline of the casing by FOOT installed. Payment will be made for the casing pipe as well as all required casing spacers, annular space fillers, levels, backfill, casing end seals, and other appurtenances necessary to complete the work.

Excavation for launch or reception pits or other construction excavations shall not be measured and paid for separately but included in the cost of CASING PIPE, 42”. All excavation located within 2’ of proposed pavement, curb & gutter or sidewalk shall be backfilled in accordance with TRENCH BACKFILL of these specifications. Trench backfill shall not be measured and paid for separately but paid for as TRENCH BACKFILL associated with the installation of the WATERMAIN, SPECIFICED SIZE. Surface restoration will be conducted as indicated on the plans (patching, sodding, etc.).

TEMPORARY CLUSTER MAILBOX

Description:
This work shall consist of placing a temporary cluster mailbox for use by all residents along Hazel Avenue. This temporary mailbox cluster must be acceptable to the Village of Deerfield Postmaster and must have one individual mailbox for each home along Hazel Avenue. Temporary keys shall be provided to each resident in the event the mailbox utilizes a lock mechanism.

Placement will be at the discretion of the Engineer and the Village, however its location will allow for the postal worker to avoid the construction zone as much as possible based on the staging plans. Multiple locations of temporary mailbox clusters will be required for this project due to the project staging. The cluster mailbox shall be relocated as many times as the Engineer and Village deem fit. NO additional payment will be made for the relocations.

Following completion of mainline pavement reconstruction, the temporary cluster mailbox will be removed from the site.

Method of Measurement,& Basis of Payment:
TEMPORARY CLUSTER MAILBOX shall be measured and paid for as a LUMP SUM item regardless of the number of mailboxes required. Multiple mailboxes will be required, the cost of this pay item (and associated keys) will not exceed the LUMP SUM unit price which shall also include removal of the mailboxes following completion of construction operations which effect the local residential houses or when the postmaster agrees to resume individual homeowner delivery.

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 (TRAINEES TRAINING PROGRAM GRADUATE). The estimated total number of hours, unit price, and total price must be included in the schedule of prices for the Contract submitted by Contractor prior to beginning work. The initial number of TPG trainees for which the incentive is available for this contract is __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.

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

SPECIAL PROVISION FOR INSURANCE

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

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

The Contractor shall name the following entities as additional insured under the Contractor's general liability insurance policy in accordance with Article 107.27:

Village of Deerfield

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

State of Illinois

DEPARTMENT OF TRANSPORTATION
Bureau of Local Roads &
Streets SPECIAL
PROVISION
FOR
LOCAL QUALITY ASSURANCE/ QUALITY MANAGEMENT
QC/QA
Effective: January 1, 2022

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

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

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

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

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

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

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

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

Density verification test locations will be determined according to the document "Hot- Mix Asphalt QC/QA Procedure for Determining Random Density Locations". The density testing interval for paving wider than or equal to 3 ft (1 m) will be 0.5 miles

(800
m) for lift thicknesses of 3 in. (75 mm) or less and 0.2 miles (320 m) for lift thicknesses greater than 3 in. (75 mm). The density testing interval for paving less than 3 ft (1 m) wide will be 1 mile (1,600 m). If a day's paving will be less than the prescribed density testing interval, the length of the day's paving will be the interval for that day. The density testing interval for mixtures used for patching will be 50 patches with a minimum of one test per mixture per project.

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

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

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

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

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

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

Illinois Department of Transportation

Storm Water Pollution Prevention Plan

E-mail | Reset Form

Route	Marked Route	Section Number
FAU Route 1263	Hazel Avenue	20-00108-00-PV
Project Number	**County**	**Contract Number**
E4Y2(438)	Lake	61K74

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 6/27/24

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:

The project is located along Hazel Avenue from Wilmot Road to Waukegan Road (IL 43) in the Village of Deerfield, Deerfield Township, in Lake County. Relative to major arterials, the project is located approximately 1/3 miles east of Interstate 94 and is approximately 1.7 miles west of US Route 41.

Geographically, the project site is located in SW ¼, Section 29, Township 43 N, Range 12E of the Third Principal Meridian at Latitude 42.171048 and Longitudinal -87.863627.

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:

A full reconstruction will be performed to provide a consistent pavement width, improved sidewalk, improved storm sewer and install a new 12” watermain throughout the corridor. A width of 24' will be maintained from Wilmot Road to Wayne Avenue and the pavement will be widened to a width of 22', to avoid tree impacts in the parkway, from Wayne Avenue to Waukegan Road. To improve bicycle and pedestrian facilities all sidewalks will be widened to 5' and the carriage walk from Illinois Trial to Wayne Avenue will be widened to 6’. The roadway profile will remain similar to its existing condition with minor adjustments for drainage. The storm sewer for the corridor will be upsized and replaced. The existing west bank outlet will remain, and the proposed east back outlet will be upsized to a 42” which discharges through the bridge wing wall. The proposed 12” watermain will be bored under the West Fork North Branch of the Chicago River. The watermain under the river will be HDPE material from structure to structure. Due to the widening of the pavement to 22’ storm sewers will be extended, utility poles relocated, and ComEd intersection lighting relocated. The railroad crossing and bridge will be excluded from the reconstruction and all intersection traffic controls will remain the same.

The proposed improvements will utilized staged construction consisting of three stages. The drainage improvements will consist of the construction of proposed trunk line and storm sewer laterals within the intersection widening locations. Temporary ESC measures will be installed and maintained during each stage of construction and will include temporary erosion control seeding, erosion control blanket, perimeter erosion barrier, temporary ditch checks, and inlet filters. Permanent stabilization measures will include seeding, sodding,

and riprap.

C. Provide the estimated duration of this project:

9 months

D. The total area of the construction site is estimated to be 8 acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is 7.25 acres.

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

Pre-Construction Weighted Runoff Coefficient = 0.70
Post-Construction Weighted Runoff Coefficient = 0.72

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

1. Frankfort Silt Loam (320A), 0 to 2 percent slopes, (Ksat): Moderately low (0.02 to 0.06 in/hr)

2. Frankfort Silt Loam (320B), 2 to 4 percent slopes, (Ksat): Moderately low (0.02 to 0.06 in/hr)

3. Montgomery Silty Clay Loam (465A), 0 to 2 percent slopes, (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

4. Wauconda and Frankfort Silt Loams (981A), 0 to 2 percent slopes, (Ksat): Moderately high to high (0.60 to 2.00 in/hr)

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

The wetlands were delineated within the project limits during the Phase I Engineering. There is one wetland and one open waters located within the project limits. One wetland located near the west project limit where Hazel Avenue crosses over the North Branch West Fork of the Chicago River. The wetland is located on the embankments of the bridge abutments and wing-walls. The open water is located in the same location and is the North Branch West Fork of the Chicago River.

Wetland W-1: 0.034 acres / 0.000 acres impacted
Open Water: 0.115 acres / 0.000 acres impacted

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

Potentially erosive areas occur with the removal of the existing roadway in the location of the reconstruction as well as the locations of earth excavation for the roadway widening. In addition, potentially erosive areas occur throughout for the removal of the existing storm sewer, construction of the proposed storm sewer, watermain and topsoil stripping for grading.

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

Stage 1
Install signage for stage 1 detour of eastbound Hazel Avenue as shown in the detour plans. Close westbound Hazel Avenue at Wilmot Road and Park Avenue. Close Chestnut Street at Hazel Avenue, allowing only southbound traffic from Hazel Avenue. Stage traffic between Park Avenue and Waukegan Road utilizing daily lane closures to install the watermain .Provide one 11-10' lane in the eastbound direction. Install all other traffic control measures for stage 1. install necessary erosion and sediment control measures per the erosion control plans. Removal all designated trees per the removal plans. Install the stage 1 watermain and bore watermain

under Metra railroad tracks. Install stage 1 storm sewer. Remove existing pavement and subgrade. Install proposed subgrade and pavement. Install topsoil and sod.

Stage 2
Install signage for stage 2 detour of eastbound Hazel Avenue as shown in the detour plans. Cose eastbound Hazel Avenue at Wilmot Road and Park Avenue. Close Chestnut Street at Hazel Avenue, allowing only northbound traffic from Hazel Avenue. Provide one 11-10' lane in the eastbound direction. Install all other traffic control measures for stage 2. Install necessary erosion and sediment control measures per the erosion control plans. Removal all designated trees per the removal plans. Install the stage 3 watermain and storm sewer. remove existing pavement and subgrade. Install proposed subgrade and pavement, topsoil and sod.

Stage 3
Install signage for stage 3 detour and full closure of Hazel Avenue between Chestnut Street and Waukegan Road as shown in the detour plans. Close Hazel Avenue between Chestnut Street and Waukegan Road. Contractor to maintain access to alleyway (60+95.32 LT, driveway (61+87.35 LT) and north and south Journal Place at all times. North Journal Place must be able to exit onto Hazel Avenue due to its southbound one-way condition. Install all other traffic control measures for stage 3. Install necessary erosion and sediment control measures per the erosion control plans. Removal all designated trees per the removal plans. Install the stage 3 watermain and storm sewer. Remove existing pavement and subgrade. Install proposed subgrade and pavement, topsoil and sod.

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

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

The Village of Deerfield owns the drainage system which ultimately drains to the North Branch West Fork of the Chicago River.

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

Village of Deerfield, Deerfield Township, in Lake County

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:

The North Branch West Fork of the Chicago River is not identified by the IDNR as "Biologically Significant Stream". The River (segment IL-HCCB-05) is listed on the 2020 303(d) list as impaired. The 20202 303(d) list identifies the aquatic life use as being impaired by Aldrin, DDT, Endrin, Hexachlorobenzene, Phosphorus (total) and TTS.

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

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

The area to remain protected are the side slopes, highly erodible soils, drainage ditches, and outlets

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.

Wetland, Riparian, 303(d) Listed Receiving Waters

☒ 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:

The North Branch West Fork of the Chicago River (IL-HCCB-05): Aldrin, DDT, Endrin, Hexachlorobenzene, Phosphorus (total) and TTS.

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:

Perimeter erosion barrier, erosion control blanket and inlet filters.The inlet filters will be placed in all drainage structures in the project limits. These varieties of Best Management Practices in combination will prevent pollutant discharge in the 25yr - 24hr storm event.

Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body:

The discharge from the site, between Wilmot Road to Alden Court, enters the storm sewer system and is discharged to the 303(d) water bodies within the project limits. The discharge from the site, east of Alden Court to Waukegan Road, enters the storm sewer system and ultimately flows to the 303(d) water body outside of the project limits.

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

There are no dewatering discharge locations to the water body.

☐ Applicable Federal, Tribal, State, or Local Programs

N/A

☐ Floodplain

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

☒ Wetland

Wetlands are located within the project site but will not be impacted by the project.

P. The following pollutants of concern will be associated with this construction project:

☒ Antifreeze / Coolants

☒ Solid Waste Debris

- ☒ Concrete
- ☒ Concrete Curing Compounds
- ☒ Concrete Truck Waste
- ☒ Fertilizers / Pesticides
- ☒ Paints
- ☒ Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids)
- ☒ Soil Sediment
- ☒ Solvents
- ☒ Waste water from cleaning construction equipments
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____

II. Controls:

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

A. **Erosion and Sediment Controls:** At a minimum, controls must be coordinated, installed and maintained to:

1. Minimize the amount of soil exposed during construction activity;
2. Minimize the disturbance of steep slopes;
3. Maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible;
4. Minimize soil compaction and, unless infeasible, preserve topsoil.

B. **Stabilization Practices:** Provided below is a description of interim and permanent stabilization practices, including site- specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II.B.1 and II.B.2, stabilization measures shall be initiated **immediately** where construction activities have temporarily or permanently ceased, but in no case more than **one (1) day** after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of fourteen (14) or more calendar days.

1. Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.

2. On areas where construction activity has temporarily ceased and will resume after fourteen (14) days, a temporary stabilization method can be used.

The following stabilization practices will be used for this project:

- ☒ Erosion Control Blanket / Mulching
- ☐ Geotextiles
- ☐ Permanent Seeding
- ☐ Preservation of Mature Seeding
- ☒ Protection of Trees
- ☒ Sodding
- ☒ Temporary Erosion Control Seeding
- ☐ Temporary Turf (Seeding, Class 7)
- ☐ Temporary Mulching
- ☐ Vegetated Buffer Strips
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____

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

1. Erosion Control Blanket / Mulching: This item will be used within 24 hours after permanent seeding operations have been completed, in swales and sloped areas that require protection from erosion. Erosion control blankets shall be installed over fill slopes, high velocity areas and slopes steeper than 3:1 that have been brought to final grade. Erosion Control Blanket will be installed in accordance to IDOT Specifications 251.04.

2. Protection of Trees: All trees designated to be saved or outside the limits of construction, shall be protected prior to beginning any clearing or removal work and shall remain protected during subsequent construction work. Protection of Trees shall be as shown on the plans or as directed by the Engineer and in accordance with Article

201.05 of the Illinois Department of Transportation's Standard Specifications for Road and Bridge, adopted January 1, 2022.

3. Sodding: Sodding Salt Tolerant will be provided within urban sections. All urban section areas disturbed by construction will be stabilized with sod immediately following final grading. It will be installed in accordance to IDOT Specification Article 252 throughout the project limits shown on the landscaping plans.

4. Temporary Erosion Control Seeding: This item will be applied within one (1) day of disturbance to all bare areas that will remain undisturbed for at least 14 days, in order to minimize the amount of exposed surface area. When temporary seeding is applied to a bare area, the seeding shall be applied every 7 days regardless of weather conditions or work progress. Temporary Erosion Control Seeding shall consist of areas as shown on the plans, areas disturbed during the removal of soil and erosion measures, or as directed by the Engineer and in accordance with the Illinois Department of Transportation's Standard Specifications for Road and Bridge, adopted January 1, 2022.

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

All areas disturbed by construction will be stabilized with permanent seeding/sodding immediately following the finished grading. Erosion Control Blankets will be installed over graded areas, which have been brought to final grade and have been seeded to protect the slopes from erosion and allow seed to germinate properly.

Stabilization controls runoff volume and velocity, peak runoff rates and volumes of discharge to minimize exposed soil, disturbed slopes, sediment discharges from construction, and provides for natural buffers and minimization of soil compaction. Existing vegetated areas where disturbance can be avoided will not require stabilization.

Where possible, stabilization of the initial stage should be completed before work is moved to subsequent stages.

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

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

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

1. Perimeter Erosion Barrier: This item will be used to demarcate the perimeter of the project location and for the prevention of silt / sediment from leaving the site. Perimeter erosion barrier will be modified as necessary to accommodate the construction and repaired / replaced as necessary. This item will remain in place until all remaining items of the project have been completed. Silt fence should only be used as perimeter erosion barrier in areas where the work area is higher than the perimeter. The use of silt fence at the top of the slope / elevations higher than the work area should be avoided. If necessary temporary fence should be utilized in these locations in lieu of silt fence.

2. Storm Drain Inlet Protection: This item will be utilized at all manholes, catch basins, and inlets with open grates. Inlet filters will be installed directly on the drainage structure or under the grate of the drainage structure resting on the lip of the frame. Inlet filters will be checked on a regular basis and any sediment / debris will be removed to maintain inlet protection. Storm Drain Inlet Protection will be performed in accordance with Article 280.04 of the IDOT Standard Specifications.

3. Inlet Filters: This item will be provided for the existing and proposed storm sewers. Sediment filters will be placed in all catch basins during construction and will be cleaned on a regular basis.

4. Stabilized Construction entrance/exit: This item will provide erosion protection during construction of the bridges and roadways. It will be provided on both side the north side and south side of the project limits. All work associated with installation and maintenance of Stabilized Construction Entrances and concrete washouts are incidental to the contract.

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

All areas disturbed by construction will be stabilized with sodding immediately following finished grading. Erosion Barrier will be placed at limits of construction and a double row adjacent to wetlands. Erosion control blankets will be installed over fill slopes which have been brought to final grade and have been seeded to protect the slopes from erosion and allow seed to germinate properly.

D. Treatment Chemicals

Will polymer flocculants or treatment chemicals be utilized on this project: ☐ Yes ☒ No

If *yes* above, identify where and how polymer flocculants or treatment chemicals will be utilized on this project.

E. **Permanent (i.e., Post-Construction) Storm Water Management Controls:** Provided below is a description of measures that will be installed during the construction process to control volume and pollutants in storm water discharges that will occur after construction operations have been completed.The installation of these devices may be subject to Section 404 of the Clean Water Act.

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

   The practices selected for implementation were determined based on the technical guidance in Chapter 41 (Construction Site Storm Water Pollution Control) of the IDOT 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:

Management practices, controls and other provisions provided in the plans are in accordance with IDOT Standard Specifications for Road and Bridge Construction and the Illinois Urban Manual, Lake County Stormwater Management Commission and other applicable permits.

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.

When requested by the Contractor, the Resident Engineer will provide maintenance guides to the Contractor for the practices associated with this project. 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 Best Management Practice (BMP) item which is installed and maintained per manufacturer's specifications.

The following ESC measures are included in the project: temporary erosion control seeding, sodding, temporary erosion control blanket, perimeter erosion barrier, and inlet filters.

All ESC measures will be maintained in accordance with the IDOT Erosion and Sediment Control Field Guide for Construction Inspection, and IDOT's Best Management Practices - Maintenance Guide, which are found at: http://www.idot.illinois.gov/transportation-system/environment/erosion-and-sediment-control

All maintenance of ESC systems is the responsibility of the Contractor. All ESC measures should be checked weekly and after each rainfall, 0.5 inches or greater in a 24 hour period, or equivalent snowfall. Additionally during winter months, all measures should be checked after each significant snowfall.

Temporary Erosion control seeding should be reapplied if stabilization n has not been achieved, and rills should be restored immediately if found greater than four (4) inches deep on slopes steeper than 1V:4H. Sodding should be maintained by limiting foot traffic to low use for the first three weeks and replaced when greater than 25% of any individual piece is no longer viable. Erosion Control Blanket should be replaced and re-stapled if they are displaced, or if erosion under the blanket has been observed. Perimeter Erosion Barrier should be inspected for tears, gaps, missing / broken stakes, or undermining and repaired as appropriate. The Barrier should be cleaned if sediment reaches one-third the height of the barrier. For storm drain inlet protection, inlet filter baskets should be cleaned of sediment when the basket is 25% full or 50% of the fabric pores are covered with silt or if standing water is present longer than one hour after a rain event. The filter should be replaced if any tears are present during removal for cleaning. Riprap should be inspected for accumulated sediment buildup and discharge into outlets, and the sediment buildup should be removed. Sediment on the roadway should be swept immediately.

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.

Illinois Department of Transportation

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
FAU Route 1263	Hazel Avenue	20-00108-00-PV

Project Number	County	Contract Number
E4Y2(438)	Lake	61K74

This certification statement is a part of SWPPP for the project described above, in accordance with the General NPDES Permit No. ILR10 issued by the Illinois Environmental Protection Agency.

I certify under penalty of law that I understand the terms of the Permit No. ILR 10 that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

Additionally, I have read and understand all of the information and requirements stated in SWPPP for the above mentioned project; I have received copies of all appropriate maintenance procedures; and, I have provided all documentation required to be in compliance with the Permit ILR10 and SWPPP and will provide timely updates to these documents as necessary.

☐ 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. of SWPPP

Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

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

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Permit Section at the above address.

For Office Use Only

Permit No. ILR10 _____

OWNER INFORMATION

Company/Owner Name: Village of Deerfield

Mailing Address: 465 Elm Street Phone: 847-317-7245

City: Deerfield State: IL Zip: 60015 Fax: _____

Contact Person: Robert Phillips, P.E. E-mail: rphillips@deerfield.il.us

Owner Type (select one) City

MS4 Community: ◯ Yes ◉ No

CONTRACTOR INFORMATION

Contractor Name: _____

Mailing Address: _____ Phone: _____

City: _____ State: ____ Zip: _____ Fax: _____

CONSTRUCTION SITE INFORMATION

Select One: ◉ New ◯ Change of information for: ILR10 _____

Project Name: Hazel Avenue Roadway Reconstruction County: Lake

Street Address: _____ City: Deerfield IL Zip: 60015

Latitude: _____ _____ _____ Longitude: _____ _____ _____ 28,29 43N **9E**

(Deg) (Min) (Sec) (Deg) (Min) (Sec) Section Township Range

Approximate Construction Start Date Feb 3, 2025 Approximate Construction End Date Nov 3, 2025

Total size of construction site in acres: 8

If less than 1 acre, is the site part of a larger common plan of development?

◯ Yes ◉ No

Fee Schedule for Construction Sites:
Less than 5 acres - $250
5 or more acres - $750

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

Has the SWPPP been submitted to the Agency? ◉ Yes ◯ No

(Submit SWPPP electronically to: epa.constilr10swppp@illinois.gov)

Location of SWPPP for viewing: Address: On-Site City: Deerfield

SWPPP contact information:

Inspector qualifications:

Contact Name: Robert Phillips P.E.

Phone: 847-317-7245 Fax: _____ E-mail: rphillips@deerfield.il.us

Project inspector, if different from above

Inspector qualifications:

Inspector's Name: _____ _____

Phone: _____ Fax: _____ E-mail: _____

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42) and may also prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

TYPE OF CONSTRUCTION (select one)

Construction Type Transportation

SIC Code: _____

Type a detailed description of the project:

The work shall consist of pavement, curb and gutter, sidewalk and subgrade removal and replacement from Wilmot Road to Waukegan Road. The improvements also include new storm sewer and watermain, along with ADA compliant crosswalks and sidewalk ramps.

Inlet filters and perimeter erosion barrier will be installed throughout the limits of the project prior to construction and will be removed once all construction activities are completed. Seeding and temporary blanket will be used depending on site conditions during placement.

HISTORIC PRESERVATION AND ENDANGERED SPECIES COMPLIANCE

Has the project been submitted to the following state agencies to satisfy applicable requirements for compliance with Illinois law on:

Historic Preservation Agency ◉ Yes ○ No

Endangered Species ◉ Yes ○ No

RECEIVING WATER INFORMATION

Does your storm water discharge directly to: ☑ Waters of the State or ☑ Storm Sewer

Owner of storm sewer system: Village of Deerfield

Name of closest receiving water body to which you discharge: West Fork North Branch Chicago River

Mail completed form to: Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn: Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276
or call (217) 782-0610
FAX: (217) 782-9891

Or submit electronically to: epa.constilr10swppp@illinois.gov

I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this 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. In addition, I certify that the provisions of the permit, including the development and implementation of a storm water pollution prevention plan and a monitoring program plan, will be complied with.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

_____ Owner Signature:

_____ Date:

Robert Phillips
Printed Name:

Public Works Director / Village Engineer
Title:

INSTRUCTIONS FOR COMPLETION OF CONSTRUCTION ACTIVITY NOTICE OF INTENT (NOI) FORM

Submit original, electronic or facsimile copies. Facsimile and/or electronic copies should be followed-up with submission of an original signature copy as soon as possible. Please write "copy" under the "For Office Use Only" box in the upper right hand corner of the first page.

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Permit Section at:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276
or call (217) 782-0610

FAX: (217) 782-9891

Or submit electronically to: epa.constilr10swppp@illinois.gov

Reports must be typed or printed legibly and signed.

Any facility that is not presently covered by the General NPDES Permit for Storm Water Discharges From Construction Site Activities is considered a new facility.

If this is a change in your facility information, renewal, etc., please fill in your permit number on the appropriate line, changes of information or permit renewal notifications do not require a fee.

NOTE: FACILITY LOCATION IS NOT NECESSARILY THE FACILITY MAILING ADDRESS, BUT SHOULD DESCRIBE WHERE THE FACILITY IS LOCATED.

Use the formats given in the following examples for correct form completion.

	Example	Format
Section	12	1 or 2 numerical digits
Township	12N	1 or 2 numerical digits followed by "N" or "S"
Range	12W	1 or 2 numerical digits followed by "E" or "W"

For the Name of Closest Receiving Waters, do not use terms such as ditch or channel. For unnamed tributaries, use terms which include at least a named main tributary such as “Unnamed Tributary to Sugar Creek to Sangamon River.”

Submission of initial fee and an electronic submission of Storm Water Pollution Prevention Plan (SWPPP) for Initial Permit prior to the Notice of Intent being considered complete for coverage by the ILR10 General Permits. Please make checks payable to: Illinois EPA at the above address.

Construction sites with less than 5 acres of land disturbance - fee is $250.

Construction sites with 5 or more acres of land disturbance - fee is $750.

SWPPP should be submitted electronically to: epa.constilr10swppp@illinois.gov. When submitting electronically, use Project Name and City as indicated on NOI form.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 North Grand Avenue, East; Post Office Box 19276; Springfield, IL 62794-9276
Division of Public Water Supplies
Telephone 217/782-1724

PUBLIC WATER SUPPLY CONSTRUCTION PERMIT

SUBJECT: DEERFIELD (IL0974340)

Permit Issued to:
Village of Deerfield
465 Elm Street
Deerfield, IL 60015

PERMIT NUMBER: 1078-FY2024

DATE ISSUED: April 30, 2024
PERMIT TYPE: Water Main Extension

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

FIRM: BLA, Inc.
NUMBER OF PLAN SHEETS: 18
TITLE OF PLANS: "Hazel Avenue – Wilmot Road to Waukegan Road – Roadway Reconstruction"
APPLICATION RECEIVED DATE: April 4, 2024

PROPOSED IMPROVEMENTS:

The installation of approximately 5,176 feet of 12-inch, 36 feet of 10-inch and 1,319 feet of 6-inch water main.

ADDITIONAL CONDITIONS:

1. When the owner or operator of a community water supply replaces a water main, the community water supply shall identify all lead service lines connected to the water main and shall comply with the requirements of Section 17.12 of the Act, 415 ILCS 5/17.12 for lead service line replacement. Galvanized service line must also be replaced if the galvanized service line is or was connected downstream to the lead piping. A statement must be submitted with the Application for Operating Permit indicating either that no full or partial lead service lines were identified or that Section 17.12 of the Act was complied with for this project.

2. When replacing water mains with lead service lines or partial lead service lines connected to them, the owner or operator of the community water supply shall provide the owner or operator of each potentially affected building that is serviced by the affected lead service lines or partial lead service lines, as well as the occupants of those buildings, with an individual written notice. The lead informational notice shall be provided at least 14 days prior to permitted water main work. The notification provided by the community water supply must satisfy the requirements of Section 17.12(jj) of the Act, 415 ILCS 5/17.12(jj). A copy of the notice used must be submitted to the Agency with the Application for Operating Permit

3. All water mains shall be satisfactorily disinfected prior to use pursuant to Ill. Adm. Code, Title 35, Subtitle F, Section 602.310. Two consecutive sets of samples collected at least 24 hours apart must show the absence of coliform bacteria. The samples must be collected from every 1,200 feet of new water main along each branch and from the end of the line. An operating permit must be obtained before the project is placed in service. The application for operating permit and supporting documents can either be mailed to this office or emailed to EPA.PWSPermits@illinois.gov. Use of the email address is preferred.

4. The permit approval is for the Application, Schedule B, and 18 plan sheets received on April 4, 2024.

DCC:GAZ

cc: BLA, Inc.
Elgin Regional Office
Lake County Health Department
IDPH/DEH – Plumbing and Water Quality Program

David C. Cook, P.E.
Manager Permit Section
Division of Public Water Supplies

STORMWATER MANAGEMENT COMMISSION

July 12, 2022

Tyler Dickinson
Village of Deerfield
465 Elm Street
Deerfield, IL 60015

Subject: SMC Watershed Development Permit #WDP-22-514
Hazel Avenue Reconstruction

PERMIT ISSUANCE

Dear Mr. Dickinson:

Accompanying this letter is the required Watershed Development Permit for the proposed road reconstruction project in Deerfield. This approval is subject to the conditions on the back of the permit application including the following:

- Provide prior notification to Tim Cook (of the SMC) of the pre-construction meeting at least 5 calendar days in advance to enable SMC attendance.

- Please note that the erosion control measures indicated on the plans are the minimum requirements. Additional measures may be required, as directed by the engineer, enforcement officer, or other governing agency.

- Please coordinate all SE/SC modifications to the plan with the SMC Inspector.

- Impacts to Waters of the United States are not permitted unless a permit from the U.S. Army Corps of Engineers (USACE) is received prior to any such impact. Please provide SMC with a copy of the USACE permit.

- Please provide SMC with a copy of the NOI application to the IEPA.

- Please provide SMC with a permit from the appropriate regulatory agency allowing work in the railroad right-of-way.

- Discussion at the pre-construction meeting will include:
    - Designated Erosion Control Inspector (DECI) contact information
    - Maintenance of sediment and erosion control measures

- The DECI shall provide weekly reports to the SMC Inspector. At a minimum, the reports shall include photographs and evaluation of critical areas, as directed by the SMC Inspector.

- Please be advised that DECI inspections are required until final as-built approval.

- Upon completion, please provide SMC an as-built submittal according to the attached checklist.

This approval is based on the plans entitled:

PLANS FOR PROPOSED FEDERAL AID HIGHWAY, FAU ROUTE 1263 (HAZEL AVENUE), WILMOT ROAD TO WAUKEGAN ROAD, ROADWAY RECONSTRUCTION, SECTION 20-00108-00-PV, VILLAGE OF DEERFIELD, LAKE COUNTY, prepared by Bollinger, Lach and Associates, Inc., received by SMC May 5, 2022 141-sheets (Plans Dated 05/04/2022).

We would like to be of assistance. Do not hesitate to contact Tim Cook at (847)377-7703 if you have questions or would like to set up the pre-construction meeting.

If you have any additional concerns that have not been addressed by the regulatory staff, you may contact Chief Engineer Brian Frank bfrank@lakecountyil.gov at (847)377-7704.

Sincerely,

LAKE COUNTY STORMWATER MANAGEMENT COMMISSION

Philip Ruiz, P.E.
Principal Permit Engineer

Brian Frank, P.E., CFM
Chief Engineer

Attachment As-built Review Checklist

C: Tim Cook – Lake County SMC
Juli Crane – Lake County SMC
Ed Lebbos – Bollinger, Lach and Associates, Inc.
Matt Cesario – Bollinger, Lach and Associates, Inc.

STORMWATER MANAGEMENT COMMISSION

As-built Review Checklist

(Revised December 2021)

Please provide the following information as indicated when submitting as-built plans for approval. Please ensure that the as-built information is annotated onto the permitted construction plans and is not a stand-alone current conditions exhibit. Plans should be provided in a digital format (PDF).

☐ Spot elevations and/or contours for cut and fill areas located in the Regulatory Floodplain.

☐ Floodplain cut and fill calculations* based on the as-built survey. (Benchmark – NAVD88 datum)

☐ Spot elevations and contours for all constructed detention and water quality treatment facilities, including:

- 2-yr and 100-yr water elevation contours
- Flared end section and restrictor sizes/invert elevations
- Detailed topography for the emergency overflow spillway
- Top of berm spot elevations surrounding detention facility

☐ Detention volume calculations* and summary (for both the 2-yr and 100-yr events) based on the as-built survey.

☒ Storm sewer locations, sizes, inverts and rim elevations. Provide storm sewer network information in a digital file (CAD and/or GIS file).

☐ Top of curb elevations at locations of overland flow paths.

☐ Overland flow path (swale) as-built cross-section survey (a minimum of two cross-sections, each with at least three points, i.e., one on either bank and one at the invert).

☐ Low-floor elevations/lowest adjacent grade elevations for structures adjacent to Regulatory Floodplain, overland flow paths, or detention facilities.

☐ Verification of at least 70% vegetative coverage by perennial species, on an aerial basis.

☐ Plants comprising a minimum of 50% native vegetation per approved seed/plant list on the permitted plan set.

☒ Verification of required native vegetation planted (seed tags, invoices) listing species by scientific name.

* As-built calculations need to be signed, sealed and dated by an Illinois Licensed Professional Engineer.

STORMWATER MANAGEMENT COMMISSION

WATERSHED DEVELOPMENT PERMIT NUMBER WDP-22-514 HAS BEEN SECURED

Project: **Hazel Avenue Reconstruction**

Date Issued: July 12, 2022

Conditions:
- See WDP application page 2 for standard permit conditions
- See permit letter for project specific permit conditions

Issued By: Philip Ruiz, P.E.
Principal Permit Engineer

Notice to Contractors and Owners

Post this card at the site, visible from the street and so located as to permit the inspector to record the indicated inspections on the placard. Do not post in the interior of a building.

Inspectors and sheriff's deputies are instructed to stop all work where this permit card is not displayed.

Always mention the Watershed Development Permit number when referring to this project. If this card becomes mislaid or lost please contact Lake County Stormwater Management Commission for a replacement.

Lake County Stormwater Management Commission (847) 377-7700

547 W. Jackson Boulevard, Chicago, IL 60661 312-322-6900 metrarail.com

March 6, 2024

Mr. Robert Phillips
Village of Deerfield
465 Elm Street
Deerfield, Illinois 60015

RE: Completed Pipeline License Agreement RE23032
Water Main License, Deerfield
Metra's Milwaukee District North Line

Mr. Phillips,

Attached for the records of the Village of Deerfield is a fully executed original counterpart of Pipeline License Agreement RE23032. Metra is in receipt of your check #259061 for $2,500 covering the contract preparation fee.

Sincerely,

Jack Uidl

Jack Uidl, Right of Way Administrator 2
Real Estate & Contract Management

Enclosure

Metra

547 W. Jackson Boulevard, Chicago, IL 60661 312-322-6900 metra.com

Office of the CEO/Executive Director

DATE: February 29, 2024

TO: Senior Staff

FROM: Jim Derwinski
CEO/Executive Director

RE: DELEGATION OF AUTHORITY

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I will be out of the office March 5-7, 2024.

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During my absence, if you require a signature or other immediate action, John Milano is authorized to act on my behalf.

Signature Authority is hereby granted commencing on March 5, 2024.

Jim Derwinski
CEO/Executive Director

Karen M. Hollings
Witness

RECESSION PURPOSE ONLY:

I hereby rescind my delegation of authority on this _____ day of _____, 2024.

Jim Derwinski
CEO/Executive Director

PIPELINE LICENSE

Prepared by:
Commuter Rail Division of the Regional Transportation Authority d/b/a Metra
547 West Jackson Boulevard
Chicago, Illinois 60661
Attn: Director, Real Estate and Contract Management
Phone: (312) 542-8189

After recording return to:
Village of Deerfield
465 Elm Street
Deerfield, Illinois 60015
Attn: Robert Phillips, Director of Public Works
Phone: (847) 719-7464

PIN(s): (portion of) 16-29-400-020
(Lake County)

(Above Space for Recorder's Use Only)

PIPELINE LICENSE AGREEMENT

THIS LICENSE AGREEMENT ("**Agreement**"), Metra Agreement No. **RE23032**, is entered into by and between the Commuter Rail Division of the Regional Transportation Authority, a division of an Illinois municipal corporation whose address is 547 West Jackson Boulevard, Chicago, Illinois 60661 ("**Metra**"), and Village of Deerfield, a(n) Illinois municipal corporation with offices located at 465 Elm Street, Deerfield, Illinois 60015 ("**Licensee**").

NOW, THEREFORE, for and in consideration of payments to be made to Metra by Licensee, as hereinafter set forth, and also of the covenants and agreements hereinafter stated, Metra hereby grants to Licensee a non-exclusive license ("**License**"), being five (5) feet in width to use Metra's property for the purpose of installing a twenty-four (24)-inch steel casing pipe containing a twelve (12)-inch ductile iron water main, which will replace an existing eight (8)-inch water main (captured in Metra Agreement No. W04840) that will be abandoned in place ("**Pipeline**"), and for no other purpose, along, across and underneath the right of way and tracks (or track, as the case may be) owned and/or controlled by Metra located on the north side of Hazel Avenue, (MP 24.36) in Deerfield, Illinois, on Metra's Milwaukee District North Line (GPS coordinates 42.171026, -87.850810), as delineated on **Exhibit "A"** ("**License Premises**") attached to and made a part of this Agreement, together with the right of reasonable access thereto for the purpose of exercising the rights and privileges granted in this Agreement. Licensee to maintain, operate and renew the same during the continuance of this License.

THIS LICENSE is granted upon the following express conditions, terms, and covenants to be observed, kept and performed by Licensee:

1. (a) As one of the considerations for this License, Licensee agrees to pay to Metra the sum of $2,500 for the cost of preparing this License, payable in advance.

2. (a) Said Pipeline shall be constructed in accordance with the specifications and notes set forth on Exhibit A. The installation of said Pipeline, including but not limited to the digging and filling of any trench and the time and manner of doing all of the work or of any maintenance, repairs, replacements, or renewals upon the License Premises, shall be as directed by Metra's authorized representatives.

(b) All of said work shall be done at Licensee's sole cost and expense, in a good and workmanlike manner, and in accordance with the plans, specifications, and profiles to be prepared by Licensee and submitted for approval to Metra's authorized representative(s), and until such approval is given, said work shall not be commenced by Licensee.

(c) Licensee agrees that it will bear and pay the entire cost of constructing, maintaining, repairing, replacing, and operating said Pipeline. Licensee shall install, construct, maintain, repair, replace, and operate the Pipeline in accordance with all applicable federal, state, and local municipal laws, ordinances, rules, and regulations promulgated by governmental authorities.

(d) Licensee shall not commence work upon the License Premises until Metra shall have approved Licensee's plans, specifications and profiles, such approval not to be unreasonably withheld or delayed. Metra's approval of Licensee's plans, specifications, and profiles shall not relieve Licensee of the duty to verify that the plans, specifications and profiles, and all amendments thereto, are in compliance with the requirements of this paragraph.

(e) Any assignment, sub-licensing, leasing, addition of more pipes, capacity, equipment, or any other expansion of the use of the License Premises beyond that indicated in the plans and specifications approved by Metra, is strictly prohibited without the prior written consent by Metra. Any such changes made without Metra's consent shall be void and will be considered a material breach of this Agreement allowing Metra, at its discretion, to terminate this Agreement and require Licensee to remove the Pipeline and any other facilities or equipment from the License Premises.

3. Upon completion of the initial installation and construction of the Pipeline, and upon completion of any subsequent installation, reconstruction, replacement, repair or maintenance of the Pipeline subsequent to its construction, Licensee, at its own cost and expense, shall remove any debris and restore, or cause to be restored to the reasonable satisfaction of Metra, the License Premises and any other affected portion of Metra's property ("**Property**") as nearly as may be possible, to the same or better condition than that which existed immediately prior to commencement of such activities by Licensee. In the event Licensee fails to cause the Premises and the Property to be restored to the reasonable satisfaction of Metra as provided for herein, Metra shall have the right to restore the License Premises and the Property and Licensee shall reimburse

Metra for all costs and expenses incurred by Metra in its performance of the obligations imposed upon Licensee hereunder.

4. Metra shall permit Licensee reasonable right of entry to the License Premises for the purpose of routine maintenance and operation of said Pipeline. Licensee's contractor(s) will be required to enter into a Right of Entry Agreement with Metra prior to any access to the License Premises for the purpose(s) of installation, construction, reconstruction, repair, replacement, or removal of said Pipeline. An application for a Right of Entry Agreement can be found at Metra's website: https://metra.com/real-estate-leasing, or by contacting Metra's Right of Way Administrator at 312-542-8189. Licensee shall contact Metra's Right of Way Administrator prior to performing any construction, revision, or action to the Pipeline or on the License Premises or Property beyond that which would be reasonably considered routine maintenance and/or operation of the Pipeline. Said construction, revision, or action may require railroad flagging protection and/or revised insurance requirements depending on the scope of the work to be performed and the proximity of said work to the live tracks.

5. Any rights to the License Premises not specifically granted to Licensee herein are reserved to Metra and its successors and/or assigns. The Pipeline shall be installed, constructed, repaired, maintained and operated in a manner so as not to interfere with efficient rail operations or any other business operations or activities being conducted by Metra or Metra's tenants or permittees on the License Premises and so as not to prevent or unreasonably interfere with use and enjoyment of the License Premises by Metra, its employees, agents or permittees for the purpose(s) to which the License Premises is now, or may hereafter be, committed by Metra. Metra shall have the right to retain the existing tracks and other improvements at the location of this Pipeline on or adjacent to the License Premises and also shall have the right at any and all times in the future to construct, maintain and operate over, under, across or parallel to said Pipeline such additional track or tracks as it may from time to time elect. Nothing shall be done or caused to be done by Licensee that will in any manner impair the usefulness or safety of the tracks and other improvements of Metra, or such track or tracks and other improvements as Metra may in the future construct or cause to be constructed over, under, across, or parallel to said Pipeline. This License is expressly subject to the rights of third parties to maintain utility and other improvements permitted by Metra on the License Premises and the Property. Metra reserves the exclusive right to grant future licenses over, under, across or parallel to said Pipeline, provided such licenses do not interfere with the Pipeline and the rights granted Licensee pursuant to this Agreement, as determined by Metra in its sole discretion.

6. Licensee shall not place, keep, store, or otherwise permit any equipment or materials to be placed, kept or stored on the License Premises or the Property except during such time as Licensee's employees, agents or contractors are physically present and conducting activities permitted under the terms of this License. Licensee agrees that it shall not operate or cause to be operated any vehicle of any kind on the License Premises, on any track or on the Property without prior authorization from Metra's authorized representative; provided, however, that Licensee shall not be prohibited from operating Licensee's vehicles and equipment on any public crossing of Metra's tracks and rights of way. If deemed necessary by Metra, Railroad flagging will be provided by Metra, the cost of such services to be paid by Licensee. An $850.00 minimum daily deposit is required for flagging costs. Metra's flagging fees are based on actual

expenses incurred for the project. The daily deposit is based on one (1) flagger during the hours of 7am to 3pm. Additional costs may be incurred for: additional flaggers, travel hours, overtime or holiday work, equipment and/or materials. Expenses charged against the project will be deducted from the initial deposit. Any costs exceeding the deposit will be billed accordingly.

7. Licensee agrees that it will, immediately upon receipt of a statement showing the amount thereof, pay all costs of any and all work performed upon the right of way and tracks of Metra which shall be made necessary by the construction, maintenance, repair, replacement, renewal, or presence thereon of said Pipeline.

8. Licensee agrees that before and during the installation, construction, replacement, repair, maintenance, or operation of said Pipeline, or at any other time, Metra shall have the right to provide such safe and temporary structures as it may deem necessary for safely caring for and preserving its tracks, buildings or other improvements and Licensee agrees to pay to Metra the entire cost of putting in or removing such temporary structures and of restoring the License Premises and the Property as near as may be possible to the same condition that existed before the commencement of said work.

9. Licensee agrees that should the construction, maintenance, operation, repair, or presence of the Pipeline necessitate any change or alteration in the location or arrangement of any other pipelines, appurtenances or other improvements located on the License Premises or the Property, the cost of such change or alteration shall be paid by Licensee within thirty (30) days of presentation of a bill by Metra. Licensee further agrees that if, at any time, Metra shall desire to change the location or grade of its track or tracks or shall desire to use or allow third party railroads to use its right of way at said point of crossing or at any point along a parallel course with the Pipeline for any purpose whatsoever, including but not limited to track installations by Metra or third parties, Licensee, at its own cost and expense, shall alter, relocate or make all changes to the Pipeline required by Metra. If Licensee shall fail, neglect, or refuse to relocate or make such change(s) to the Pipeline for a period of ninety (90) days after the receipt of written notice from Metra, then Metra may make or cause to be made such relocation or change(s) at the expense of Licensee.

10. Licensee shall at all times install, construct, replace, repair, maintain and operate said Pipeline in a secure, safe and sanitary condition and in accordance with all applicable laws, ordinances, rules and regulations. Licensee shall take all reasonable safety precautions to adequately secure the License Premises, warn of risks and ensure the safety of the public during periods of construction, reconstruction, replacement, repair, maintenance, and operation of the Pipeline. If the manner of installing, constructing, repairing, maintaining, replacing, or operating said Pipeline shall at any time be in violation of any applicable law, rule, regulation or ordinance, then Licensee, at no cost or expense to Metra and upon receipt of appropriate notice from a governmental agency having enforcement jurisdiction over the License Premises, shall make such changes or repairs as shall be necessary. Failure or refusal of Licensee to make the required changes or repairs within the time prescribed by said agency shall terminate this License, provided that it shall not terminate as long as Licensee, in good faith and by pursuit of appropriate legal or equitable remedies, enjoins, defends against, appeals from or pursues other lawful measures to avoid the enforcement of said laws, rules, regulations or ordinances.

11. To the fullest extent permitted by law, Licensee hereby assumes and agrees to release, acquit and waive any rights against and forever discharge Metra, the Regional Transportation Authority ("**RTA**") and the Northeast Illinois Regional Commuter Railroad Corporation ("**NIRCRC**"), their respective directors, administrators, officers, employees, agents, successors, assigns and all other persons, firms and corporations acting on their behalf or with their authority from and against any and all claims, demands or liabilities imposed upon them by law or otherwise of every kind, nature and character on account of personal injuries, including death at any time resulting therefrom, or on account of damage to or destruction of property arising out of or in any way relating to or occurring in connection with, the use of the License Premises or any other Metra property ("**Property**") for the purposes set forth in this Agreement, or which may occur to or be incurred by Licensee, its employees, officers, agents and all other persons, firms and corporations acting on Licensee's behalf or with Licensee's authority while on the License Premises or Property or arising from the condition of the License Premises or the Property during the term of this Agreement, whether or not such injuries or damages are caused by the actions, omissions or negligence of Metra, the RTA, or the NIRCRC. Notwithstanding anything in this Agreement to the contrary, the releases and waivers contained in this paragraph shall survive termination of this Agreement.

12. To the fullest extent permitted by law, Licensee agrees to indemnify, defend and hold harmless Metra, the RTA and the NIRCRC, their respective directors, administrators, officers, agents, employees, successors, assigns and all other persons, firms and corporations acting on their behalf or with their authority, from and against any and all injuries, liabilities, losses, damages, costs, payments and expenses of every kind and nature (including court costs and attorneys' fees) as a result of claims, demands, actions, suits, proceedings, judgments or settlements arising out of or in any way relating to or occurring in connection with, the use of the License Premises or the Property for the purposes set forth in this Agreement, or the condition of the License Premises or the Property, or which may occur to or be incurred by Licensee, its employees, officers, agents, and all other persons, firms and corporations acting on Licensee's behalf or with Licensee's authority while on the License Premises or the Property, whether or not such injuries, liabilities, losses, damages, costs, payments or expenses are caused by the actions, omissions or negligence of Metra, the RTA or the NIRCRC. Metra agrees to notify Licensee in writing within a reasonable time of any claim of which it becomes aware which may fall within this indemnity provision. Licensee further agrees to defend Metra, the RTA, the NIRCRC, their respective directors, administrators, officers, agents and employees against any claims, suits, actions or proceedings filed against any of them with respect to the subject matter of this indemnity provision, whether such claims, suits, actions or proceedings are rightfully or wrongfully made or filed; provided, however, that Metra, the RTA and the NIRCRC, may elect to participate in the defense thereof at their own expense or may, at their own expense, employ attorneys of their own selection to appear and defend the same on behalf of Metra, the RTA, the NIRCRC, and their respective directors, administrators, officers, agents or employees. Licensee shall not enter into any compromise or settlement of any such claims, suits, actions or proceedings without the consent of Metra, the RTA and the NIRCRC, which consent shall not be unreasonably withheld. Notwithstanding anything to the contrary contained in this Agreement, the indemnities contained in this paragraph shall survive termination of this Agreement.

13. Prior to entering upon the Premises, Licensee agrees to furnish insurance in form and in such amounts as required by Metra's Risk Management Department (312-322-1455) and shall deliver to Metra's Risk Management Department certificates of insurance or such other documentation acceptable to Metra's Risk Management Department. At a minimum, Licensee shall obtain and keep in force the insurance coverages, kinds, and amounts, relating to the Premises as listed on **Exhibit "B"** (**"Insurance Requirements"**) during all periods that Licensee or those persons authorized by or acting on behalf of Licensee are on the Premises to perform or cause to be performed any installation, construction, maintenance, or repair with respect to the Pipeline. (Metra may change said insurance requirements from time to time). The total cost of the premium for such insurance shall be at the expense of Licensee or its contractor(s) and/or sub-contractor(s).

14. Licensee or its contractor(s) shall not commence any work until it has obtained and provided the required insurance and has received approval of same by Metra. All policies must be in full force at the time of submission and shall not be canceled, modified, limited, or allowed to expire without having given Metra thirty (30) days prior written notice of such. Notice must be sent via certified mail to: Metra, Attention: Director, Risk Management, 15th Floor, 547 West Jackson Boulevard, Chicago, Illinois 60661.

15. This License may be terminated by Metra effective immediately upon notice to Licensee if the License Premises, or any portion thereof, are needed for any Metra or railroad purposes as determined by Metra in its sole discretion or Licensee ceases to operate or maintain the Pipeline or violates any of the terms, conditions or provisions set forth in this License. In case of termination, Licensee shall remove from the License Premises said Pipeline and shall restore said License Premises to the same or better condition than that which existed prior to the construction and installation of said Pipeline; or upon failure, neglect or refusal of Licensee to do so, Metra may make or cause to be made such removal and restoration, and the total cost hereof shall be paid by Licensee; or, if Metra shall so elect, it may treat the said Pipeline as abandoned by Licensee and may make such disposition thereof as it may see fit. <u>This License shall be perpetual unless terminated in accordance with the terms.</u>

16. This License and all of the terms, conditions, rights, and obligations herein contained shall inure to and be binding upon the Parties, their respective legal representatives, lessees, permittees, successors and/or assigns whether hereinabove so stated or not; but it is distinctly agreed that Licensee shall not assign its rights under this License without first having received the prior written consent of Metra.

17. All payments required to be made by Licensee to Metra under the terms, conditions, or provisions of this License shall be made within sixty (60) days of Licensee's receipt of any demand or invoice from Metra evidencing the amount due to Metra. Payments not made within said sixty (60) day period shall accrue interest at a rate of one and one half percent (1 ½%) per month or the highest amount permitted by Illinois law, whichever is less, from the date payment is due until paid.

18. All notices, demands and elections required or permitted to be given or made by either party upon the other under the terms of this License or any statute shall be in writing. Such communications shall be deemed to have been sufficiently served if sent by certified or registered

mail, return receipt requested, with proper postage prepaid, or hand delivered to the respective addresses shown below or to such other party or address as either party may from time to time furnish to the other in writing. Such notices, demands, elections and other instruments shall be considered delivered to recipient on the second business day after deposit in the U.S. Mail, or on the day of delivery if hand delivered.

(a) Notices to Metra shall be sent to:

Metra
547 West Jackson Boulevard
Chicago, Illinois 60661
Attn: Real Estate & Contract Management, Director
Phone: (312) 542-8189

(b) Notices to Licensee shall be sent to:

Village of Deerfield
465 Elm Street
Deerfield, Illinois 60015
Attn: Robert Phillips, Director of Public Works
Phone: (847) 719-7464

19. This Agreement shall be governed by the internal laws of the State of Illinois. If any provision of this Agreement, or any paragraph, sentence, clause, phrase or word or the application thereof is held invalid, the remainder of this Agreement shall be construed as if such invalid part were never included and this Agreement shall be and remain valid and enforceable to the fullest extent permitted by law provided that the Agreement, in its entirety as so reconstituted, does not represent a material change to the rights or obligations of either of the parties. No waiver of any obligation or default of Licensee shall be implied from omission by Metra to take any action on account of such obligation or default and no express waiver shall affect any obligation or default other than the obligation or default specified in the express waiver and then only for the time and to the extent therein stated. Whenever the context requires or permits, the singular shall include the plural, the plural shall include the singular and the masculine, feminine and neuter shall be freely interchangeable. In the event the time for performance hereunder falls on a Saturday, Sunday or holiday, the actual time for performance shall be the next business day. This License constitutes the entire agreement between the parties with respect to the subject matter hereof.

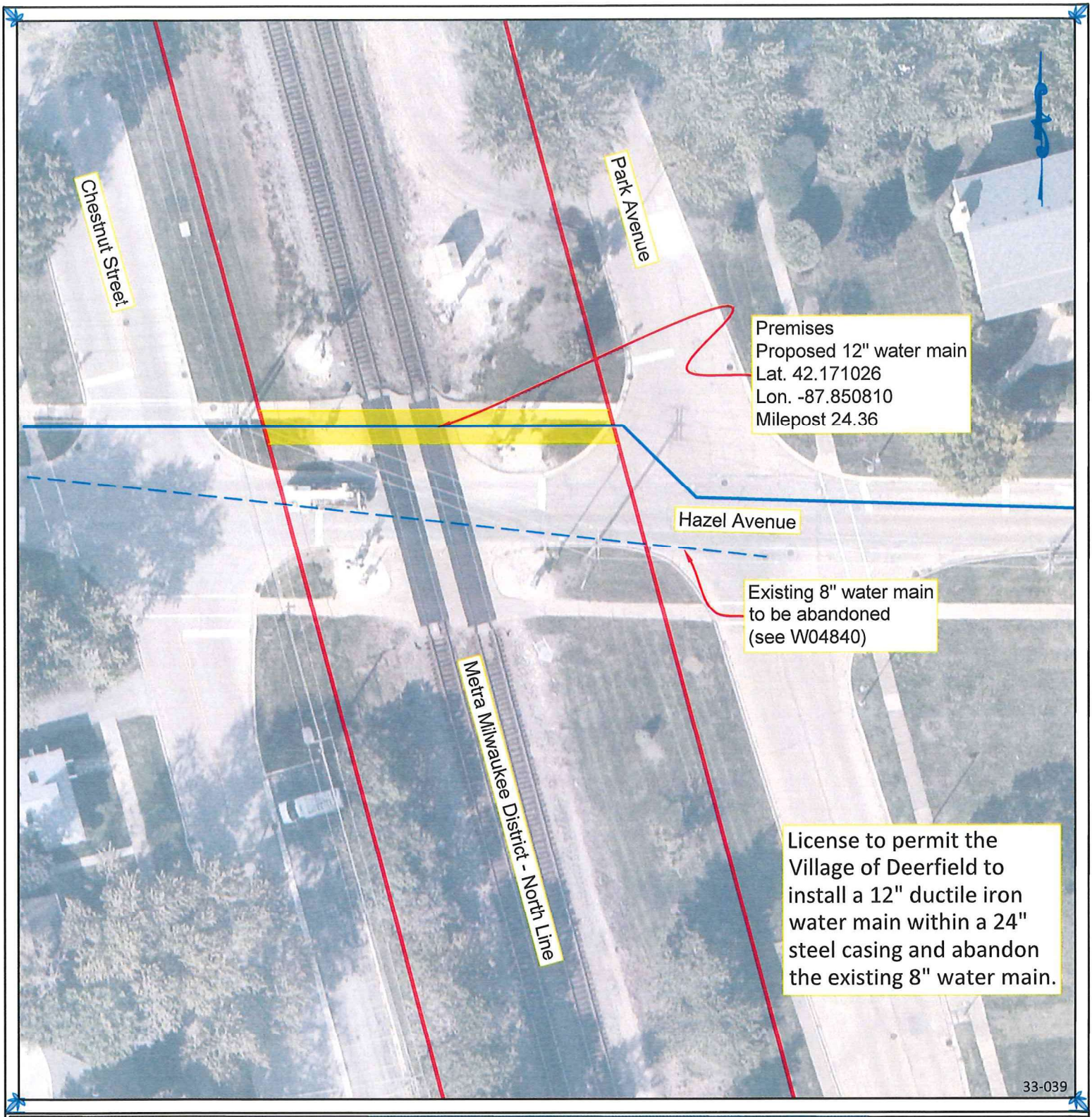
LICENSEE ACKNOWLEDGES THAT INSTRUMENTS OF RECORD, COURT DECISIONS, OR THE LAWS OF THE STATE IN WHICH THE LICENSE PREMISES ARE LOCATED MAY LIMIT THE QUALITY OF METRA'S TITLE. LICENSEE FURTHER ACKNOWLEDGES THAT LICENSEE PURCHASES THE LICENSE SUBJECT TO THESE POSSIBLE LIMITATIONS ON THE TITLE AND ASSUMES ALL RESPONSIBILITY FOR INVESTIGATING THE TITLE TO THE LICENSE PREMISES AND THE APPLICABLE LAWS OF THE STATE.

(Signature Page to Follow)

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of this 5th day of March, 2024.

LICENSEE, VILLAGE OF DEERFIELD:	**THE COMMUTER RAIL DIVISION OF THE REGIONAL TRANSPORTATION AUTHORITY D/B/A METRA:**
By: _____	By: _____ 3.5.24
Name: Daniel C. Shapiro	Name: James M. Derwinski
Title: Mayor, Village of Deerfield	Title: CEO/Executive Director

Exhibit A



Metra Stipulations:

The contractor, when awarded, will require a right of entry.

EXHIBIT "A"

Metra

547 W. JACKSON BLVD.
CHICAGO, IL. 60661

Exhibit A
Continued

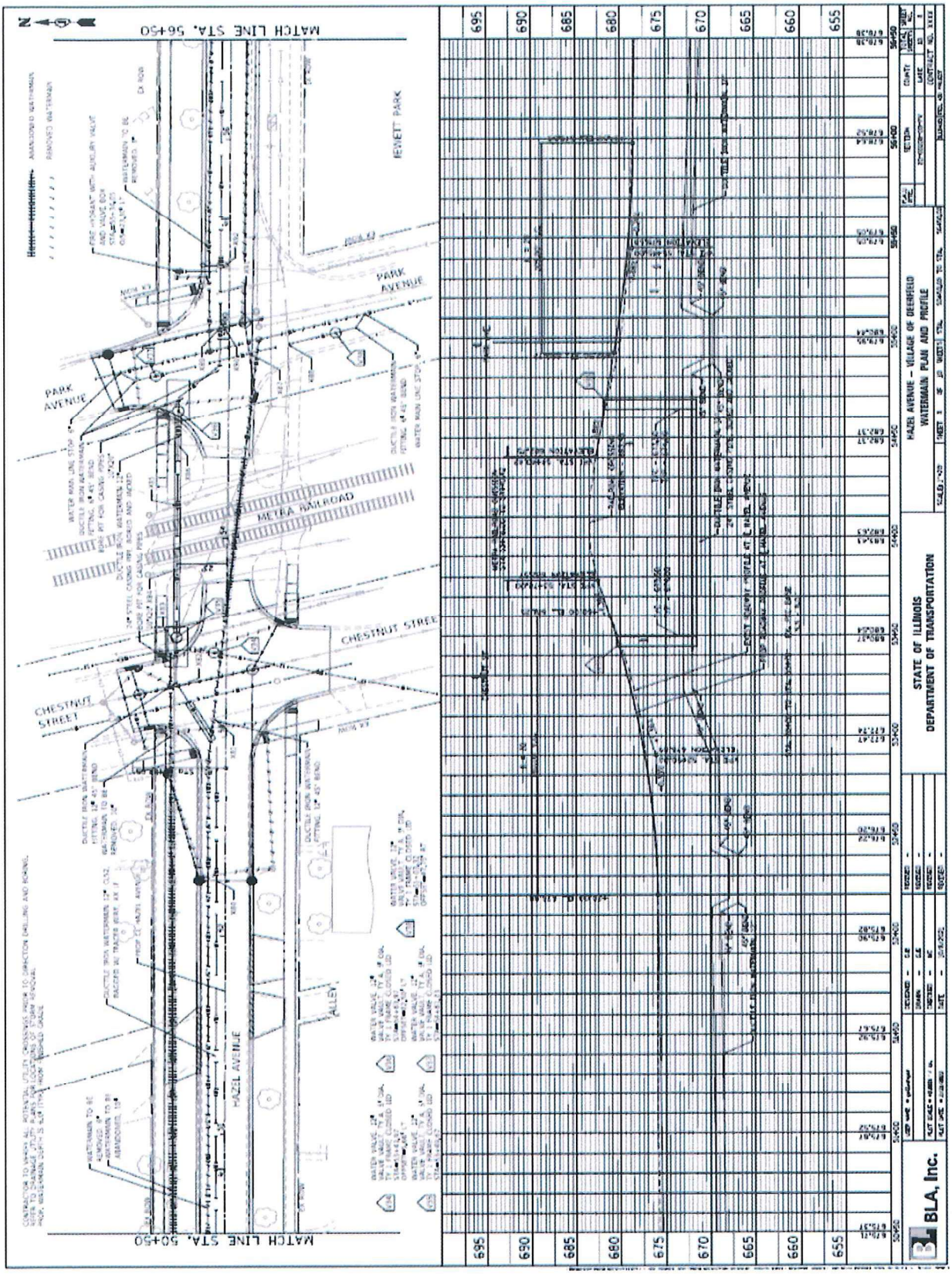


Exhibit B

METRA'S INSURANCE REQUIREMENTS

1. **Commercial General Liability Insurance**

   The CGL policy shall include the following coverage limits when limits are indicated:

   $2,000,000 per occurrence, $4,000,000 aggregate
   $2,000,000 aggregate for completed operations & products liability

2. **Automobile Liability Insurance**

   The Automobile policy shall include the following additional coverage limits:

   -Include "any" auto (i.e., all autos owned by the contractor/vendor as well as hired and non-owned autos used by the contractor/vendor and autos used by the contractor/vendors' employees while on Metra property).

   $1,000,000 for Property Damage (if not combined in single limit)

3. **Worker's Compensation and Employer's Liability Insurance**

   Workers Compensation Insurance coverage should be at statutory limits.
   As a minimum, the Employers Liability policy shall include coverage limits of:

   $1,000,000 for bodily injury by accident
   $1,000,000 for bodily injury by disease, each employee
   $1,000,000 aggregate liability

4. **Contractor's Pollution Liability Insurance (if applicable)**

   Coverage shall:

   -Cover losses caused by pollution conditions (including sudden and non-sudden pollution conditions) arising from the services and operations of the contractor/vendor and all subcontractors involved in the work.

   -Apply, without limitation, to bodily injury, property damage (including loss of use of damaged property or of property which has not been physically injured or destroyed) and clean-up costs.

   -Provide coverage for pollution conditions which arise from encountering pre-existing environmental conditions at the project site.

   -Provide coverage for liability resulting from the transportation of hazardous wastes.

   -Shall be written on a "project specific" basis.

Exhibit B
continued

5. **Railroad Protective Liability Insurance**

   LIMITS REQUIRED: $2,000,000 / $6,000,000

   Insure all liabilities assumed under the provisions of the Hold Harmless and Indemnity Clause in the contract and not exclude any construction and/or demolition work performed within 50 feet of railroad track. Commercial General Liability policies, including excess/umbrella, must contain contractual language covering construction and/or demolition being performed on or near railroad property. Commercial General Liability must be written on the ISO Occurrence Form CG 00 01 12 04 (or a substitute form providing equivalent coverage) and include the following endorsement: Contractual Liability Railroads ISO Form CG 24 17 10 01 (or a substitute form providing equivalent coverage).

6. **Additional/Named Insured shall be as follows:** "*The Commuter Rail Division of the Regional Transportation Authority, a division of an Illinois municipal corporation, and its affiliated separate public corporation known as the Northeast Illinois Regional Commuter Railroad Corporation, both operating under the service mark Metra as now exists or may hereafter be constituted or acquired, The Regional Transportation Authority, an Illinois municipal corporation and all other railroads operating on Metra property.*"

ADDITIONAL INSURED IS REQUIRED ON THE GENERAL LIABILITY CERTIFICATE AND NAMED INSURED IS REQUIRED ON THE RAILROAD PROTECTIVE LIABILITY CERTIFICATE

7. **Each Policy shall:**

   -Include a waiver of subrogation, thereby waiving your rights of subrogation against Metra and any additional insureds.

   -Include the Additional Insured Endorsement for all coverages including products and completed operations, excluding Workers Compensation and Professional Liability.

   -Be primary and non-contributory on all coverages.

8. **Deductibles** All deductibles applicable to the insurance coverage shall be borne by the contractor/vendor. The certificate of insurance shall clearly state how defense costs (also known as "allocated loss adjustment expenses") shall apply in terms of the deductible and the insurance limits. (SIR programs are prohibited, unless approved by Metra's Risk Management Department.)

9. **Subcontractors** All subcontractors retained or hired for the work shall be required to maintain limits and term equivalent to those required of the prime contractor.

10. **Cancellation** Should any of the above-described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions. Contractor/Vendor will immediately notify Metra of the cancellation, non-renewal, material change or reduction in coverage of any required insurance policy. Such notice shall be sent certified mail to Metra, care of Director of Risk Management, 547 W. Jackson, Suite 1500, Chicago, IL 60661.

Exhibit B
continued

11. **No Waiver** The failure by Metra to receive certificates of insurance required hereunder, or to receive them by the date(s) required hereunder, be construed as a waiver of the contractor/vendor's obligation to obtain the required insurance coverages. Failure by Metra to demand any certificate of insurance or other evidence of full compliance with the insurance requirements set forth herein, or failure by Metra to identify a deficiency in the evidence provided, shall not be construed as a waiver of the obligation to procure, or maintain the insurance required hereunder. The acceptance of delivery by Metra of any certificate of insurance does not constitute approval or agreement that the insurance requirements have been met or that the insurance policies identified in the certificates of insurance are in compliance with such requirements.

12. **Certificates**

Certificates of Insurance shall be sent to:

- Ann Hammo
  Metra Risk Management
  547 W. Jackson Blvd
  Chicago, IL 60661
  (phone) 312-322-1455
  (email) AHammo@METRARR.com

July 26, 2022

Regulatory Branch (LRC-2020-00522)

SUBJECT: Nationwide Permit Authorization for Replacement of an Existing Stormwater Outfall with a New 42” Diameter Outfall, West Fork of the North Branch of the Chicago River at Hazel Avenue, Section 29, Township 43 North, Range 12 East, Village of Deerfield, Lake County, Illinois (Latitude 42.171048, Longitude -87.863627)

Tyler Dickinson
Village of Deerfield
465 Elm Street
Deerfield, Illinois 60015

Dear Mr. Dickinson:

This letter is in response to your pre-construction notification, dated February 22, 2022, submitted on your behalf by BLA, Inc., for the above-referenced project. We have determined that activities in waters of the U.S. associated with the project is authorized by Nationwide Permit (NWP) Number 58 (Utility Line Activities for Water and Other Substances).

This determination covers only your project as described above and in the approved project plans titled, “Plans for Proposed Federal Aid Highway, Wilmot Road to Waukegan Road, FAU Route 1263 (Hazel Avenue), Roadway Reconstruction”, dated 10/8/2021, revised 2/21/2022, prepared by BLA, Inc. Caution must be taken to prevent construction materials and activities from impacting waters of the United States beyond the scope of this authorization. If the design, location, or purpose of the project is changed, you should contact this office to determine the need for further authorization.

The subject activity may be performed without further authorization from this office provided that the activity complies with the NWP terms and general conditions, the regional conditions for Illinois, the special conditions listed below, and the Section 401 Water Quality Certification (“WQC”) conditions added by the Illinois Environmental Protection Agency (“IEPA”). The NWP Program terms, general conditions, and regional conditions are listed in the enclosed NWP Summary. The WQC conditions are listed in the enclosed Fact Sheet.

Specifically, we wish to draw your attention to General Condition 21, which requires permittees to notify our office immediately in the event of discovery of previously unknown human remains, Native American cultural items, or archaeological artifacts; and a term of the NWP program, which states that NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

In addition to the general, regional, and water quality conditions of this permit verification, the following special conditions also apply to this verification:

1. Prior to the commencement of any work, you shall receive a determination by The Lake County Stormwater Management Commission (LCSMC) that the Soil Erosion and Sediment Control (SESC) plans meet technical standards.

2. This authorization is contingent upon implementing and maintaining soil erosion and sediment controls in a serviceable condition throughout the duration of the project. You shall comply with the LCSMC's written and verbal recommendations regarding the SESC plan and the installation and maintenance requirements of the SESC practices on-site.

a. You shall schedule a preconstruction meeting with LCSMC to discuss the SESC plan and the installation and maintenance requirements of the SESC practices on the site. You shall contact the LCSMC at least 10 calendar days prior to the preconstruction meeting so that a representative may attend.

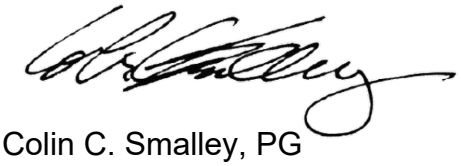
b. You shall notify the LCSMC or the LCSMC’s designated agent of any changes or modifications to the approved plan set. Field conditions during project construction may require the implementation of additional SESC measures. If you fail to implement corrective measures, this office may require more frequent site inspections to ensure the installed SESC measures are acceptable.

Please note that IEPA has issued Section 401 Water Quality Certification for this NWP. The conditions of this WQC are automatically conditions of this NWP verification and are included in the enclosed Fact Sheet. If you have any questions regarding Section 401 certification, please contact IEPA's Division of Water Pollution Control, Permit Section #15, by telephone at (217) 785-6939.

This verification is valid until March 14, 2026, when NWP 58 is scheduled to be modified, reissued, or revoked. Furthermore, if you commence or are under contract to commence this activity before the date the NWP is modified, reissued, or revoked, you will have 12 months from the date of the modification, reissuance or revocation to complete the activity under the present terms and conditions. Failure to comply with the general and regional conditions of this NWP, or any project-specific special conditions of this authorization, may result in the suspension or revocation of your authorization.

Once you have completed the authorized activity, please sign and return the enclosed compliance certification as required by general condition 30. If you have any questions, please contact me by telephone at (312) 846-5538, or email at Colin.C.Smalley@usace.army.mil.

Sincerely,



Colin C. Smalley, PG
Regulatory Project Manager

Enclosures

cc:
Lake County Stormwater Management Commission (Brian Frank)
BLA, Inc. (Edmond Lebbos)

PERMIT COMPLIANCE

CERTIFICATION

Permit Number: LRC-2020-00522

Permittee: Tyler Dickinson
Village of Deerfield

Date: July 26, 2022

I hereby certify that the work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of said permit and if applicable, compensatory wetland mitigation was completed in accordance with the approved mitigation plan.[1]

PERMITTEE DATE

Within 30 days after completion of the activity authorized by this permit and any mitigation required by the permit, this certification must be signed and returned to the following address:

Email to: ChicagoRequests@usace.army.mil
Subject: Compliance Certification, LRC-2020-00522

Please note that your permitted activity is subject to compliance inspections by Corps of Engineers representatives. If you fail to comply with this permit, you may be subject to permit suspension, modification, or revocation.

[1] If compensatory mitigation was required as part of your authorization, you are certifying that the mitigation area has been graded and planted in accordance with the approved plan. You are acknowledging that the maintenance and monitoring period will begin after a site inspection by a Corps of Engineers representative or after thirty days of the Corps' receipt of this certification. You agree to comply with all permit terms and conditions, including additional reporting requirements, for the duration of the maintenance and monitoring period.

Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: Hazel Avenue Improvements Project Office Phone Number, if available:

Physical Site Location (address, including number and street):

Hazel Avenue roadway beginning at Wilmot Road and extending east to Waukegan Road

City: Deerfield State: IL Zip Code: 60015

County: Lake Township: West Deerfield

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 42.17099 (Decimal Degrees) Longitude: - 87.85731 (-Decimal Degrees)

Identify how the lat/long data were determined:

○ GPS ○ Map Interpolation ○ Photo Interpolation ○ Survey ✓ Other

Approximate center of Project Area using Google Earth (decimal degrees)

IEPA Site Number(s), if assigned: BOL: BOW: BOA:

Approximate Start Date (mm/dd/yyyy): TBD Approximate End Date (mm/dd/yyyy): TBD

Estimated Volume of debris (cu. Yd.):

II. Owner/Operator Information for Source Site

Site Owner

Name: Village of Deerfield
Street Address: 465 Elm Street
PO Box:
City: Deerfield State: IL
Zip Code: 60015 Phone: 847-719-7464
Contact: Robert W. Phillips Dir. of PW and Eng.
Email, if available: rphillips@deerfield.il.us

Site Operator

Name:
Street Address:
PO Box:
City: State:
Zip Code: Phone:
Contact:
Email, if available:

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: Hazel Avenue Improvements Project Latitude: 42.17099 Longitude: - 87.85731

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

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

A database review was completed in the 2020 H&H PESA for the Project Area, which consists of commercial and unincorporated land use properties. Three (3) potentially impacted properties (PIPs) were identified in connection with the Project Area through the database review and site visit and confirmed with August 2024 database with no new PIPs identified. Refer to attachments.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0,including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201 (g), 1100.205(a), 1100.610]:

18 soil borings were advanced on May 26, 2021. Samples were analyzed for one or more of: VOCs(BTEX), SVOCs(PNAs), RCRA Metals, TCLP, and pH. With exception of soils in the vicinity of SB-16 (5-10' due to As results), and the railroad ROW (Risk-Managed) the sample results achieve CCDD requirements. Refer to the attachments for additional information.

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Jeremy J. Reynolds, P.G. (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name: Huff & Huff, Inc.

Street Address: 915 Harger Rd Suite 330

City: Oak Brook State: IL Zip Code: 60523

Phone: (630) 684-9100

Jeremy J. Reynolds, P.G.
Printed Name:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

Aug 26, 2024
Date:

LICENSED PROFESSIONAL GEOLOGIST
JEREMY J. REYNOLDS
196-001170
ILLINOIS

P.E or L.P.G. Seal:

AGGREGATE SUBGRADE IMPROVEMENT (BDE)

Effective: April 1, 2012
Revised: April 1, 2022

Add the following Section to the Standard Specifications:

"**SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT**

303.01 Description. This work shall consist of constructing an aggregate subgrade improvement (ASI).

303.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate	1004.07
(b) Reclaimed Asphalt Pavement (RAP)	1031.09

303.03 Equipment. The vibratory roller shall be according to Article 1101.01, or as approved by the Engineer. Vibratory machines, such as tampers, shall be used in areas where rollers do not fit.

303.04 Soil Preparation. The minimum immediate bearing value (IBV) of the soil below the improved subgrade shall be according to the Department's "Subgrade Stability Manual" for the aggregate thickness specified.

303.05 Placing and Compacting. The maximum nominal lift thickness of aggregate gradations CA 2, CA 6, and CA 10 when compacted shall be 9 in. (225 mm). The maximum nominal lift thickness of aggregate gradations CS 1, CS 2, and RR 1 when compacted shall be 24 in. (600 mm).

The top surface of the aggregate subgrade improvement shall consist of a layer of capping aggregate gradations CA 6 or CA 10 that is 3 in. (75 mm) thick after compaction. Capping aggregate will not be required when aggregate subgrade improvement is used as a cubic yard pay item for undercut applications.

Each lift of aggregate shall be compacted to the satisfaction of the Engineer. If the moisture content of the material is such that compaction cannot be obtained, sufficient water shall be added so that satisfactory compaction can be obtained.

303.06 Finishing and Maintenance. The aggregate subgrade improvement shall be finished to the lines, grades, and cross sections shown on the plans, or as directed by the Engineer. The aggregate subgrade improvement shall be maintained in a smooth and compacted condition.

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

303.08 Basis of Payment. This work will be paid for at the contract unit price per cubic yard (cubic meter) or ton (metric ton) for AGGREGATE SUBGRADE IMPROVEMENT or at the contract unit price per square yard (square meter) for AGGREGATE SUBGRADE IMPROVEMENT, of the thickness specified."

Add the following to Section 1004 of the Standard Specifications:

"**1004.07 Coarse Aggregate for Aggregate Subgrade Improvement (ASI).** The aggregate shall be according to Article 1004.01 and the following.

(a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete. In applications where greater than 24 in. (600 mm) of ASI material is required, gravel may be used below the top 12 in (300 mm) of ASI.

(b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials.

(c) Gradation.

(1) The coarse aggregate gradation for total ASI thickness less than or equal to 12 in. (300 mm) shall be CA 2, CA 6, CA 10, or CS 1.

The coarse aggregate gradation for total ASI thickness greater than 12 in. (300 mm) shall be CS 1 or CS 2 as shown below or RR 1 according to Article 1005.01(c).

	COARSE AGGREGATE SUBGRADE GRADATIONS				
Grad No.	Sieve Size and Percent Passing				
	8"	6"	4"	2"	#4
CS 1	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20
CS 2		100	80 ± 10	25 ± 15	

	COARSE AGGREGATE SUBGRADE GRADATIONS (Metric)				
Grad No.	Sieve Size and Percent Passing				
	200 mm	150 mm	100 mm	50 mm	4.75 mm
CS 1	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20
CS 2		100	80 ± 10	25 ± 15	

(2) Capping aggregate shall be gradation CA 6 or CA 10."

Add the following to Article 1031.09 of the Standard Specifications:

"(b) RAP in Aggregate Subgrade Improvement (ASI). RAP in ASI shall be according to Articles 1031.01(a), 1031.02(a), 1031.06(a)(1), and 1031.06(a)(2), and the following.

(1) The testing requirements of Article 1031.03 shall not apply.

(2) Crushed RAP used for the lower lift may be mechanically blended with aggregate gradations CS 1, CS 2, and RR 1 but it shall be no greater than 40 percent of the total product volume. RAP agglomerations shall be no greater than 4 in. (100 mm).

(3) For capping aggregate, well graded RAP having 100 percent passing the 1 1/2 in. (38 mm) sieve may be used when aggregate gradations CS 1, CS 2, CA 2, or RR 1 are used in the lower lift. FRAP will not be permitted as capping material.

Blending shall be through calibrated interlocked feeders or a calibrated blending plant such that the prescribed blending percentage is maintained throughout the blending process. The calibration shall have an accuracy of ± 2.0 percent of the actual quantity of material delivered."

80274

BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE)

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

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

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

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

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

Where: CA = Cost Adjustment, $.
BPI_P = Bituminous Price Index, as published by the Department for the month the work is performed, $/ton ($/metric ton).
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).
$\%AC_V$ = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the % AC_V will be determined from the adjusted job mix formula. For bituminous materials applied, a performance graded or cutback asphalt will be considered to be 100% AC_V and undiluted emulsified asphalt will be considered to be 65% AC_V.
Q = Authorized construction Quantity, tons (metric tons) (see below).

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

For bituminous materials measured in gallons: Q, tons = V x 8.33 lb/gal x SG / 2000
For bituminous materials measured in liters: Q, metric tons = V x 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.

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

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

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

80173

CEMENT, TYPE IL (BDE)

Effective: August 1, 2023

Add the following to Article 302.02 of the Standard Specifications:

"(k) Type IL Portland-Limestone Cement .....1001"

Revise Note 2 of Article 352.02 of the Standard Specifications to read:

"Note 2. Either Type I or Type IA portland cement or Type IL portland-limestone cement shall be used."

Revise Note 1 of Article 404.02 of the Standard Specifications to read:

"Note 1. The cement shall be Type I portland cement or Type IL portland-limestone cement."

Revise Article 1019.02(a) of the Standard Specifications to read:

"(a) Cement, Type I or IL .....1001"

80449

COMPENSABLE DELAY COSTS (BDE)

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

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

"(b) Compensation. Compensation will not be allowed for delays, inconveniences, or damages sustained by the Contractor from conflicts with facilities not meeting the above definition; or if a conflict with a utility in an unanticipated location does not cause a shutdown of the work or a documentable reduction in the rate of progress exceeding the limits set herein. The provisions of Article 104.03 notwithstanding, compensation for delays caused by a utility in an unanticipated location will be paid according to the provisions of this Article governing minor and major delays or reduced rate of production which are defined as follows.

(1) Minor Delay. A minor delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two hours, but not to exceed two weeks.

(2) Major Delay. A major delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two weeks.

(3) Reduced Rate of Production Delay. A reduced rate of production delay occurs when the rate of production on the work in conflict with the utility in an unanticipated location decreases by more than 25 percent and lasts longer than seven calendar days."

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

"(c) Payment. Payment for Minor, Major, and Reduced Rate of Production Delays will be made as follows.

(1) Minor Delay. Labor idled which cannot be used on other work will be paid for according to Article 109.04(b)(1) and (2) for the time between start of the delay and the minimum remaining hours in the work shift required by the prevailing practice in the area.

Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4).

(2) Major Delay. Labor will be the same as for a minor delay.

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

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

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

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

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

"(b) No working day will be charged under the following conditions.

(1) When adverse weather prevents work on the controlling item.

(2) When job conditions due to recent weather prevent work on the controlling item.

(3) When conduct or lack of conduct by the Department or its consultants, representatives, officers, agents, or employees; delay by the Department in making the site available; or delay in furnishing any items required to be furnished to the Contractor by the Department prevents work on the controlling item.

(4) When delays caused by utility or railroad adjustments prevent work on the controlling item.

(5) When strikes, lock-outs, extraordinary delays in transportation, or inability to procure critical materials prevent work on the controlling item, as long as these delays are not due to any fault of the Contractor.

(6) When any condition over which the Contractor has no control prevents work on the controlling item."

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

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

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

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

Add the following to Section 109 of the Standard Specifications.

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

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

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

(a) Escalated Material and/or Labor Costs. When the delay causes work, which would have otherwise been completed, to be done after material and/or labor costs have increased, such increases will be paid. Payment for escalated material costs will be limited to the increased costs substantiated by documentation furnished by the Contractor. Payment for escalated labor costs will be limited to those items in Article 109.04(b)(1) and (2), except the 35 percent and 10 percent additives will not be permitted.

(b) Extended Project Overhead. For the duration of the delay, payment for extended project overhead will be paid as follows.

(1) Direct Jobsite and Offsite Overhead. Payment for documented direct jobsite overhead and documented direct offsite overhead, including onsite supervisory and administrative personnel, will be allowed according to the following table.

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

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

(2) Home Office and Unabsorbed Overhead. Payment for home office and unabsorbed overhead will be calculated as 8 percent of the total delay cost.

(c) Extended Traffic Control. Traffic control required for an extended period of time due to the delay will be paid for according to Article 109.04.

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

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

80384

CONCRETE SEALER (BDE)

Effective: November 1, 2023

Replace Section 1026 of the Standard Specifications with the following:

"**SECTION 1026. CONCRETE SEALER**

1026.01 General. Sealer types shall be according to the listing in AASHTO M 224. All concrete sealer types shall meet the sealer requirements of AASHTO M 224 when tested in accordance with AASHTO T 384. The sealer shall be listed on the Department's qualified product list.

The sealer shall have a clear or amber color when dry.

The Department will perform the sealer characterization properties of ATR-FTIR spectra, total solids, and specific gravity in accordance with AASHTO M 224."

80453

CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

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

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

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

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

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

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

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

a) Included on the U.S. Environmental Protection Agency (USEPA) *Verified Retrofit Technology List* (http://www.epa.gov/cleandiesel/verification/verif-list.htm), or verified by the California Air Resources Board (CARB) (http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm); or

b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit

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

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

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

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

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

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

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

Diesel Retrofit Deficiency Deduction

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

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

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

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

80261

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

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

FEDERAL OBLIGATION. 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.

CONTRACTOR ASSURANCE. 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 **18**% 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.

DBE LOCATOR REFERENCES. 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.

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

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

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

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

(a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases and will be considered by the Department.

(1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.

(2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Contractor might otherwise prefer to perform these work items with its own forces.

(3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

(4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.

b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable. In accordance with the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.

(5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.

(6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.

(7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.

(8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.

(b) If the Department determines the bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided it is otherwise eligible for award. If the Department determines the

bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification will also include a statement of reasons for the adverse determination. If the Utilization Plan is not approved because it is deficient as a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no more than a five calendar day period to cure the deficiency.

(c) The bidder may request administrative reconsideration of an adverse determination by emailing the Department at "DOT.DBE.UP@illinois.gov" within the five calendar days after the receipt of the notification of the determination. The determination shall become final if a request is not made on or before the fifth calendar day. A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be reviewed by the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

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

(a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.

(b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.

(c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.

(d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:

(1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.

(2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.

(e) DBE as a material supplier:

(1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.

(2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.

(3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a DBE regular dealer or DBE manufacturer.

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

(a) NO AMENDMENT. 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 DOT.DBE.UP@illinois.gov.

(b) CHANGES TO WORK. 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) SUBCONTRACT. 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) ALTERNATIVE WORK METHODS. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated 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) ENFORCEMENT. 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) RECONSIDERATION. 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.

80029

FUEL COST ADJUSTMENT (BDE)

Effective: April 1, 2009
Revised: August 1, 2017

Description. Fuel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in fuel 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 category of work will make that category of work exempt from fuel cost adjustment.

General. The fuel cost adjustment shall apply to contract pay items as grouped by category. The adjustment shall only apply to those categories of work checked "Yes", and only when the cumulative plan quantities for a category exceed the required threshold. Adjustments to work items in a category, either up or down, and extra work paid for by agreed unit price will be subject to fuel cost adjustment only when the category representing the added work was subject to the fuel cost adjustment. Extra work paid for at a lump sum price or by force account will not be subject to fuel cost adjustment. Category descriptions and thresholds for application and the fuel usage factors which are applicable to each are as follows:

(a) Categories of Work.

(1) Category A: Earthwork. Contract pay items performed under Sections 202, 204, and 206 including any modified standard or nonstandard items where the character of the work to be performed is considered earthwork. The cumulative total of all applicable item plan quantities shall exceed 25,000 cu yd (20,000 cu m). Included in the fuel usage factor is a weighted average 0.10 gal/cu yd (0.50 liters/cu m) factor for trucking.

(2) Category B: Subbases and Aggregate Base Courses. Contract pay items constructed under Sections 311, 312 and 351 including any modified standard or nonstandard items where the character of the work to be performed is considered construction of a subbase or aggregate, stabilized or modified base course. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is a 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.

(3) Category C: Hot-Mix Asphalt (HMA) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 355, 406, 407 and 482 including any modified standard or nonstandard items where the character of the work to be performed is considered HMA bases, pavements and shoulders. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.

(4) Category D: Portland Cement Concrete (PCC) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 353, 420, 421 and 483 including any

modified standard or nonstandard items where the character of the work to be performed is considered PCC base, pavement or shoulder. The cumulative total of all applicable item plan quantities shall exceed 7500 sq yd (6000 sq m). Included in the fuel usage factor is 1.20 gal/cu yd (5.94 liters/cu m) factor for trucking.

(5) Category E: Structures. Structure items having a cumulative bid price that exceeds $250,000 for pay items constructed under Sections 502, 503, 504, 505, 512, 516 and 540 including any modified standard or nonstandard items where the character of the work to be performed is considered structure work when similar to that performed under these sections and not included in categories A through D.

(b) Fuel Usage Factors.

English Units

Category	Factor	Units
A - Earthwork	0.34	gal / cu yd
B – Subbase and Aggregate Base courses	0.62	gal / ton
C – HMA Bases, Pavements and Shoulders	1.05	gal / ton
D – PCC Bases, Pavements and Shoulders	2.53	gal / cu yd
E – Structures	8.00	gal / $1000

Metric Units

Category	Factor	Units
A - Earthwork	1.68	liters / cu m
B – Subbase and Aggregate Base courses	2.58	liters / metric ton
C – HMA Bases, Pavements and Shoulders	4.37	liters / metric ton
D – PCC Bases, Pavements and Shoulders	12.52	liters / cu m
E – Structures	30.28	liters / $1000

(c) Quantity Conversion Factors.

Category	Conversion	Factor
B	sq yd to ton	0.057 ton / sq yd / in depth
	sq m to metric ton	0.00243 metric ton / sq m / mm depth
C	sq yd to ton	0.056 ton / sq yd / in depth
	sq m to metric ton	0.00239 m ton / sq m / mm depth
D	sq yd to cu yd	0.028 cu yd / sq yd / in depth
	sq m to cu m	0.001 cu m / sq m / mm depth

Method of Adjustment. Fuel cost adjustments will be computed as follows.

$CA = (FPI_P - FPI_L) \times FUF \times Q$

Where: CA = Cost Adjustment, $
FPI_P = Fuel Price Index, as published by the Department for the month the work is performed, $/gal ($/liter)
FPI_L = Fuel 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, $/gal ($/liter)
FUF = Fuel Usage Factor in the pay item(s) being adjusted
Q = Authorized construction Quantity, tons (metric tons) or cu yd (cu m)

The entire FUF indicated in paragraph (b) will be used regardless of use of trucking to perform the work.

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

Percent Difference = $\{(FPI_L - FPI_P) \div FPI_L\} \times 100$

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

80229

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."

80456

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 styrene-butadiene rubber. The polymer modified asphalt binder shall be smooth, homogeneous, and be according to the requirements shown in Table 1 or 2 for the grade shown on the plans.

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

Table 2 - Requirements for Styrene-Butadiene Rubber (SBR) Modified Asphalt Binders		
Test	Asphalt Grade SBR PG 64-28 SBR PG 70-22	Asphalt Grade SB/SBS PG 64-34 SB/SBS PG 70-28 SBR PG 76-22 SBR PG 76-28
Separation of Polymer ITP, "Separation of Polymer from Asphalt Binder" Difference in °F (°C) of the softening point between top and bottom portions	4 (2) max.	4 (2) max.
Toughness ASTM D 5801, 77 °F (25 °C), 20 in./min. (500 mm/min.), in.-lbs (N-m)	110 (12.5) min.	110 (12.5) min.
Tenacity ASTM D 5801, 77 °F (25 °C), 20 in./min. (500 mm/min.), in.-lbs (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	
Test	Asphalt Grade SM PG 46-28 SM PG 46-34 SM PG 52-28 SM PG 52-34 SM PG 58-22 SM PG 58-28 SM PG 64-22
Small Strain Parameter (AASHTO PP 113) BBR, ΔTc, 40 hrs PAV (40 hrs continuous or 2 PAV at 20 hrs)	-5°C min.
Large Strain Parameter (Illinois Modified AASHTO T 391) DSR/LAS Fatigue Property, Δ|G*|peak τ, 40 hrs PAV (40 hrs continuous or 2 PAV at 20 hrs)	≥ 54 %

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."

80441

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."

80451

RAILROAD PROTECTIVE LIABILITY INSURANCE (BDE)

Effective: December 1, 1986
Revised: January 1, 2022

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

NAMED INSURED & ADDRESS	NUMBER & SPEED OF PASSENGER TRAINS	NUMBER & SPEED OF FREIGHT TRAINS
Commuter Rail Division of the Regional Transportation Authority, a division of an Illinois Municipal corporation and its Affiliated separate public corporation known As the Northeast Illinois Regional Commuter Railroad Corporation, both operating under the Service mark Metra as now exists or may here After be constituted or acquired, the Regional Transportation Authority, an Illinois municipal Corporation and all other railroad operating On Metra Property 547 W. Jackson Boulevard Chicago Illinois 60661 312-322-1455	54	8

Class 1 RR (Y or N): N
DOT/AAR No.: 388044Y
RR Mile Post: 24.3
RR Division: Commuter
RR Sub-Division: C&M

For Freight/Passenger Information Contact: Ann Hammo Phone: 312-322-1455
For Insurance Information Contact: Ann Hammo Phone: 312-322-1455

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

3426I

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 Ill. 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 Method 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."

80455

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

Class – Type		Seeds	lb/acre (kg/hectare)
4	Native Grass 2/ 6/	*Andropogon gerardi* (Big Blue Stem) 5/	4 (4)
		Schizachyrium scoparium (Little Blue Stem) 5/	5 (5)
		Bouteloua curtipendula (Side-Oats Grama) 5/	5 (5)
		Elymus canadensis (Canada Wild Rye) 5/	1 (1)
		Panicum virgatum (Switch Grass) 5/	1 (1)
		Sorghastrum nutans (Indian Grass) 5/	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)
		Perennial Ryegrass	15 (15)
4B	Wetland Grass and Sedge Mixture 2/ 6/	Annual Ryegrass	25 (25)
		Oats, Spring	25 (25)
		Wetland Grasses (species below) 5/	6 (6)

Species:	% By Weight
Calamagrostis canadensis (Blue Joint Grass)	12
Carex lacustris (Lake-Bank Sedge)	6
Carex slipata (Awl-Fruited Sedge)	6
Carex stricta (Tussock Sedge)	6
Carex vulpinoidea (Fox Sedge)	6
Eleocharis acicularis (Needle Spike Rush)	3
Eleocharis obtusa (Blunt Spike Rush)	3
Glyceria striata (Fowl Manna Grass)	14
Juncus effusus (Common Rush)	6
Juncus tenuis (Slender Rush)	6
Juncus torreyi (Torrey's Rush)	6
Leersia oryzoides (Rice Cut Grass)	10
Scirpus acutus (Hard-Stemmed Bulrush)	3
Scirpus atrovirens (Dark Green Rush)	3
Bolboschoenus fluviatilis (River Bulrush)	3
Schoenoplectus tabernaemontani (Softstem Bulrush)	3
Spartina pectinata (Cord Grass)	4

Class – Type		Seeds	lb/acre (kg/hectare)
5	Forb with Annuals Mixture 2/ 5/ 6/	Annuals Mixture (Below) Forb Mixture (Below)	1 (1) 10 (10)

Annuals Mixture - Mixture not exceeding 25 % by weight of any one species, of the following:

Coreopsis lanceolata (Sand Coreopsis)
Leucanthemum maximum (Shasta Daisy)
Gaillardia pulchella (Blanket Flower)
Ratibida columnifera (Prairie Coneflower)
Rudbeckia hirta (Black-Eyed Susan)

Forb Mixture - Mixture not exceeding 5 % by weight PLS of any one species, of the following:

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

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

Notes:

1/ Seeding shall be performed when the ambient temperature has been between 45 ºF (7 ºC) and 80 ºF (27 ºC) 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 ºF (7 ºC) for a minimum of seven (7) consecutive days and ending when the ambient temperature exceeds 80 ºF (27 ºC) according to the National Weather Service.
3/ Specific variety as shown in the plans or approved by the Engineer.
4/ Inoculation required.
5/ Pure Live Seed (PLS) shall be used.
6/ Fertilizer shall not be used.
7/ Seed shall be primed with KNO_3 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."

80445

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.

x	0.490	0.475	0.485	0.530
y	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_L	
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."

80457

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."

80448

STEEL COST ADJUSTMENT (BDE)

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

Description. 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.

Types of Steel Products. 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.

Documentation. 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:

$SCA = Q \times D$

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:

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

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

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)

80127

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."

80397

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%"

80391

SUBMISSION OF PAYROLL RECORDS (BDE)

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

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

"STATEMENTS AND PAYROLLS

The payroll records shall include the worker's name, 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."

STATE CONTRACTS. 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.”

80437

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.

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 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.

20338

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."

80439

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.

80302

WORK ZONE TRAFFIC CONTROL DEVICES (BDE)

Effective: March 2, 2020

Add the following to Article 701.03 of the Standard Specifications:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

"(g) Truck Mounted/Trailer Mounted Attenuators. The attenuator shall be approved for use at Test Level 3. Test Level 2 may be used for normal posted speeds less than or equal to 45 mph.

(k) Temporary Water Filled Barrier. The water filled barrier shall be a lightweight plastic shell designed to accept water ballast and be on the Department's qualified product list.

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

(l) 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."

80427

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

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 design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in 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, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or 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 non-minority 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 *DBAconformance@dol.gov*, 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, 31 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 40 U.S.C. 3144(b) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.

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 29 CFR part 1 or 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, 31 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 lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

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

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term “perform work with its own organization” in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

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

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

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

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. “First Tier Covered Transactions” refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (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.

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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.

* * * * *

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.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.