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Letting April 24, 2026

Notice to Bidders, Specifications and Proposal



**Contract No. 61L84
DUPAGE County
Section 24-00071-00-RS (Carol Stream)
Route FAU 1379 (Fullerton Avenue)
Project SCTX-733 ()
District 1 Construction Funds**

Prepared by

Checked by

F

(Printed by authority of the State of Illinois)



- 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. April 24, 2026 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. 61L84
DUPAGE County
Section 24-00071-00-RS (Carol Stream)
Project SCTX-733 ()
Route FAU 1379 (Fullerton Avenue)
District 1 Construction Funds**

HMA resurfacing of FAU 1379 (Fullerton Ave.) from Gary Ave. to Schmale Rd. in the Village of Carol Stream. Additional work includes curb & gutter, sidewalks with ADA ramps, street lighting, pavement marking and other required work.

- 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

Gia Biagi,
Secretary

INDEX
FOR
SUPPLEMENTAL SPECIFICATIONS
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2026

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 1-1-26)

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BDE SPECIAL PROVISIONS

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

<u>File Name</u>	<u>Pg.</u>	<input type="checkbox"/>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80099		<input type="checkbox"/>	Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2022
80274	183	<input checked="" type="checkbox"/>	Aggregate Subgrade Improvement	April 1, 2012	April 1, 2022
80192		<input type="checkbox"/>	Automated Flagger Assistance Device	Jan. 1, 2008	April 1, 2023
80173		<input type="checkbox"/>	Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
* 80426		<input type="checkbox"/>	Bituminous Surface Treatment with Fog Seal	Jan. 1, 2020	April 1, 2026
80475		<input type="checkbox"/>	Bridge Deck Concrete Overlays	Jan. 1, 2026	
80241		<input type="checkbox"/>	Bridge Demolition Debris	July 1, 2009	
50531		<input type="checkbox"/>	Building Removal	Sept. 1, 1990	Aug. 1, 2022
50261		<input type="checkbox"/>	Building Removal with Asbestos Abatement	Sept. 1, 1990	Aug. 1, 2022
80460	186	<input checked="" type="checkbox"/>	Cement, Finely Divided Minerals, Admixtures, Concrete, and Mortar	Jan. 1, 2025	Jan. 1, 2026
80384	203	<input checked="" type="checkbox"/>	Compensable Delay Costs	June 2, 2017	April 1, 2019
80198		<input type="checkbox"/>	Completion Date (via calendar days)	April 1, 2008	
80199		<input type="checkbox"/>	Completion Date (via calendar days) Plus Working Days	April 1, 2008	
80461		<input type="checkbox"/>	Concrete Barrier	Jan. 1, 2025	
80453		<input type="checkbox"/>	Concrete Sealer	Nov. 1, 2023	
80261	207	<input checked="" type="checkbox"/>	Construction Air Quality – Diesel Retrofit	June 1, 2010	Jan. 1, 2025
80476		<input type="checkbox"/>	Deck Slab Repair	Jan. 1, 2026	
80029		<input type="checkbox"/>	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Jan. 2, 2025
80467	209	<input checked="" type="checkbox"/>	Erosion Control Blanket	Aug. 1, 2025	
80229		<input type="checkbox"/>	Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
80452		<input type="checkbox"/>	Full Lane Sealant Waterproofing System	Nov. 1, 2023	
80433		<input type="checkbox"/>	Green Preformed Thermoplastic Pavement Markings	Jan. 1, 2021	Jan. 1, 2022
80471		<input type="checkbox"/>	Guardrail	Nov. 1, 2025	
80472		<input type="checkbox"/>	High Friction Surface Treatment	Nov. 1, 2025	
* 80456		<input type="checkbox"/>	Hot-Mix Asphalt	Jan. 1, 2024	April 1, 2026
80446	212	<input checked="" type="checkbox"/>	Hot-Mix Asphalt – Longitudinal Joint Sealant	Nov. 1, 2022	Aug. 1, 2023
80438		<input type="checkbox"/>	Illinois Works Apprenticeship Initiative – State Funded Contracts	June 2, 2021	April 2, 2024
* 80483	214	<input checked="" type="checkbox"/>	Inlet Filters	April 1, 2026	
80477		<input type="checkbox"/>	Longitudinal Tining	Jan. 1, 2026	
80450		<input type="checkbox"/>	Mechanically Stabilized Earth Retaining Walls	Aug. 1, 2023	Aug. 1, 2025
80478		<input type="checkbox"/>	Modified Longitudinal Construction Joint	Jan. 1, 2026	
80464	216	<input checked="" type="checkbox"/>	Pavement Marking	April 1, 2025	Nov. 1, 2025
80468		<input type="checkbox"/>	Pavement Patching	Aug. 1, 2025	
* 80441	217	<input checked="" type="checkbox"/>	Performance Graded Asphalt Binder	Jan 1, 2023	April 1, 2026
80459		<input type="checkbox"/>	Preformed Plastic Pavement Marking	June 2, 2024	
34261	223	<input checked="" type="checkbox"/>	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2022
80473		<input type="checkbox"/>	Raised Reflective Pavement Markers	Nov. 1, 2025	
* 80455	224	<input checked="" type="checkbox"/>	Removal and Disposal of Regulated Substances	Jan. 1, 2024	April 1, 2026
80474		<input type="checkbox"/>	Residential Driveway Temporary Signal	Nov. 1, 2025	
80445	226	<input checked="" type="checkbox"/>	Seeding	Nov. 1, 2022	
80457	232	<input checked="" type="checkbox"/>	Short Term and Temporary Pavement Markings	April 1, 2024	April 2, 2024
80462	236	<input checked="" type="checkbox"/>	Sign Panels and Appurtenances	Jan. 1, 2025	Jan. 1, 2026
80479		<input type="checkbox"/>	Sinusoidal Rumble Strips	Jan. 1, 2026	
80469		<input type="checkbox"/>	Slope Wall	Aug. 1, 2025	
80448	238	<input checked="" type="checkbox"/>	Source of Supply and Quality Requirements	Jan. 2, 2023	Jan. 1, 2026
80340		<input type="checkbox"/>	Speed Display Trailer	April 2, 2014	Jan. 1, 2022
80127		<input type="checkbox"/>	Steel Cost Adjustment	April 2, 2004	Nov. 1, 2025
80480		<input type="checkbox"/>	Structural Repair of Concrete	Jan. 1, 2026	
80397	240	<input checked="" type="checkbox"/>	Subcontractor and DBE Payment Reporting	April 2, 2018	
80391	241	<input checked="" type="checkbox"/>	Subcontractor Mobilization Payments	Nov. 2, 2017	April 1, 2019
80463	242	<input checked="" type="checkbox"/>	Submission of Bidders List Information	Jan. 2, 2025	Mar. 2, 2025

File Name	Pg.		Special Provision Title	Effective	Revised
* 80482	243	<input checked="" type="checkbox"/>	Submission of Payroll Records – Federal Aid Contract	April 1, 2026	
* 80437		<input type="checkbox"/>	Submission of Payroll Records – State Contract	April 1, 2021	April 1, 2026
80435		<input type="checkbox"/>	Surface Testing of Pavements – IRI	Jan. 1, 2021	Jan. 1, 2023
80465	245	<input checked="" type="checkbox"/>	Surveying Services	April 1, 2025	
80481		<input type="checkbox"/>	Temporary Concrete Barrier	Jan. 1, 2026	
80466		<input type="checkbox"/>	Temporary Rumble Strips	April 1, 2025	
80470		<input type="checkbox"/>	Traffic Signal Backplate	Aug. 1, 2025	
20338	246	<input checked="" type="checkbox"/>	Training Special Provisions	Oct. 15, 1975	Sept. 2, 2021
80429		<input type="checkbox"/>	Ultra-Thin Bonded Wearing Course	April 1, 2020	Jan. 1, 2022
80439	249	<input checked="" type="checkbox"/>	Vehicle and Equipment Warning Lights	Nov. 1, 2021	Nov. 1, 2022
80458		<input type="checkbox"/>	Waterproofing Membrane System	Aug. 1, 2024	
80302		<input type="checkbox"/>	Weekly DBE Trucking Reports	June 2, 2012	Jan. 2, 2025
80454	250	<input checked="" type="checkbox"/>	Wood Sign Support	Nov. 1, 2023	
80427	251	<input checked="" type="checkbox"/>	Work Zone Traffic Control Devices	Mar. 2, 2020	Jan. 1, 2026
80071	254	<input checked="" type="checkbox"/>	Working Days	Jan. 1, 2002	

DUPAGE COUNTY, ILLINOIS
SPECIAL PROVISIONS

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

Section No. 24-00071-00-RS
Project No. SCTX(733)
Job No. C-91-031-25
Contract No. 61L84

LOCATION OF PROJECT

The project is located along the centerline of Fullerton Avenue (FAU 1379) between Gary Avenue and Schmale Road within the Village of Carol Stream, DuPage County. The net and gross length of the improvement is 5,229.49 feet (0.990 mile).

DESCRIPTION OF PROJECT

The work consists of the bituminous surface milling, leveling courses, hot-mix asphalt surface and binder courses, curb and gutter removal, sidewalk removal, new curb and gutter, new sidewalk with ADA ramps, driveway removal and replacement, street lighting, aggregate base course, pavement marking and signing, landscaping, erosion control, restoration and all incidental and collateral work necessary to complete the project as shown on plans and as described herein.

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-LR)

Effective: January 13, 2026

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

UTILITIES TO BE ADJUSTED

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

Pre-Stage

STAGE / LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
127+86, 30' LT	ComEd	The wood pole acts as a tie back for a power pole on the opposite side of the street. The wood pole conflicts with the proposed sidewalk.	Commonwealth Edison	5 days

Pre-Stage: 5 Days Total Installation
Stage 1 - No conflicts anticipated
Stage 2 - No conflicts anticipated

Stage 3 - No conflicts anticipated
Stage 4 - No conflicts anticipated

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
Astound	Ng William	312-955-3356	William.ng@astound.com
ATT	Tom Laskowski		g05256@att.com
ComEd		866-639-3532	
Comcast	Martha Gieras		martha_gieras@cable.comcast.com
DuPage County	Jeremy Lee		Jeremy.lee@dupagecounty.gov
Everstream GLC	Amanda Vander Kelen		avanderkelen@everstream.net
Adesta	Ryan Aguirre		ryan.aguirre@aus.com
Nicor			
Vinakom	Dickey Patel		dicky.patel@vinakom.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.

Stage 1

STAGE / LOCATION	TYPE	DESCRIPTION	OWNER
Sta. 115+00 to 121+00, 44' LT	Underground Gas Line, 4"	The Contractor is alerted that there is a 4" gas main running parallel and under the drainage ditch. There is no conflict with the proposed improvements, however, contractors shall not leave sanding equipment over the top of the gas main.	Nicor
Sta. 135+05, 34' to 94' LT (Kimberly)	Underground Gas Line, 4"	The Contractor is alerted that there is a 4" gas main running under the pcc widening at the NE corner of	Nicor

		Kimberly and Fullerton intersection. There is no conflict with the proposed improvements, however, contractors shall verify the depth of the existing gas main prior to excavation.	
Sta. 141+72, 15' to 45' LT	Underground Gas Line, 4"	The Contractor is alerted that there is a 4" gas main running under the proposed driveway. There is no conflict with the proposed improvements, however, contractors shall verify the depth of the existing gas main prior to excavation.	Nicor
Sta. 150+11, 38' to 48' LT (Center)	Underground Gas Line, 4"	The Contractor is alerted that there is a 4" gas main running under the proposed sidewalk on the NW corner of Center and Fullerton. There is no conflict with the proposed improvements, however, contractors shall verify the depth of the existing gas main prior to excavation.	Nicor

Stage 2

STAGE / LOCATION	TYPE	DESCRIPTION	OWNER
Sta. 115+00 to 118+80, 49' RT	Overhead Electric Lines	The Contractor is alerted that there Are overhead electric lines running parallel to the ROW and adjacent to the Seeding Special work area. There is no conflict with the proposed improvements, however, contractors shall not leave sanding equipment under the overhead electric lines.	ComEd
Sta. 121+00 to 146+00, 24' RT	Underground Gas Line, 4"	The Contractor is alerted in areas of curb & gutter and driveway R&R there is a 4" gas main running approx.5' parallel and behind the BOC. There is no conflict with the proposed improvements, however, contractors shall verify the location of the existing gas main prior to excavation.	Nicor
Sta. 121+60, 5' RT Sta. 135+06, 30' LT Sta. 138+10, 5' RT	Underground Gas Line, 4"	The Contractor is alerted in areas of proposed street lighting cable/conduit is being installed across a 4" gas main running approx.5' parallel and behind the BOC. Contractor will maintain 1' of clearance with the gas main. Contractor shall verify the location of the existing gas main prior to excavation.	Nicor

Sta. 156+00 to 167+00, 24' to 43' RT	Underground Gas Line, 4"	The Contractor is alerted in areas of curb & gutter and driveway R&R there is a 4" gas main running approx.5' parallel and behind the BOC. There is no conflict with the proposed improvements, however, contractors shall verify the location of the existing gas main prior to excavation.	Nicor
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Stage 3 - No extra consideration required.
Stage 4 - No extra consideration required.

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

Agency/Company Responsible to Resolve Conflict	Name of contact	Phone	E-mail address
Astound	Ng William	312-955-3356	William.ng@astound.com
ATT	Tom Laskowski		g05256@att.com
ComEd		866-639-3532	
Comcast	Martha Gieras		martha_gieras@cable.comcast.com
DuPage County	Jeremy Lee		Jeremy.lee@dupagecounty.gov
Everstream GLC	Amanda Vander Kelen		avanderkelen@everstream.net
Adesta	Ryan Aguirre		ryan.aguirre@aus.com
Nicor			
Vinakom	Dickey Patel		dicky.patel@vinakom.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 contractor is responsible for contacting JULIE (or DIGGER within the City of Chicago) prior to any excavation work. Please note that IDOT electrical facilities are not part of the one-call locating services, such as JULIE or DIGGER.

If the contract requires the services of an electrical contractor, it is the contractor's responsibility, at their own expense, to locate existing IDOT and/or local agency electrical facilities before commencing work. For contracts that do not require an electrical contractor, the contractor may request one free locate of IDOT electrical facilities by contacting the Department's Electrical Maintenance Contractor and/or the appropriate local agency electrical maintenance contractor. Additional locate requests will be at the contractor's expense.

For work on or near IDOT ROW on contracts without an electrical contractor, the Department's Electrical Maintenance Contractor must be notified at least 72 hours in advance of the work by calling 773-287-7600 or emailing dispatch@meade100.com to arrange for the locating of underground electrical facilities.

Please note, the marking of underground facilities does not absolve the contractor of their responsibility to repair or replace any facilities damaged during construction at their expense.

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:

- Preliminary Environmental Site Assessment (Prepared by Hampton, Lenzini and Renwick dated: November 2024)
- Preliminary Site Investigation (Prepared by Hampton, Lenzini and Renwick, dated June 30, 2025)
- Soils/Geotechnical Report
 - Geotech Data Report Fullerton Ave. Reconstruction from Gary Ave. to Schmale Rd. (Prepared by Wang Engineering, dated: June 14, 2024)
- Other: LPC 663 Test Results/Additional Information (By HLR July 2, 2025)

Those seeking these reports should request access from:

Village of Carol Stream Adam Frederick, PE
afrederick@carolstream.org
500 N. Gary Avenue, Carol Stream, IL 60188
(630) 868-2263
Hours: 8 AM to 4 PM (Monday - Friday)

CHANGEABLE MESSAGE SIGN

Description. The project will require that electronic changeable message signs be placed on the east and west ends sides of the project or as directed by the Engineer to warn the public of the pending road construction and road closures. The message boards will need to be placed and set out for seven (7) days in advance of the anticipated first day of construction.

Unless otherwise directed by the Engineer, the signs shall remain in place for the duration of the project. The Contractor will coordinate with the Engineer on the exact placement of the message boards and the message that is to be displayed.

Method of Measurement. Message board(s) will be paid for per Calendar Day for each message sign utilized (2 signs are anticipated for this project).

Basis of Payment. The signs shall be removed after the specified duration of time or as directed by the Engineer. The Contractor will coordinate with the Engineer on the exact placement of the message boards and the message that is to be displayed. The message boards will be paid for as CHANGEABLE MESSAGE SIGN per CALENDAR DAY for each message sign utilized. There will be no additional compensation for periodically changing the message when directed by the Engineer.

CONTRACTORS RIGHT-OF-ENTRY AGREEMENT

Description. In accordance with Article 107.04, the Contractor shall be required to procure a Contractor's Right-of-Entry Agreement with the Canadian National Railroad that will allow the Contractor to perform work as shown in the plans within the railroad property.

Basis of Payment. This item will not be measured separately for payment but shall be included in the cost of the items of work within the railroad right of way.

DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED

Description. This work shall consist of the adjustment of inlets, catch basins, valve vaults, and drainage manholes located within the curb and gutter line, driveway, sidewalk or turf areas as directed by the Engineer in the field. This item of work shall consist of the adjustment of the existing, regardless of the type of structure, with a new frame and grate/lid of the type that matches the existing frame and grate/lid in accordance with the applicable portions of Section 602 of the Standard Specifications. The work shall include replacement of existing broken adjustment rings, removal and disposal of the existing frame and grate and new adjusting rings at locations as directed by the Engineer.

If the structure is a combination sewer or sanitary manhole then chimney seals shall be provided.

Closed lids shall have machined bearing surfaces, and "concealed" pick holes. The top surface of lids shall be embossed with the words "STORM", "WATER" or "SANITARY" as applicable to the utility.

Enviro-curb logos on curb boxes for Type 11 frame and grate shall have the words "DUMP NO WASTE" and "DRAINS TO RIVER" or "DRAINS TO WATERWAY" cast into the top of all curb boxes.

In addition to those structures shown on the plans, an additional nominal quantity has been added to the plan to be used at the discretion of the Engineer.

Basis of Payment. This work shall be paid for at the contract unit price per EACH for DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED, regardless of the type of frame and grate/lid, which price shall be payment in full for furnishing the new frame and grate, adjusting rings, and disposal of the existing frame and rings, mortar, and all materials, labor and equipment necessary to adjust the drainage structures complete in place.

DUPAGE COUNTY HIGHWAY PERMITS

Description: The Contractor shall be aware that DuPage County permits are required for this project. These permits have been submitted (# DOT2025-0326) for approval by the permitting agency and conditional approval for each permit has been given. In order secure full approval the Contractor will be required to submit the permit application with his/her company information required by the permit. The following are the required permits and the forms can be found in these special provisions.

DuPage County Highway Permit

The Contractor shall begin the process of acquiring each permit as soon as the contract has been awarded and shall include the following items:

- Contractor shall provide and submit information required on the CONTRACTOR (DOT) INFORMATION form (included at the end of these provisions).
- Contractor shall provide bonding - The general contractor shall provide bonding in the amount of 110% of cost of the project within DPC right-of-way. The contractor shall provide an executed contract to substantiate the amount for the County's approval prior to submitting a bond.
- Contractor shall provide certificate of insurance - The general contractor shall provide a Certificate of Insurance, naming "County of DuPage c/o Division of Transportation" as Certificate Holder, based upon the requirements of Art. 107.27 of IDOT's "Standard Specifications for Road and Bridge Construction" (latest edition) for said project per the attached information and sample certificate included at the end of these provisions. The description of the certificate should include the note; "The Certificate Holder is named as additional insured with respect to general liability for all work performed within DuPage County rights-of-way" rather than solely for the specific project. DPC DOT requires specific endorsements listing the "County of DuPage c/o Division of Transportation" as additional insured for Commercial General Liability and Auto Liability. We also require Notice of Cancellation endorsements for ALL policies listed on the Certificate of Insurance. For

additional insurance information visit this web link. [Microsoft Word - HighwayPermitProcedures12072010.doc](#)

- For questions regarding your Certificate of Insurance, contact Ms. Christine Bentley, Administrative Specialist at 630/407-6919 or via e-mail christine.bentley@dupageco.org
- For additional insurance information visit this web link. [Highway Permit Insurance Reqs.pdf](#)
- Provide sub-contractors contact information (business name, address, contact person, e-mail address, telephone number, etc.)
- Provide your onsite Forman and Traffic Control Company's contact information (24hr cell phone number /e-mail address) for our file.
- Submit a construction schedule to our office permits.

Basis of Payment: Coordination, cost, submittal shall be in accordance with Section 107.04 of the Standard Specifications.

EXPLORATION TRENCH (SPECIAL)

Description: This work shall be as required in Section 213 of the Standard Specifications and shall also consist of excavating a trench of sufficient width (minimum 60"), length and depth (as field determined) to expose existing utilities, potential utility conflicts, other utility obstructions, underdrains and/or field tiles shown on the plans or as determined by the Engineer.

Construction Requirements: The depth and width of trench shall be of adequate width to allow investigation of the item in the trench. The maximum depth shall be based on the depth of the proposed utility depth, to the point of potential utility conflict, or the point of the field tile connection.

The exploration holes will also be completed at all locations where the proposed sewers, casing pipe, underdrains or culvert pipes cross an existing utility line where meeting clearance requirements are essential and adjustment to the existing utility may be necessary prior to starting construction operations to meet said clearance requirements. Other exploration trenches may be excavated at the locations noted on the plans or required by the Engineer.

The depth of the inspection hole shall be necessary to uncover the existing utilities or other obstructions and of adequate width to allow investigation of the investigated item in the hole. In no case does the inspection hole need to be deeper than the proposed invert elevation of the proposed work item being installed plus the clearance requirement.

The Contractor shall expose all existing field tiles where they are to be connected to proposed drainage structures or rerouted as shown in the Plans. The Contractor shall prepare an inventory list with the following information for each location: 1) Northing/Easting, 2) top of field tile elevation,

and 3) diameter of field tile (in inches). This inventory list shall be provided to the Engineer for approval prior to ordering any proposed drainage structures or storm sewer.

After a determination of the condition and/or location adequacy and at the direction of the Engineer, in areas of proposed structural embankment or pavement structures, the Contractor shall backfill the trench with materials meeting the requirement of TRENCH BACKFILL in Section 208 of the Standard Specifications. All areas outside the improvements can be backfilled with the originally excavated material. All excess excavated material created by this work shall be disposed of offsite by the Contractor.

Basis of Payment. This work will be paid for at the contract unit price per FOOT for EXPLORATION TRENCH (SPECIAL) regardless of depth for utility exploration and as specified in Section 213 for underdrain exploration, which will be payment in full for all required work as set forth above. Trench backfill will not be measured separately for payment but shall be INCLUDED in the cost of Exploration Trench, Special. Preparation of the inventory list will not be measured separately for payment but shall also be INCLUDED in the cost of Exploration Trench, Special.

FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)

Description. This work shall consist of the adjustment of inlets, catch basins, valve vaults, and drainage manholes located within the milling and resurfacing areas as directed by the Engineer in the field. This item of work shall consist of the adjustment of the existing drainage structures in the roadway, regardless of the type of structure, with a new frame and grate/lid of the type that matches the existing frame and grate/lid in accordance with the applicable portions of Section 603 of the Standard Specifications and District Detail BD-08 "Details for Frames and Lids Adjustment with Milling" for adjustment of structures in resurfacing sections of the project. The work shall include replacement of existing broken adjustment rings, removal and disposal of the existing frame and grate and new adjusting rings at locations as directed by the Engineer.

If the structure is a combination sewer or sanitary manhole then chimney seals shall be provided. All drainage structure adjustments and frames and lids to be adjusted (special) shall use Portland Cement Concrete. Hot-Mix Asphalt will not be allowed. Each joint shall be sealed according to the manufacturer's specifications as directed per article 602.02 of the Standard Specifications.

Closed lids shall have machined bearing surfaces, and "concealed" pick holes. The top surface of lids shall be embossed with the words "STORM", "WATER" or "SANITARY" as applicable to the utility.

In addition to those structures shown on the plans, an additional nominal quantity has been added to the plan to be used at the discretion of the Engineer.

Basis of Payment. This work shall be paid for at the contract unit price per EACH for FRAMES AND LIDS TO BE ADJUSTED (SPECIAL), regardless of the type of frame and grate/lid, which price shall be payment in full for furnishing the new frame and grate, adjusting rings, and disposal of the existing frame and rings, mortar, and all materials, labor and equipment necessary to adjust the drainage structures complete in place.

HOT-MIX ASPHALT DRIVEWAY PAVEMENT

Description: This work shall consist of constructing hot-mix asphalt driveway pavement on a prepared aggregate base course in accordance with the applicable portions of Section 406 of the Standard Specifications at the locations shown on the plans.

Materials: The materials for this project shall be:

Commercial Entrance

Mix	Design Thickness
Hot Mix Asphalt Binder Course, IL-19.0, N50	8.25"
Hot Mix Asphalt Surface Course, IL-9.5, Mix "D", N50	1.75"
Bituminous Materials – Prime and Tack Coat	

Basis of Payment: The hot-mix asphalt driveway pavement will be paid for at the contract unit price per SQUARE YARD for HOT-MIX ASPHALT DRIVEWAY PAVEMENT, of the thickness specified, which shall include all labor, equipment and material necessary for the completion of the work.

Aggregate base course material and bituminous materials will be measured separately for payment as AGGREGATE BASE COURSE, TYPE B 6" and BITUMINOUS MATERIALS (PRIME COAT or TACK COAT), respectively.

HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH

This work shall consist of grinding the existing pavement surface, including around utility castings as necessary. It shall also include street cleaning and providing all equipment, tools, labor, and incidentals necessary to complete the work in accordance with Article 440.03 of the Standard Specifications and the paving details sheets of the plans.

The roadway shall be ground a variable 4" to 5" at locations as shown on the plans and typical sections to allow for the cross slopes shown on the proposed typical sections to be constructed.

Removal of the grindings shall be the responsibility of the Contractor. The Contractor shall also remove all loose and deleterious material including but not limited to broken concrete, exposed rock of any size, loose grindings, or any other material necessary to prepare the roadway for paving, as directed by the Engineer. The roadway shall be swept following the grinding operation and prior to paving. This work will include a base proof roll test, as directed by the Engineer. **Removal of loose material and street sweeping shall be considered included in the cost of this item.**

The Contractor shall construct and maintain temporary ramps at all ends of the areas removed. This includes the north and south project limits and any other locations, as required by the Engineer. The temporary ramps are to be constructed immediately upon completion of the removal operation and shall be removed prior to placing the proposed surface or binder course. Cold-milled bituminous tailings may be used to construct the temporary ramps. The Engineer can

direct the Contractor to replace the milled material with binder or surface course if the millings can not withstand traffic exposure.

This work shall be paid for at the contract unit price per square yard of HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH. Price shall be payment in full for performing this work, regardless of the number of passes required.

LIGHT POLE FOUNDATION, METAL, 11 1/2” BOLT CIRCLE, 8 5/8” X 6’

Description: This item shall consist of furnishing and installing metal light pole foundations as specified herein and as indicated on the plans. This work shall consist of furnishing and installing metal light pole foundations complete and all hardware and accessories required for the permanent use.

Materials. Metal light pole foundation must be new. No foundations of used, remanufactured, or similar conditions will be accepted.

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

Item	Article/Section
(c) Light Pole Foundation, Metal.....	1070.01
(d) Fine Aggregate.....	1003.04

CONSTRUCTION REQUIREMENTS

Transportation. The Contractor shall transport, handle the metal light pole foundation in complete conformance with industry standard recommendations.

Installation. The installation shall be according to Section 836.03(b) of the Standard Specifications and as modified herein. Unless otherwise indicated, the Contractor shall furnish all labor, tools, and equipment necessary to install the metal light pole foundation as specified herein and indicated on the plans.

Method Of Measurement. Metal light pole foundation shall be counted as, each installed.

Basis of Payment: This work shall be paid for at the contract price each for LIGHT POLE FOUNDATION, METAL, 11 1/2” BOLT CIRCLE, 8 5/8” x 6’, which shall be payment for the work as described herein and as indicated in the plans.

LIGHT POLE, ALUMINUM, 30 F.T. M.H., 8 F.T. MAST ARM

Description. This item shall consist of furnishing and installing a light pole as specified herein and as indicated on the plans. This work shall consist of furnishing and installing a light pole complete and all hardware and accessories required for the permanent use of the pole.

Materials. The light pole arm, shaft and base shall be manufactured and/or supplied by the following:

Arm: Hapco RTA30C7B4M18-01
Pole: Hapco 4 Bolt Base RTA30C8B4M18-01

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

Item	Article/Section
(a) Light Poles.....	1069.01 – 1069.05
(b) Mounting Pad.....	1069.07
(c) Light Pole Identification.....	1069.06

CONSTRUCTION REQUIREMENTS

Transportation. The Contractor shall transport, handle the aluminum pole in complete conformance with industry standard recommendations.

Installation. Installation shall be as described in Article 830.03(a). Unless otherwise indicated, the Contractor shall provide all hardware to install the pole and mast arm as specified herein and indicated on the plans.

Method Of Measurement. Light poles shall be counted as, each installed.

Basis Of Payment. This item shall be paid at the contract unit price each for LIGHT POLE, of the material, mounting height, mast arm quantity and length indicated. The price will be payment in full for furnish the mast arm, pole, base, anchor bolts, covers, wiring, fuses, fuseholders, grounding and all other materials and incidentals required, specified, or shown on the plans, and furnishing all labor, tools, and equipment necessary for the assembly of all equipment, wired, erected, and otherwise complete and in operation.

LPC-663 CLEAN CONSTRUCTION OR DEMOLITION DEBRIS

A soil analysis was performed for this project and a completed IEPA LPC-663 form will be provided to the awarded Contractor for use for the disposal of material generated from this project. This LPC-663 was pre-approved for disposal using the attached Pre-approval letter. If the Contractor chooses not to take it to the pre-approved facility, it is the Contractor's responsibility to locate and dispose of the material at a permitted CCDD facility in accordance with the criteria set forth in 35 Illinois Administrative Code (IAC) 1100 as amended on August 27, 2012.

Pre-approval letters were obtained for this project at the following CCDD Facilities:

Lafarge Aggregates Illinois
7N848 S McLean Blvd,
South Elgin, IL 60177
Contact: Angie Munoz
Email: angelica.munoz@amrize.com
Bluff City Materials – Bartlett
1245 Gifford Road
Elgin, Illinois 60120
Contact: Andy Paxson
Email: AndyP@grp7.com

If the Contractor's desired CCDD facility requires additional sampling and testing, it is the Contractor's responsibility to provide the additional sampling and testing necessary for appropriate disposal. The Contractor shall not be compensated for the additional sampling, testing, or paperwork necessary as required by the CCDD facility. The cost will be included in the cost of the contract.

Soil within the Preliminary Exclusion Zone shall be disposed of in accordance with the REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (PROJECT SPECIFIC) description.

LUMINAIRE, LED, SPECIAL

Description. This work shall consist of furnishing and installing a roadway LED luminaire and shorting cap or photocell as shown on the plans, as specified herein.

General.

The luminaires shall be Autobahn Series ATBM-P50-MVOLT-R2-SH. This code indicates:

ATBM:	Autobahn LED Roadway
P50	18,700 Lumens
MVOLT:	Multi-volt, 120-277V
R2:	Roadway Type II
SH:	Shorting Cap

The shorting cap shall be Intermatic K4500 Shorting Cap, Locking-Type Mounting.

Luminaires, shorting cap and photocell must be new. No luminaires, shorting cap or photocell of used, remanufactured, or similar conditions will be accepted.

Installation. Each luminaire shall be installed according to the luminaire manufacturer's recommendations.

Luminaires which are pole mounted shall be mounted on site such that poles and arms are not left unloaded. Pole mounted luminaires shall be leveled/adjusted after poles are set and vertically aligned before being energized. When mounted on a tenon, care shall be exercised to assure maximum insertion of the mounting tenon. Each luminaire shall be checked to assure compatibility with the project power system. When the night-time check of the lighting system by the Engineer indicates that any luminaires are mis-aligned, the mis-aligned luminaires shall be corrected at no additional cost.

No luminaire shall be installed prior to approval. Where independent testing is required, full approval will not be given until complete test results, demonstrating compliance with the specifications, have been reviewed and accepted by the Engineer.

Pole wiring shall be provided with the luminaire. Pole wire shall run from handhole to luminaire. Pole wire shall be sized No. 10, rated 600 V, RHW/USE-2, and have copper conductors, stranded in conformance with ASTM B 8. Pole wire shall be insulated with cross-linked polyethylene (XLP) insulation. Pole wire shall include a phase, neutral, and green ground wire. Wire shall be trained within the pole or sign structure so as to avoid abrasion or damage to the insulation.

Pole wire shall be extended through the pole, pole grommet, luminaire ring, and any associated arm and tenon. The pole wire shall be terminated in a manner that avoids sharp kinks, pinching, pressure on the insulation, or any other arrangement prone to damaging insulation value and producing poor megger test results. Wires shall be trained away from heat sources within the luminaire. Wires shall be terminated so all strands are extended to the full depth of the terminal lug with the insulation removed far enough so it abuts against the shoulder of the lug, but is not compressed as the lug is tightened.

Included with the pole wiring shall be fusing located in the handhole. Fusing shall be according to Article 1065.01 of the IDOT Standard Specifications with the exception that fuses shall be 6 amperes.

Each luminaire and optical assembly shall be free of all dirt, smudges, etc. Should the optical assembly require cleaning, a luminaire manufacturer approved cleaning procedure shall be used.

Warranty. The entire luminaire and all of its component parts shall be covered by a 5-year warranty. Failure is when one or more of the following occur:

- 1) Negligible light output from more than 10 percent of the discrete LEDs.
- 2) Significant moisture that deteriorates performance of the luminaire.
- 3) Driver that continues to operate at a reduced output due to overheating.

The warranty period shall begin on the date of luminaire shipment. The Contractor shall verify that the Resident Engineer has noted the shipment date in the daily diary. Copy of the shipment documentation shall be submitted.

The replacement luminaire shall be of the same manufacturer, model, and photometric distribution as the original. If at the time of failure the manufacturer no longer exists or the model is no longer available, the Village of Carol Stream shall approve of any substitutions.

Basis of Payment. The work shall be paid for at the contract unit price each for LUMINAIRE, LED, SPECIAL, which price shall be payment in full for all labor, materials, and equipment necessary to complete the work described above and as indicated on the plans. The labor, materials, and equipment necessary to install the shorting cap or photocell shall be included in the unit price for LUMINAIRE, LED, SPECIAL.

PORTLAND CEMENT CONCRETE BASE COURSE WIDENING (VARIABLE DEPTH)

Description. This work will be performed at the locations shown on the plans in accordance with Section 353 and Section 606 of the Standard Specifications and as directed by the Engineer.

The bottom of the concrete base course shall match the bottom of the existing adjacent pavement. The top of the concrete base course should be finished to match the top of the existing adjacent pavement. The minimum thickness of the PCC Base Course Widening shall be 8 inches.

Although not anticipated, if the Portland Cement Concrete Base Course Widening is placed next to the existing concrete base course the new Portland Cement Concrete Base Course Widening shall be tied to the adjacent concrete base course with No. 6 tie bars. Tie bars will not be measured for payment but shall be included in the cost of the pcc base course and pcc base course widening.

Basis of Payment. This work will be paid for at the contract unit price per SQUARE YARD for PORTLAND CEMENT CONCRETE BASE COURSE WIDENING (VARIABLE DEPTH), which shall include all labor, equipment, and materials to complete the work as described herein.

PROPOSED STORM SEWER CONNECTION TO EXISTING MANHOLE

Description. This item shall consist of the construction of proposed storm sewer connection to existing storm sewers or existing drainage structures at locations shown on the plans and as directed by the Engineer. This work shall consist of making a new storm sewer connection to the existing manhole as directed in Sections 502 and 550 of the Standard Specifications. The new opening in the existing drainage structure or storm sewer shall be made in a manner to minimize any structural damage to the drainage structure or storm sewer. Any damage to the existing drainage structure or storm sewer shall be repaired to the Engineer's satisfaction by the Contractor at no additional cost.

Materials. Materials shall be in accordance with Section 1024 of the Standard Specifications.

Construction Requirements: The Contractor shall carefully core into the existing structure at the line and grades as shown on the Contract Drawings. After the storm sewer is installed, the manhole shall be mortared with a non-shrink concrete grout.

Basis of Payment. The work shall be paid for at the contract unit price EACH for PROPOSED STORM SEWER CONNECTION TO EXISTING MANHOLE.

POWER PEDESTALS

Description. This work shall consist of furnishing and installing a power pedestal as shown on the plans, as specified herein.

General. The power pedestal shall be Milbank U6689-O-100-KK-LP-CECHA. Power pedestal must be new. No power pedestal of used, remanufactured, or similar conditions will be accepted.

Installation. Each power pedestal shall be installed according to the power pedestal manufacturer's recommendations. Power pedestal installation is to include all equipment, grounding, bonding, and back filling materials. The installation includes testing to verify proper operation of power pedestal.

Basis of Payment. The work shall be paid for at the contract unit price EACH for POWER PEDESTALS, which price shall be payment in full for all labor, materials, equipment and incidental expenses necessary to complete the work described above and as indicated on the plans.

PROPOSED MANHOLE/CATCH BASIN CONNECTION OVER EXISTING STORM SEWER

Description. This item shall consist of the construction of proposed drainage structure over an existing storm sewer at locations shown on the plans and as directed by the Engineer. This work shall be completed in accordance with Section 602 of the Standard Specifications for Road and Bridge Construction and shall consist of construction of a proposed manhole/catch basin connection over an existing storm sewer.

Construction. The Contractor shall carefully remove the existing storm sewer which falls within the structure. After the manhole/catch basin is installed, all pipe holes within the structure walls shall be mortared with a non-shrink concrete grout. Damage to the existing storm sewer to remain shall be repaired by the Contractor at his own expense.

Method of Measurement. Proposed Manhole/Catch Basin Connection over Existing Storm Sewer shall be measured for payment per each.

Basis of Payment. This work will be measured for payment at the contract unit price per each for PROPOSED MANHOLE/CATCH BASIN CONNECTION OVER EXISTING STORM SEWER. Payment shall be full compensation for materials, labor and equipment required to complete this work. The manhole/catch basin and frame and grate/lid will be paid for separately.

RAILROAD FLAGGER

Description. It is the Contractor's sole responsibility to coordinate with the Canadian National Railroad (CNRR) whenever construction activity is within 25 feet of the centerline of track. The Contractor shall adhere to the CNRR railroad flagging requirements and retain flagmen employed and designated by the CNRR to monitor on-coming train traffic and advise contractor personnel when activity on or near the railroad right of way may proceed.

Arrangements. To make arrangements for flagmen, the Contractor shall contact the Canadian National Railroad (CNRR) at the following phone number:

Steve Elledge
CN – Manager Engineering
815-370-3529

Basis of Payment. This item will be paid for according to Article 107.12 and will be reimbursed according to Article 109.05 of the Standard Specifications.

Reimbursement to the CNRR will be required covering the full eight-hour day during which any flagman is furnished, unless the flagman can be assigned to other Railroad work conducted by the CNRR during a portion of such day, in which event reimbursement will not be required for the portion of the day during which the flagman is engaged in other Railroad work by the CNRR. Reimbursement will also be required for any day not actually worked by the flagman following the flagman's assignment to work on the project for which Railroad is required to pay the flagman and which could not reasonably be avoided by the Railroad by assignment of such flagman to other work, even though Contractor may not be working during such time.

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.

The following contract specific work area shall be monitored by the Environmental Firm for soil contamination and workers protection.

Site 4 – Canadian National Railway, No address, Carol Stream, Illinois

- Station 127+00 to 128+00. All excavation within the railroad and road right-of-way. 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: RCRA Metals, PCBs, Pesticide/Herbicide.

Site 15 – Tri-Sure Carol Stream, 290 Fullerton Avenue, Carol Stream, Illinois

- Station 120+50 To 127+00, RT. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a(5)). Contaminants of concern sampling parameters: VOCs (Benzo(b)fluoranthene) and RCRA Metals (Chromium).

Site 16 – Time Messenger & Trucking Ltd, 140 Fullerton Avenue, Carol Stream, Illinois

- Station 115+00 to 120+50 RT. The Engineer has determined this material meets the criteria of and shall be managed in accordance with Article 669.05(a(5)). Contaminants of concern sampling parameters: VOCs (Benzo(b)fluoranthene) and RCRA Metals (Chromium).

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 HLR-PESA Sites:

None

SAW CUTTING

Description: This item refers to all locations where a saw cut is required for the removal of pavement, curb, gutter, medians, driveways, sidewalk, butt joints, patches or any other structures which are one piece with no construction joints. This saw cut shall be made at the limits of construction or other areas as required to perform the proposed improvements shown on the plans. The saw cut shall be accomplished with a "pavement saw". Wheel type trenchers will not be allowed for final saw cut at the limits of construction.

Basis of Payment. All saw cutting required to complete removal tasks of work shall not be paid for separately but shall be considered INCLUDED in the unit contract price of the related removal item.

RESPONSIBILITY FOR VANDALISM

The Contractor shall be responsible to avoid the defacement of any concrete pours before they have set up. Concrete pavement, sidewalk, driveway, or curbing that has been defaced, in the opinion of the Engineer, shall be removed and replaced by the Contractor at their own expense.

WASHOUT BASIN

Description: This item shall consist of constructing and maintaining a washout basin for concrete trucks and other construction vehicles. The washout basin will be as detailed on the plans.

The Contractor shall provide a straw bale washout basin per the requirements shown in the detail for "Temporary Concrete Washout Facility – Straw Bale" in the erosion control plans. The straw bale washout basin is the minimum required by the Kane-DuPage Soil and Water Conservation District (KDSWCD). The Contractor may request in writing to the Engineer to utilize alternate methods/designs for the washout basin. Any alternate will need to be approved by THE Engineer.

Any washouts constructed that do not meet the requirements of the plans or applicable and/or IUM standards will not be allowed.

The Contractor will be required to coordinate with the Engineer the location of the washout basin.

Basis of Payment: This work shall be paid for at the contract unit price per LUMP SUM for WASHOUT BASIN, which prices shall include, coordination with KDSWCD (if required), general cleaning and removal of all construction debris when two-thirds full or as directed by the Engineer, general maintenance or reconstruct as necessary throughout the duration of use, and all material, labor, tools, equipment, disposal of surplus material, and incidentals necessary to complete this item of work. The Contractor with the approval of the Engineer may choose to utilize multiple washout basins for his work operations. Regardless of how many washout basins are used for the project, the washout basin(s) will be measured for payment as one and only once for the entire project duration.

If an alternate design for the washout basin has been submitted and approved for use in the project there shall be no additional compensation to the original unit bid price for Washout Basin.

WOOD POSTS

Description. This work shall consist of furnishing and installing a wood post to support railroad signing at locations on the plans and as directed by the Engineer.

The wood post shall meet the requirements of BDE 80454 and Section 730 of the Standard Specification. Signs and mounting hardware for signs will be paid for separately and meet the requirements of Section 720 of the Standard Specification.

Basis of Payment. This item will be paid for at the contract price per EACH for WOOD POSTS. The price shall be payment in full for all services, materials, labor, equipment, tools and incidentals to complete this item.

DETECTOR LOOP REPLACEMENT (DUPAGE COUNTY)

Description. This work consists of the complete replacement and testing of traffic signal detector loops damaged during pavement milling and patching operations, in accordance with the applicable portions of Sections, 810, 816, and 886 of the Standard Specifications, Details, and as specified herein.

Construction Requirements. The Contractor shall notify the maintaining agency seven days prior to beginning any operation which may damage existing detector loops at signalized intersections. If damage to the loops is unavoidable, replacement of the existing detection system will be necessary. The work shall be done by an IDOT pre-qualified Electrical Contractor as directed by the Engineer.

Replacement of the loops shall be completed prior to the final surfacing, and shall be accomplished in the following manner. The Contractor shall mark the location of the replacement loops. The County Traffic Signal Coordinator shall be called to approve loop locations prior to the cutting of the pavement. The Contractor may reuse the existing conduit (duct between the existing handhole and the pavement) if it has not been damaged. All burrs shall be removed from the edges of the existing conduit which may cause damage to the new detector loop during installation. If the existing conduit is damaged beyond repair, or if it cannot be located, or if additional conduits are required to provide one lead-in duct for each proposed loop, the Contractor will be required to drill through the existing pavement and into the appropriate handhole, and install 1 inch unit duct conduit. Upon establishment of the duct, the loop may be cut, installed, sealed and spliced to the twisted-shielded cable in the handhole.

The detector loops shall be in operation within 10 calendar days after the placement of level binder is completed.

Submittals. The Contractor will be required to submit materials to be reviewed by DuPage County (or an authorized representative thereof) for approval prior to submitting to Local Roads for review. The submittal to Local Roads shall include any comments made by the local agency.

Method of Measurement. This work will be measured for payment in feet along the sawed slot in the pavement containing the loop and lead-in, rather than the actual length of wire in the slot.

Basis of Payment. This work will be paid for at the contract unit price per FOOT of DETECTOR LOOP REPLACEMENT.

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.”

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 course 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.”

BREAKAWAY DEVICE

Effective: January 1, 2023

Revise the first sentence of Article 1070.04(b)(2) to read:

“The device shall be approximately 9 in. (230 mm) high and shall have a large fiberglass or polyethylene access door of a color to match the base finish which shall be held in place with a button-type tamper resistant stainless-steel screw or other means approved by the Engineer.”

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.”

ELECTRIC SERVICE INSTALLATION

Effective: January 1, 2012

Description. This item shall consist of all material and labor required to extend, connect or modify the electric services, as indicated or specified, which is over and above the work performed by the utility. Unless otherwise indicated, the cost for the utility work, if any, will be reimbursed to the Contractor separately under ELECTRIC UTILITY SERVICE CONNECTION. This item may apply to the work at more than one service location and each will be paid separately.

Materials. Materials shall be in accordance with the Standard Specifications.

CONSTRUCTION REQUIREMENTS

General. The Contractor shall ascertain the work being provided by the electric utility and shall provide all additional material and work not included by other contract pay items required to complete the electric service work in complete compliance with the requirements of the utility.

No additional compensation will be allowed for work required for the electric service, even though not explicitly shown on the Drawings or specified herein

Method Of Measurement. Electric Service Installation shall be counted, each.

Basis Of Payment. This work will be paid for at the contract unit price each for ELECTRIC SERVICE INSTALLATION which shall be payment in full for the work specified herein.

ELECTRIC UTILITY SERVICE CONNECTION (COMED)

Effective: January 1, 2012

Description. This item shall consist of payment for work performed by ComEd in providing or modifying electric service as indicated. THIS MAY INVOLVE WORK AT MORE THAN ONE ELECTRIC SERVICE. For summary of the Electrical Service Drop Locations see the schedule contained elsewhere herein.

CONSTRUCTION REQUIREMENTS

General. It shall be the Contractor's responsibility to contact ComEd. The Contractor shall coordinate his work fully with the ComEd both as to the work required and the timing of the installation. No additional compensation will be granted under this or any other item for extra work caused by failure to meet this requirement. **Please contact ComEd, New Business Center Call Center, at 866 NEW ELECTRIC (1-866-639-3532) to begin the service connection process. The Call Center Representatives will create a work order for the service connection. The representative will ask the requestor for information specific to the request. The representative will assign the request based upon the location of project.**

The Contractor should make particular note of the need for the earliest attention to arrangements with ComEd for service. In the event of delay by ComEd, no extension of time will be considered applicable for the delay unless the Contractor can produce written evidence of a request for electric service within 30 days of execution.

Method Of Payment. The Contractor will be reimbursed to the exact amount of money as billed by ComEd for its services. Work provided by the Contractor for electric service will be paid separately as described under ELECTRIC SERVICE INSTALLATION. No extra compensation shall be paid to the Contractor for any incidental materials and labor required to fulfill the requirements as shown on the plans and specified herein.

For bidding purposes, this item shall be estimated as Five-Thousand dollars (\$7,500).

Basis Of Payment. This work will be paid for at the contract lump sum price for ELECTRIC UTILITY SERVICE CONNECTION which shall be reimbursement in full for electric utility service charges.

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).

EMBANKMENT I

Effective: March 1, 2011

Revised: November 1, 2013

Description. This work shall be according to Section 205 of the Standard Specifications except for the following.

Material. All material shall be approved by the District Geotechnical Engineer. The proposed material must meet the following requirements.

- a) The laboratory Standard Dry Density shall be a minimum of 90 lb/cu ft (1450 kg/cu m) when determined according to AASHTO T 99 (Method C).
- b) The organic content shall be less than ten percent determined according to AASHTO T 194 (Wet Combustion).
- c) Soils which demonstrate the following properties shall be restricted to the interior of the embankment and shall be covered on both the sides and top of the embankment by a minimum of 3 ft (900 mm) of soil not considered detrimental in terms of erosion potential or excess volume change.
 - 1) A grain size distribution with less than 35 percent passing the number 75 um (#200) sieve.

- 2) A plasticity index (PI) of less than 12.
- 3) A liquid limit (LL) in excess of 50.
- d) Reclaimed asphalt shall not be used within the ground water table or as a fill if ground water is present.
- e) The RAP used shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications". Gradation deleterious count shall not exceed 10% of total RAP and 5% of other by total weight.

CONSTRUCTION REQUIREMENTS

Samples. Embankment material shall be sampled, tested, and approved before use. The contractor shall identify embankment sources, and provide equipment as the Engineer requires, for the collection of samples from those sources. Samples will be furnished to the Geotechnical Engineer a minimum of three weeks prior to use in order that laboratory tests for approval and compaction can be performed. Embankment material placement cannot begin until tests are completed and approval given.

Placing Material. In addition to Article 202.03, broken concrete, reclaimed asphalt with no expansive aggregate, or uncontaminated dirt and sand generated from construction or demolition activities shall be placed in 6 inches (150 mm) lifts and disked with the underlying lift until a uniform homogenous material is formed. This process also applies to the overlaying lifts. The disk must have a minimum blade diameter of 24 inches (600 mm).

When embankments are to be constructed on hillsides or existing slopes that are steeper than 3H:1V, steps shall be keyed into the existing slope by stepping and benching as shown in the plans or as directed by the Engineer.

Compaction. Soils classification for moisture content control will be determined by the Soils Inspector using visual field examination techniques and the IDH Textural Classification Chart.

When tested for density in place each lift shall have a maximum moisture content as follows.

- a) A maximum of 110 percent of the optimum moisture for all forms of clay soils.
- b) A maximum of 105 percent of the optimum moisture for all forms of clay loam soils.

Stability. The requirement for embankment stability in Article 205.04 will be measured with a Dynamic Cone Penetrometer (DCP) according to the test method in the IDOT Geotechnical Manual. The penetration rate must be equal or less than 1.5 inches (38 mm) per blow.

Basis of Payment. This work will not be paid separately but will be considered as INCLUDED in the various items of excavation.

FRICITION AGGREGATE (D-1)

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	<u>Allowed Alone or in Combination</u> ^{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	<u>Allowed Alone or in Combination</u> ^{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	<u>Allowed Alone or in Combination</u> ^{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	<u>Allowed Alone or in Combination</u> ^{5/} : Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/}

Use	Mixture	Aggregates Allowed	
HMA High ESAL	D Surface and Binder IL-9.5 or IL-9.5FG	<u>Allowed Alone or in Combination</u> ^{5/} : Crushed Gravel Carbonate Crushed Stone (other than Limestone) ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/}	
		<u>Other Combinations Allowed:</u>	
		<i>Up to...</i>	<i>With...</i>
		25% Limestone	Dolomite
		50% Limestone	Any Mixture D aggregate other than Dolomite
		75% Limestone	Crushed Slag (ACBF) or Crushed Sandstone
HMA High ESAL	E Surface IL-9.5 SMA Ndesign 80 Surface	<u>Allowed Alone or in Combination</u> ^{5/ 6/} : Crushed Gravel Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.	
		<u>Other Combinations Allowed:</u>	
		<i>Up to...</i>	<i>With...</i>
		50% Dolomite ^{2/}	Any Mixture E aggregate
		75% Dolomite ^{2/}	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone
		75% Crushed Gravel ^{2/}	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag

Use	Mixture	Aggregates Allowed		
HMA High ESAL	F Surface IL-9.5 SMA Ndesign 80 Surface	<u>Allowed Alone or in Combination</u> ^{5/ 6/} :		
		Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.		
		<u>Other Combinations Allowed:</u>		
		<table border="1"> <thead> <tr> <th><i>Up to...</i></th> <th><i>With...</i></th> </tr> </thead> <tbody> <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> </tbody> </table>	<i>Up to...</i>	<i>With...</i>
<i>Up to...</i>	<i>With...</i>			
50% Crushed Gravel ^{2/} or Dolomite ^{2/}	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone			

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

GENERAL ELECTRICAL REQUIREMENTS

Effective: July 1, 2025

This special provision replaces Articles 801.01 – 801.07, 801.09 – 801-16 of the Standard Specifications.

Definition. Codes, standards, and industry specifications cited for electrical work shall be by definition the latest adopted version thereof, unless indicated otherwise.

Materials shall include electrical equipment, fittings, devices, motors, appliances, fixtures, apparatus, all hardware and appurtenances, and the like, used as part of, or in connection with, electrical installation.

Standards of Installation. Materials shall be installed according to the manufacturer’s recommendations, the NEC, OSHA, the NESC, and AASHTO’s Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals.

All like materials shall be from the same manufacturer. Listed and labeled materials shall be used whenever possible. The listing shall be according to UL or an approved equivalent.

Safety and Protection. Safety and protection requirements shall be as follows.

Safety. Electrical systems shall not be left in an exposed or otherwise hazardous condition. All electrical boxes, cabinets, pole handholes, etc. which contain wiring, either energized or non-energized, shall be closed or shall have covers in place and be locked when possible, during nonworking hours.

Protection. Electrical raceway or duct openings shall be capped or otherwise sealed from the entrance of water and dirt. Wiring shall be protected from mechanical injury.

Equipment Grounding Conductor. All electrical systems, materials, and appurtenances shall be grounded. Good ground continuity throughout the electrical system shall be assured, even though every detail of the requirements is not specified or shown. Electrical circuits shall have a continuous insulated equipment grounding conductor. When metallic conduit is used, it shall be bonded to the equipment grounding conductor, but shall not be used as the equipment grounding conductor.

Detector loop lead-in circuits, circuits under 50 volts, and runs of fiber optic cable will not require an equipment grounding conductor.

Where connections are made to painted surfaces, the paint shall be scraped to fully expose metal at the connection point. After the connection is completed, the paint system shall be repaired to the satisfaction of the Engineer.

Bonding of all boxes and other metallic enclosures throughout the wiring system to the equipment grounding conductor shall be made using a splice and pigtail connection. Mechanical connectors shall have a serrated washer at the contact surface.

All connections to structural steel or fencing shall be made with exothermic welds. Care shall be taken not to weaken load carrying members. Where connections are made to epoxy coated reinforcing steel, the epoxy coating shall be sufficiently removed to facilitate a mechanical connection. The epoxy coating shall be repaired to the satisfaction of the Engineer. Where connections are made to insulated conductors, the connection shall be wrapped with at least four layers of electrical tape extended 6 in. (150 mm) onto the conductor insulation.

Submittals. At the preconstruction meeting, the Contractor shall submit a written listing of manufacturers for all major electrical and mechanical items. The list of manufacturers shall be binding, except by written request from the Contractor and approval by the Engineer. The request shall include acceptable reasons and documentation for the change.

Within 30 calendar days after contract execution, the Contractor shall submit, for approval, through the method as directed in the pre-construction meeting. Submittals for the materials for each individual pay item shall be complete in every respect. Submittals which include multiple pay items shall have all submittal material for each item or group of items covered by a particular specification, grouped together and the applicable pay item identified. Various submittals shall,

when taken together, form a complete coordinated package. A partial submittal will be returned without review unless prior written permission is obtained from the Engineer.

Submittals shall be provided for all items used, temporary and permanent, for review and approval.

Equipment which will be owned and maintained by a local agency other than the State shall be reviewed and approved by that agency prior to submittal to the State. The submittal to the State shall include any comments made by the local agency.

Each PDF document must be a vector format PDF from the originating supplier or program and not scanned images.

The submittal must clearly identify the specific model number or catalog number of the item being proposed. Submittals must be the Manufacturers current published information. Out of date submittal material will be grounds for rejection.

The submittal shall be properly identified by Contractor, Pay Item Number, route, section, county, and contract number. Example:

Contractor: Contractor Name
 Pay Item: X0327607
 Route: I-00
 Section: 2013-xxx-yzx
 County: Cook
 Contract: 12Z34

The Contractor shall have reviewed the submittal material and affixed the Contractor’s stamp of approval, with date and signature, for each individual item prior to submittal. The Contractor’s approval stamp shall be the first page of the submittal.

Illegible print, incompleteness, inaccuracy, or lack of coordination will be grounds for rejection.

Items from multiple disciplines shall not be combined on a single submittal and transmittal. Items for lighting, signals, surveillance, and CCTV must be in separate submittals since they may be reviewed by various personnel in various locations.

The Department may provide a list of pay items broken out by discipline upon request for a particular contract. In general, the disciplines are as follows:

Discipline	Typical Items
ITS	CCTV CCTV structures Communication vaults Fiber optic Fiber optic duct Network equipment
Lighting	Breakaway devices Light poles

Discipline	Typical Items
	Light tower Lighting cables Lighting controllers Luminares Unit duct
Pump Station	All pump station equipment
Signing	Signing
Surveillance	Loop cables Detector equipment & associated structures Ramp metering & associated structures Wireless pavement sensors and assoc. structures Radar detection Data Probing Handholes Dynamic Message Signs (DMS)
Traffic Signal	Controllers/Cabinets Handholes Illuminated signs Pedestrian Push Buttons Signal Cable Signal Detectors Signal Heads Signal Loop Cable Signal Modules Signal Structures
Local Roads Lighting	Same as lighting
Local Roads Traffic Signal	Same as traffic signal
Discipline with the predominate amount of work in contract or ask Engineer.	Raceways Electric cables Junction boxes

The Engineer will review the submittals for conformance with the design concept of the project according to Article 105.04 and the following. The Engineer will stamp the drawings indicating their status as “Approved”, “Approved as Noted”, “Disapproved”, “Incomplete”, or “Information Only”. Since the Engineer’s review is for conformance with the design concept only, it shall be the Contractor’s responsibility to coordinate the various items into a working system as specified. The Contractor shall not be relieved from responsibility for errors or omissions in the shop, working, or layout drawings by the Engineer’s approval thereof. The Contractor shall still be in full compliance with contract and specification requirements.

All submitted items reviewed and marked “Disapproved”, “Incomplete” or “Approved as Noted” shall be resubmitted by the Contractor in their entirety, unless otherwise indicated within the submittal comments.

Work shall not begin until the Engineer has approved the submittal. Material installed prior to approval by the Engineer, will be subject to removal and replacement at no additional cost to the Department.

Certifications. When certifications are specified and are available prior to material manufacture, the certification shall be included in the submittal information. When specified and only available after manufacture, the submittal shall include a statement of intent to furnish certification. All certificates shall be complete with all appropriate test dates and data.

Authorized Project Delay. See Article 801.08

Maintenance transfer and Preconstruction Inspection:

General. Before performing any excavation, removal, or installation work (electrical or otherwise) at the site, the Contractor shall request a maintenance transfer and preconstruction site inspection, to be held in the presence of the Engineer and a representative of the party or parties responsible for maintenance of any electrical systems (lighting, ITS, Pump Station, Surveillance, and traffic control systems) which may be affected by the work. The request for the maintenance transfer and preconstruction inspection shall be made no less than fourteen (14) calendar days prior to the desired inspection date. The maintenance transfer and preconstruction inspection shall:

Establish the procedures for formal transfer of maintenance responsibility required for the construction period.

Establish the approximate location and operating condition of the electrical systems which may be affected by the work.

Marking of Existing Cable Systems. The party responsible for maintenance of any existing electrical systems at the project site will, at the Contractor's request, mark and/or stake, once per location, all underground cable routes owned or maintained by the State. A project may involve multiple "locations" where separated electrical systems are involved (i.e. different controllers). The markings shall be taken to have a horizontal tolerance of at least 1 foot (304.8 mm) to either side. The request for the cable locations and marking shall be made at the same time the request for the maintenance transfer and preconstruction inspection is made. The Contractor shall exercise extreme caution where existing buried cable runs are involved. The markings of existing systems are made strictly for assistance to the Contractor and this does not relieve the Contractor of responsibility for the repair or replacement of any cable run damaged in the course of his work, as specified elsewhere herein. Note that the contractor shall be entitled to only one request for location marking of existing systems and that multiple requests may only be honored at the contractor's expense. No locates will be made after maintenance is transferred unless it is at the contractor's expense.

Condition of Existing Systems. The Contractor shall conduct an inventory of all existing electrical system equipment within the project limits, which may be affected by the work, making note of any parts which are found broken or missing, defective or malfunctioning. Megger and load readings shall be taken for all existing circuits which will remain in place or be modified. If a circuit is to be taken out in its entirety, then readings do not have to be taken. The inventory and test data shall be reviewed with and approved by the Engineer and a record of the inventory shall be submitted to the Engineer for the record. Without such a record, all systems transferred to the Contractor for maintenance during construction shall be returned at the end of construction in complete, fully operating condition."

Maintenance and Responsibility During Construction.

Lighting Operation and Maintenance Responsibility. The scope of work shall include the assumption of responsibility for the continuing operation and maintenance of the existing, proposed, temporary, sign and navigation lighting, or other lighting systems and all appurtenances affected by the work as specified elsewhere herein. Maintenance of lighting systems is specified elsewhere and will be paid for separately.

The proposed lighting system must be operational prior to opening the roadway to traffic unless temporary lighting exists which is designed and installed to properly illuminate the roadway.

Electrical Infrastructure During Construction. The scope of work shall include locating and marking the proposed underground infrastructure installed in this contract.

Energy and Demand Charges. The payment of basic energy and demand charges by the electric utility for existing lighting which remains in service will continue as a responsibility of the Owner, unless otherwise indicated. Unless otherwise indicated or required by the Engineer duplicate lighting systems (such as temporary lighting and proposed new lighting) shall not be operated simultaneously at the Owner's expense and lighting systems shall not be kept in operation during long daytime periods at the Owner's expense. Upon written authorization from the Engineer to place a proposed new lighting system in service, whether the system has passed final acceptance or not, (such as to allow temporary lighting to be removed), the Owner will accept responsibility for energy and demand charges for such lighting, effective the date of authorization. All other energy and demand payments to the utility shall be the responsibility of the Contractor until final acceptance.

Damage to Electrical Systems. Should damage occur to any existing electrical systems through the Contractor's operations, the Engineer will designate the repairs as emergency or non-emergency in nature.

Emergency repairs shall be made by the Contractor, or as determined by the Engineer, the Department, or its agent. Non-emergency repairs shall be performed by the Contractor within six working days following discovery or notification. All repairs shall be performed in an expeditious manner to assure all electrical systems are operational as soon as possible. The repairs shall be performed at no additional cost to the Department.

Lighting. An outage will be considered an emergency when three or more lights on a circuit or three successive lights are not operational. Knocked down materials, which result in a danger to the motoring public, will be considered an emergency repair.

Temporary aerial multi-conductor cable, with grounded messenger cable, will be permitted if it does not interfere with traffic or other operations, and if the Engineer determines it does not require unacceptable modification to existing installations.

Marking Proposed Locations. The Contractor shall mark or stake the proposed locations of all poles, cabinets, junction boxes, pull boxes, handholes, cable routes, pavement crossings, and other items pertinent to the work. A proposed location inspection by the Engineer shall be

requested prior to any excavation, construction, or installation work after all proposed installation locations are marked. Any work installed without location approval is subject to corrective action at no additional cost to the Department.

Inspection of electrical work. Inspection of electrical work shall be according to Article 105.12 and the following.

Before any splice, tap, or electrical connection is covered in handholes, junction boxes, light poles, or other enclosures, the Contractor shall notify and make available such wiring for the Engineer's inspection.

Testing.

General. Before final inspection, the electrical work shall be tested. Tests may be made progressively as parts of the work are completed or may be made when the work is complete. Tests shall be made in the presence of the Engineer. Items which fail to test satisfactorily shall be repaired or replaced. Tests shall include checks of control operation, system voltages, cable insulation, and ground resistance and continuity.

The forms for recording test readings will be available from the Engineer in electronic format. The Contractor shall provide the Engineer with a written report of all test data including the following:

- Voltage Tests
- Amperage Tests
- Insulation Resistance Tests
- Continuity tests
- Resistance of Grounding Electrodes
- Detector Loop Tests

Lighting systems. The following tests shall be made.

- (1) Voltage Measurements. Voltages in the cabinet from phase to phase and phase to neutral, at no load and at full load, shall be measured and recorded. Voltage readings at the last termination of each circuit shall be measured and recorded.
- (2) Insulation Resistance. Insulation resistance to ground of each circuit at the cabinet shall be measured and recorded with all loads disconnected. Prior to performance of the insulation resistance test, the Contractor shall remove all fuses within all light pole bases on a circuit to segregate the luminaire loads.

On tests of new cable runs, the readings shall exceed 50 megohms for phase and neutral conductors with a connected load over 20A and shall exceed 100 megohms for conductors with a connected load of 20A or less.

On tests of cable runs which include cables which were existing in service prior to this contract, the resistance readings shall be the same or better than the readings

recorded at the maintenance transfer at the beginning of the contract. Measurements shall be taken with a megohm meter approved by the Engineer.

- (3) Loads. The current of each circuit, phase main, and neutral shall be measured and recorded. The Engineer may direct reasonable circuit rearrangement. The current readings shall be within ten percent of the connected load based on material ratings.
- (4) Ground Continuity. Resistance of the system ground as taken from the farthest extension of each circuit run from the controller (i.e. check of equipment ground continuity for each circuit) shall be measured and recorded. Readings shall not exceed 2.0 ohms, regardless of the length of the circuit.
- (5) Resistance of Grounding Electrodes. Resistance to ground of all grounding electrodes shall be measured and recorded. Measurements shall be made with a ground tester during dry soil conditions as approved by the Engineer. Resistance to ground shall not exceed 10 ohms.

Surveillance. The following tests shall be made in addition to the lighting system test above.

- (1) Detector Loops. Before and after permanently securing the loop in the pavement, the resistance, inductance, resistance to ground, and quality factor for each loop and lead-in circuit shall be tested.
- (2) The loop and lead-in circuit shall have an inductance between 20 and 2500 microhenries.
- (3) The resistance to ground shall be a minimum of 50 megohms under any conditions of weather or moisture.
- (4) The continuity test of the loop and loop lead-in shall not have a resistance greater than two (2) ohms
- (5) The quality factor (Q) shall be 5 or greater.

Loops which fail to test satisfactorily shall be repaired or replaced.

Telecommunication Cable. Once the telecommunication cable is installed complete with all cable terminations complete the Contractor shall request an end-to-end test. The Contractor shall request the end-to-end test at least 7 days in advance to the TSC Engineer. Any lane closures and/or any other safety measures that need to be taken shall be provided for by the Contractor and shall be considered incidental to the cost of this item. The type of test performed shall be an end-to-end test with Halcyon type equipment transmitting and receiving at each end of the cable. Each pair shall be tested, and the results shall be recorded and submitted to the Engineer. If any results don't fall within the requirements set forth in (REA) PE-39, the Contractor shall correct and re-test that cable pair. Traffic Systems will tolerate only one pair out of every 100 pair of cable that doesn't meet or exceed specifications set forth in (REA) PE-39.

Wireless In-Pavement Detection Systems shall be tested in accordance with the approved testing procedures provided in the catalog cut submittal.

Fiber Optic Systems.

The Contractor shall submit detailed test procedures for approval by the Engineer. All fibers (terminated and un-terminated) shall be tested bi-directionally at both 1310 nm and 1550 nm with both an Optical Time Domain Reflectometer (OTDR) and a power meter with an optical source. For testing, intermediate breakout fibers may be concatenated and tested end-to-end. Any discrepancies between the measured results and these specifications will be resolved to the satisfaction of the Engineer.

Fibers which are not to be terminated shall be tested with a temporary fusion spliced pigtail fiber. **Mechanical splice or bare fiber adapters are not acceptable.**

The Contractor shall provide the date, time and location of any tests required by this specification to the Engineer at least 5 working (7 calendar) days before performing the test. Included with the notification shall be a record drawing of the installed fiber optic cable system. The drawings shall indicate actual installed routing of the cable, the locations of splices, and locations of cable slack with slack quantities identified.

Upon completion of the cable installation, splicing, and termination, the Contractor shall test all fibers for continuity, events above 0.1 dB, and total attenuation of the cable. The test procedure shall be as follows:

A Certified Technician utilizing an Optical Time Domain Reflectometer (OTDR) and Optical Source/Power Meter shall conduct the installation test. The test equipment used shall have been calibrated within the last two years. Documentation shall be provided. The Technician is directed to conduct the test using the standard operating procedures defined by the manufacturer of the test equipment. All fibers installed shall be tested in both directions.

A fiber ring or fiber box shall be used to connect the OTDR to the fiber optic cable under test at both the launch and receive ends. The tests shall be conducted at 1310 and 1550 nm for all fibers.

All testing shall be witnessed by the IDOT Engineer, and a copy of the test results (CD ROM or USB Drive) shall be submitted on the same day of the test. Hardcopies shall be submitted as described herein with copies on CD ROM or USB Drive.

At the completion of the test, the Contractor shall provide copies of the documentation of the test results to the Project Engineer. The test documentation shall be submitted as two bound copies and three CD ROM, or USB drive copies, and shall include the following:

Cable & Fiber Identification:

- Cable ID
- Cable Location - beginning and end point
- Fiber ID, including tube and fiber color
- Wavelength
- Pulse width (OTDR)
- Refractory index (OTDR)
- Operator Name
- Date & Time
- Setup Parameters
- Range (OTDR)
- Scale (OTDR)
- Setup Option chosen to pass OTDR "dead zone"

Test Results shall include:

- OTDR Test results
- Total Fiber Trace
- Splice Loss/Gain
- Events > 0.10 dB
- Measured Length (Cable Marking)
- Total Length (OTDR)
- Optical Source/Power Meter Total Attenuation (dB/km)

Sample Power Meter Tabulation:

Power Meter Measurements (dB)									
Location		Fiber No.	Cable Length (km)	A to B		B to A		Bidirectional Average	
A	B			1310 nm	1550 nm	1310 nm	1550 nm	1310 nm	1550 nm
		1							
		2							
Maximum Loss									
Minimum Loss									

The OTDR test results file format must be Bellcore/Telcordia compliant according to GR-196-CORE Issue 2, OTDR Data Standard, GR 196, Revision 1.0, GR 196, Revision 1.1, GR 196, Revision 2.0 (SR-4731) in a ".SOR" file format. A copy of the test equipment manufacture's software to read the test files, OTDR and power, shall be provided to the Department. These results shall also be provided in tabular form, see sample below:

Sample OTDR Summary				
Cable Designation:	<i>TCF-IK-03</i>	OTDR Location:	<i>Pump Sta. 67</i>	Date: <i>1/1/00</i>
Fiber Number	Event Type	Event Location	Event Loss (dB)	
			1310 nm	1550 nm
<i>1</i>	<i>Splice</i>	<i>23500 Ft.</i>	<i>.082</i>	<i>.078</i>
<i>1</i>	<i>Splice</i>	<i>29000 Ft.</i>	<i>.075</i>	<i>.063</i>
<i>2</i>	<i>Splice</i>	<i>29000 Ft.</i>	<i>.091</i>	<i>.082</i>
<i>3</i>	<i>Splice</i>	<i>26000 Ft.</i>	<i>.072</i>	<i>.061</i>
<i>3</i>	<i>Bend</i>	<i>27000 Ft.</i>	<i>.010</i>	<i>.009</i>

The following shall be the criteria for the acceptance of the cable:

Upon completing all splicing operations for a cable span, the Contractor shall measure the mean bi-directional loss at each splice using an Optical Time Domain Reflectometer.

When splices are made between identical cables (same manufacturer and cable type) the average optical loss of each splice shall not exceed 0.10 dB. The average is determined by measuring the splice loss in both directions with an OTDR, adding the two readings, and dividing by two. Testing should be performed for both the 1310 and 1550 nm wavelengths. No individual splice loss measured in a single direction shall exceed 0.15 dB.

When splices are made between cables containing fibers of different mode field diameters, the average optical loss of each splice shall not exceed 0.50 dB. The average is determined by measuring the splice loss in both directions with an OTDR, adding the two readings, and dividing by two. Testing should be performed for both the 1310 and 1550 nm wavelengths. No individual splice loss measured in a single direction shall exceed 0.6 dB.

The Contractor shall measure the end-to-end attenuation of each fiber, from connector to connector, using an optical power meter and source. This loss shall be measured at from both directions and shall not exceed 0.5 dB per installed kilometer of single mode cable. Measurements shall be made at both 1300 and 1550 nm for single mode cable.

For multimode cable, power meter measurements shall be made at 850 and 1300 nm. The end-to-end attenuation shall not exceed 3.8 dB/installed kilometers at 850nm or 1.8 dB per installed kilometer at 1300nm for multimode fibers.

If the total loss exceeds these specifications, the Contractor shall replace or repair the cable run at the no additional cost to the state, both labor and materials. Elevated attenuation due to exceeding the pulling tension, or any other installation operation, during installation shall require the replacement of the cable run at no additional cost to the State, including labor and materials.

All test results shall be furnished to the Engineer seven working days before the date the inspection is scheduled.

Contract Guarantee. The Contractor shall provide a written guarantee for all electrical work provided under the contract for a period of six months after the date of acceptance with the following warranties and guarantees.

- (a) The manufacturer's standard written warranty for each piece of electrical material or apparatus furnished under the contract. The warranty for light emitting diode (LED) modules, including the maintained minimum luminance, shall cover a minimum of 120 months from the date of delivery.

- (b) The Contractor's written guarantee that, for a period of six months after the date of final acceptance of the work, all necessary repairs to or replacement of said warranted material or apparatus for reasons not proven to have been caused by negligence on the part of the user or acts of a third party shall be made by the Contractor at no additional cost to the Department.
- (c) The Contractor's written guarantee for satisfactory operation of all electrical systems furnished and constructed under the contract for a period of six months after final acceptance of the work.

The warranty for an uninterruptable power supply (UPS) shall cover a minimum of two years from date the equipment is placed in operation; however, the batteries of the UPS shall be warranted for full replacement for a minimum of five years.

Record Drawings. Alterations and additions to the electrical installation made during the execution of the work shall be made on the PDF copy of the as-Let documents using a PDF editor. Hand drawn notations or markups and scanned plans are not acceptable. These drawings shall be updated daily and shall be available for inspection by the Engineer during the work. The record drawings shall include the following:

- Cover Sheet
- The Electrical Maintenance Contract Management System (EMCMS) location designation, i.e. "L", "TS", "S", "A" number.
- Summary of Quantities, electrical items only
- Legends, Schedules, and Notes
- Plan Sheets
- Final fiber assignment tables
- Pertinent Details
- Single Line Diagrams; electrical, communications, surveillance and fiber optic.
- Other useful information useful to locate and maintain the systems.

Any modifications to the details shall be indicated. Final quantities used shall be indicated on the Summary of Quantities. **Foundation depths used shall also be listed.**

As part of the record drawings, the Contractor shall inventory all materials, new or existing, on the project and record information on inventory sheets provided by the Engineer.

The inventory shall include:

- Location of Equipment, including rack, chassis, slot as applicable.
- Designation of Equipment
- Equipment manufacturer
- Equipment model number
- Equipment Version Number
- Equipment Configuration
 - Addressing, IP or other
 - Settings, hardware or programming

- Equipment Serial Number

The following electronic inventory forms are available from the Engineer:

- Lighting Controller Inventory
- Lighting Inventory
- Light Tower Inspection Checklist
- ITS Location Inventory

The information shall be entered in the forms; handwritten entries will not be acceptable; except for signatures. Electronic file shall also be included in the documentation.

When the work is complete, and seven days before the request for a final inspection, the set of contract drawings, marked "**RECORD DRAWINGS**", shall be submitted to the Engineer for review and approval and shall be stamped with the date and the signature of the Contractor's supervising Engineer or Electrician. The record drawings shall be submitted in PDF format via a mutually agreed to electronic format for review and approval.

In addition to the record drawings, PDF copies of the final catalog cuts which have been Approved and Approved as Noted with applicable follow-up shall be submitted along with the record drawings. **The PDF files shall clearly indicate either by filename or PDF table of contents (bookmarks) the respective pay item number.** Specific part or model numbers of items which have been selected shall be clearly visible.

If the Electric Service is new or modified, documentation as required in the Electric Utility Service Connection shall be submitted.

During the Final Inspection, the Contractor shall provide three sets of electronically produced drawings in a moisture proof pouch to be kept on the inside door of the controller cabinet or other location approved by the Engineer. These drawings shall show the final as-built circuit orientation(s) of the project in the form of a single line diagram with all equipment designations and clearly identified.

Final documentation shall be submitted as a complete submittal package, i.e. record drawings, test results, inventory, etc. shall be submitted at the same time. Partial piecemeal submittals will be rejected without review.

A total of three hardcopies and two CD-ROMs or USB Drives of the final documentation shall be submitted. The identical material shall also be submitted in the same manner as the catalog cut submittals utilizing the following final documentation pay item numbers:

Pay Code	Description	Discipline
FDLRD000	Record Drawings - Lighting	Lighting
FDSRD000	Record Drawings - Surveillance	Surveillance
FDTRD000	Record Drawings - Traffic Signal	Traffic Signal
FDIRD000	Record Drawings - ITS	ITS

FDLCC000	Catalog Cuts - Lighting	Lighting
FDSCC000	Catalog Cuts – Surveillance	Surveillance
FDTCC000	Catalog Cuts – Traffic Signal	Traffic Signal
FDICC000	Catalog Cuts - ITS	ITS
FDLWL000	Warranty - Lighting	Lighting
FDSWL000	Warranty - Surveillance	Surveillance
FDTWL000	Warranty - Traffic Signal	Traffic Signal
FDIWL000	Warranty - ITS	ITS
FDLTR000	Test Results - Lighting	Lighting
FDSTR000	Test Results - Surveillance	Surveillance
FDTTR000	Test Results - Traffic Signal	Traffic Signal
FDITR000	Test Results - ITS	ITS
FDLINV00	Inventory - Lighting	Lighting
FDSINV00	Inventory - Surveillance	Surveillance
FDTINV00	Inventory - Traffic Signal	Traffic Signal
FDIINV00	Inventory - ITS	ITS
FDLGPS00	GPS - Lighting	Lighting
FDSGPS00	GPS - Surveillance	Surveillance
FDTGPS00	GPS - Traffic Signal	Traffic Signal
FDIGPS00	GPS - ITS	ITS
FDLES00	Electric Service - Lighting	Lighting
FDSES00	Electric Service - Surveillance	Surveillance
FDTES00	Electric Service - Traffic Signal	Traffic Signal
FDIES00	Electric Service - ITS	ITS

Record Drawings shall include Marked up plans, controller info, Electric Service Info, Equipment Settings, Manuals, Wiring Diagrams for each discipline.

Test results shall be all electrical test results, fiber optic OTDR, and Fiber Optic power meter as applicable for each discipline.

GPS Documentation. In addition to the specified record drawings, the Contactor shall record GPS coordinates of the following electrical components being installed, modified or being affected in other ways by this contract:

- All light poles and light towers.
- Handholes and vaults.
- Junction Boxes
- Conduit roadway crossings.
- Controllers.
- Control Buildings.
- Structures with electrical connections, i.e. DMS, lighted signs.

- Electric Service locations.
- CCTV Camera installations.
- Roadway Surveillance installations.
- Fiber Optic Splice Locations.
- Fiber Optic Cables. Coordinates shall be recorded along each fiber optic cable route every 200 feet.
- Fiber Optic Utility Markers
- All fiber optic slack locations shall be identified with quantity of slack cable included. When sequential cable markings are available, those markings shall be documented as cable marking into enclosure and marking out of enclosure.
- All wireless in-pavement vehicle detectors

Datum to be used shall be North American 1983.

Data shall be provided electronically. The electronic format shall be compatible with MS Excel. **Latitude and Longitude shall be in decimal degrees with a minimum of 6 decimal places.** Each coordinate shall have the following information:

1. District
2. Description of item
3. Designation
4. Use
5. Approximate station
6. Contract Number
7. Date
8. Owner
9. Latitude
10. Longitude
11. Comments

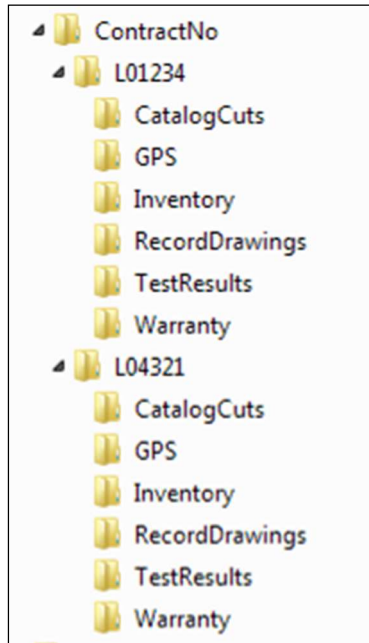
A spreadsheet template will be available from the Engineer for use by the Contractor.

Accuracy. Data collected is to be mapping grade. A handheld mapping grade GPS device shall be used for the data collection. The receiver shall support differential correction and data shall have minimum 5 meter accuracy after post processing.

GPS receivers integrated into cellular communication devices, recreational and automotive GPS devices are not acceptable.

The GPS shall be the product of an established major GPS manufacturer having been in the business for a minimum of 6 years.”

The documents on the CD ROM, or USB Drive shall be organized by the Electrical Maintenance Contract Management System (EMCMS) location designation. If multiple EMCMS locations are within the contract, separate folders shall be utilized for each location as follows:



Extraneous information not pertaining to the specific EMCMS location shall not be included in that particular folder and sub-folder.

The inspection will not be made until after the delivery of acceptable record drawings, specified certifications, and the required guarantees.

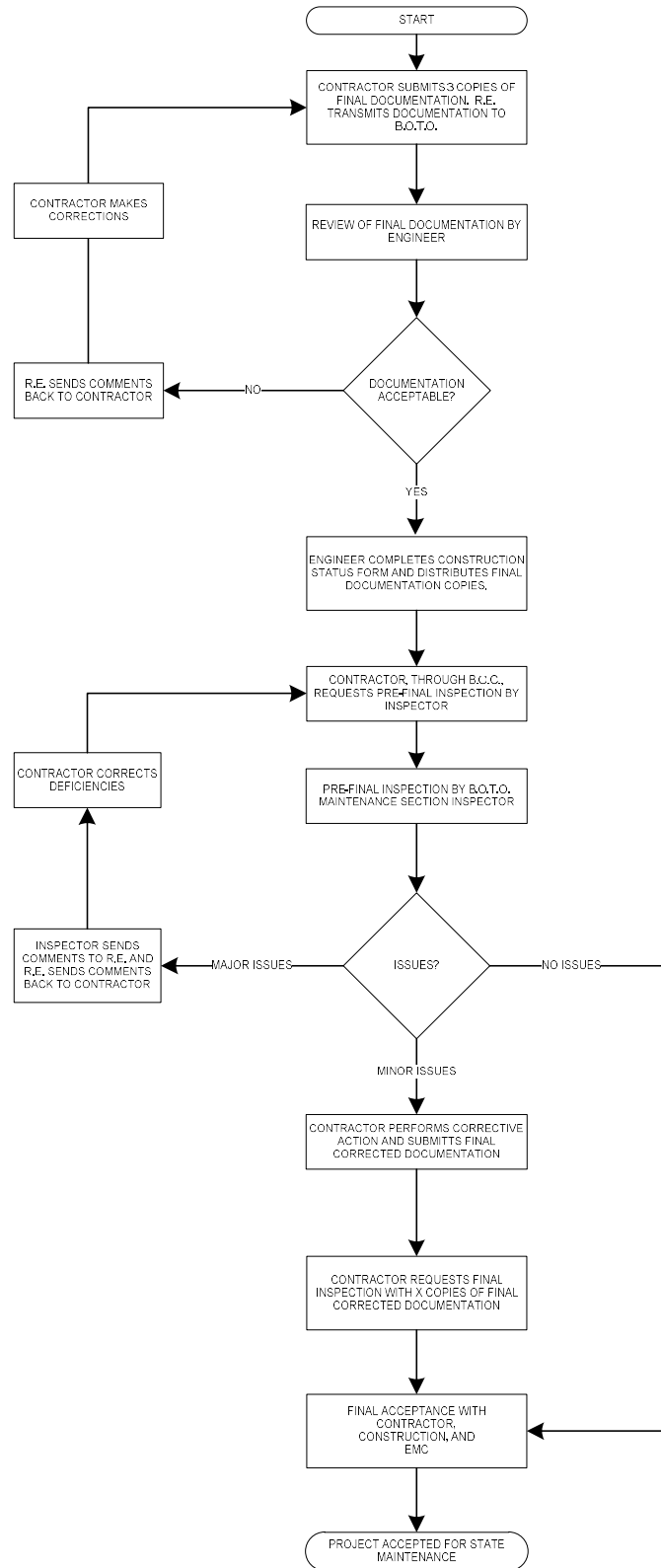
The Final Acceptance Documentation Checklist shall be completed and is contained elsewhere herein.

If CD's are used they shall be labeled as illustrated in the CD Label Template contained herein.

Acceptance. Acceptance of electrical work will be given at the time when the Department assumes the responsibility to protect and maintain the work according to Article 107.30 or at the time of final inspection.

When the electrical work is complete, tested, and fully operational, the Contractor shall schedule an inspection for acceptance with the Engineer no less than seven working days prior to the desired inspection date. The Contractor shall furnish the necessary labor and equipment to make the inspection.

A written record of the test readings taken by the Contractor according to Article 801.13 shall be furnished to the Engineer seven working days before the date the inspection is scheduled. Inspection will not be made until after the delivery of acceptable record drawings, specified certifications, and the required guarantees.



Final Acceptance Documentation Checklist

LOCATION	
Route	Common Name
Limits	Section
Contract #	County
Controller Designation(s)	EMC Database Location Number(s)

ITEM	Contractor (Verify)	Resident Engineer (Verify)
Record Drawings -Three hardcopies (11" x 17") -PDFs as required elsewhere	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Field Inspection Tests -Voltage -Amperage -Cable Insulation Resistance -Continuity -Controller Ground Rod Resistance (Three Hardcopies & PDFs as required)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
GPS Coordinates -Excel file (Check Special Provisions, Excel file required.)	<input type="checkbox"/>	<input type="checkbox"/>
Job Warranty Letter (Three Hardcopies & PDFs as required)	<input type="checkbox"/>	<input type="checkbox"/>
Catalog Cut Submittals -Approved & Approved as Noted (PDFs as required)	<input type="checkbox"/>	<input type="checkbox"/>
Lighting Inventory Form (Three Hardcopies & PDFs as required)	<input type="checkbox"/>	<input type="checkbox"/>
Lighting Controller Inventory Form (Three Hardcopies & PDFs as required)	<input type="checkbox"/>	<input type="checkbox"/>
Light Tower Inspection Form (If applicable, Three Hardcopies & PDFs as required)	<input type="checkbox"/>	<input type="checkbox"/>

Three Hardcopies & PDFs as required shall be submitted for all items above. If a CD ROM is used it shall be labeled as shown in the example contained herein.

General Notes:

Record Drawings – The record drawings should contain contract cover sheet, summary of quantities showing all lighting pay item sheets, proposed lighting plans and lighting detail sheets. Submit hardcopies shall be 11” x 17” size. Temporary lighting plans and removal lighting plans should not be part of the set.

Field Inspection Tests – Testing should be done for proposed cables. Testing shall be per standard specifications. Forms shall be neatly filled out.

GPS Coordinates – Check special provisions “General Electrical Requirements”. Submit electronic “EXCEL” file.

Job Warranty Letter – See standard specifications.

Cutsheet Submittal – See special provisions “General Electrical Requirements”. Scan Approved and Approved as Noted cutsheets.

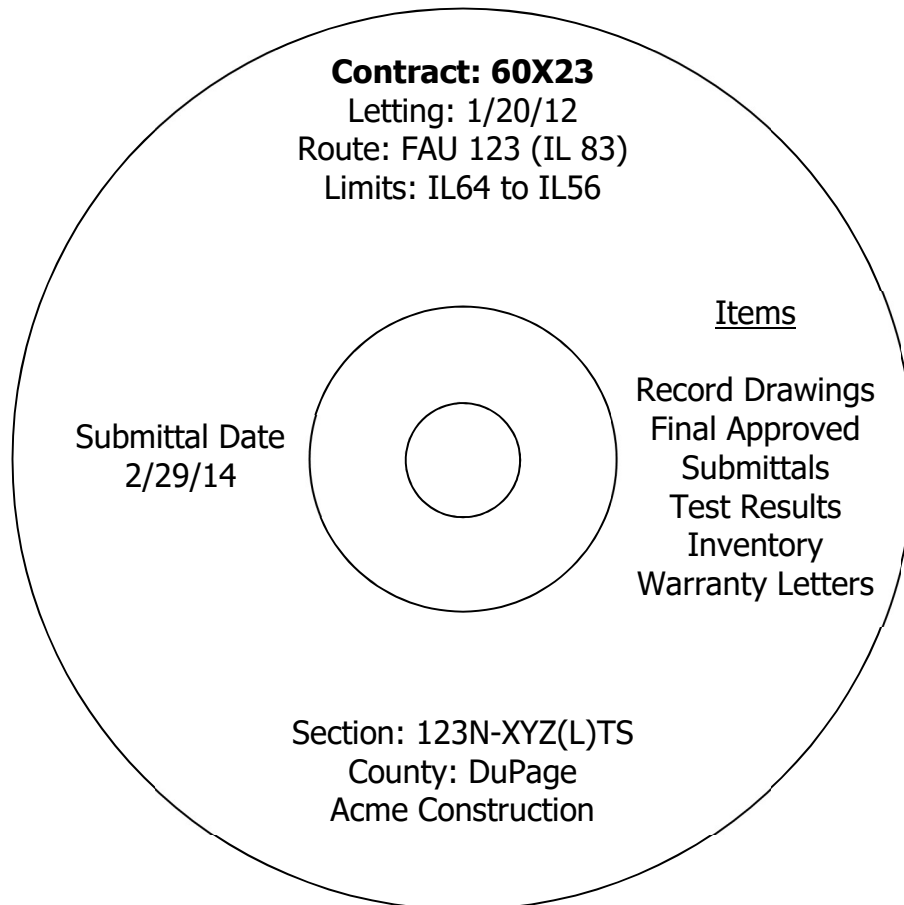
Lighting Inventory Form – Inventory form should include only proposed light poles, proposed light towers, proposed combination (traffic/light pole) lighting and proposed underpass luminaires.

Lighting Controller Inventory Form – Form should be filled out for only proposed lighting controllers.

Light Tower Safety Inspection Form – Form should be filled out for each proposed light tower.

CD LABEL FORMAT TEMPLATE.

Label must be printed; hand written labels are unacceptable and will be rejected.



GENERAL REQUIREMENTS FOR WEED CONTROL SPRAYING

Experience

The Contractor shall have previous experience with the use of weed control chemicals. They shall have had at least three (3) season's experience in ecological restoration and the ability to identify and differentiate between targeted weeds and vegetation to remain. The Contractor shall observe and comply with all sections of the Illinois Custom Spray Law, including licensing. Contractor personnel applying herbicides shall have a valid pesticide applicator license issued by the Illinois Department of Agriculture.

The licensed pesticide applicator shall attend the preconstruction meeting and submit their current license to the Engineer. The licensed pesticide applicator shall be qualified at a minimum in Right-of-Way and Aquatics. The licensed applicator shall work on-site.

Equipment

The equipment used shall consist of a vehicle-mounted tank, pump, spray bar and handgun, plus any other accessories needed to complete the specified work. Spraying shall be done through multiple low-pressure flooding or broad jet nozzles mounted on spray bars operated not more than 36" above the ground. If different sizes or types of nozzles are used to make up the spray pattern, the pressure, sizes, and capacities shall be adjusted to provide a uniform rate of application for each segment of the spray pattern. Hand spray guns may be used for spraying areas around traffic control devices, lighting standard and similar inaccessible areas. Maximum speed of the spray vehicle during application of chemical shall be ten (10) miles per hour.

Pumps used shall have a volume and pressure capacity range sufficient to deliver the mixture at a pressure to provide the required coverage and to keep the spray pattern full and steady without pulsation or excessive pressure as to cause fogging. Maximum pressure for application shall be 15 PSI. Quick acting shut-off valves and spring-loaded ball check valves shall be provided to stop the spray pattern with a minimum of nozzle drip. In areas where the spray vehicle must traverse the right-of-way, a four-wheel drive vehicle with flotation tires will be required to minimize damage to the ground surface.

Additional equipment used shall consist of swiping gloves, wicks, wands, hand spray guns and/or backpack sprayers, plus any other accessories needed to complete the specified work as directed by the Engineer. Wick applicators, swiping gloves, or other such devices may be required to ensure herbicides are applied only to target species. If hand spray guns used are attached to spray vehicle, maximum speed of the spray vehicle during application of chemical shall be five (5) miles per hour. In areas where a vehicle is needed to traverse the right-of-way, a four-wheel drive vehicle with flotation tires will be required to minimize damage to the ground surface.

Prior to beginning work, the Contractor shall obtain approval from the Engineer of the spraying equipment proposed for completing this work. The proposed equipment shall be in an operational condition and available for inspection by the Engineer at least two (2) weeks prior to the proposed starting time. If requested by the Engineer, the Contractor shall demonstrate the calibration of the equipment.

The equipment must provide consistently uniform coverage and keep the spray mixture sufficiently agitated or the work will be suspended until the equipment is repaired or replaced.

Spraying Areas

This work includes roadsides and other types of rights-of-way of various widths and gradients. Spray areas often extend more than thirty (30) feet from the edge of the roadway, requiring both spray bar and handgun applications.

When the description of work requires weed control of a stated species, such as teasel, the chemical shall be applied only to locations where the stated species is present. When the description of work requires general weed control within a bed or area, such as broadleaf weed control in turf, then the chemical shall be applied to the entire bed or area.

Exclusion of Spraying Areas

Areas where weed control spraying is inappropriate or detrimental to the environment, desirable planting, or private property shall be excluded from the spray area.

Spraying will not be permitted over any drainage swales or waterways, or other areas where the chemical label prohibits application. Spraying will not be permitted within 150 feet of a natural area or site where endangered or threatened species occur.

Responsibility for Prevention of Damage to Private Property

The Contractor shall, at all times, exercise extreme caution to prevent damage to residential plantings, flower or vegetable gardens, vegetable crops, farm crops, orchard or desirable plants adjacent to the roadside.

The Contractor or Department receives a complaint; the Contractor shall inspect the complaint within ten (10) days after receiving a claim for damages. The Contractor, or their authorized representative, shall make a personal contact with the complainant within twenty (20) days. The Engineer shall also be notified by the Contractor of all claims for damage he received and shall keep the Engineer informed as to the progress in arriving at a settlement for such claims.

Communication with the Engineer

The Contractor is required to communicate with the Engineer to receive all required approvals in a timely way and to assure that the Engineer can accurately document the work performed.

All herbicide application shall be directly supervised by the Engineer for quality assurance and for payment purposes. If the Contractor performs work without the Engineer's supervision, work will not be paid for.

It shall be the Contractor's responsibility to assure that all chemical containers are opened and added to the spray mixture in the presence of the Engineer.

The Contractor shall obtain approval from the Engineer to proceed with spraying at each location 24 hours prior to the proposed spray operations.

The Contractor's superintendent shall closely coordinate the work with the Engineer at all times in accordance with Article 105.06. The superintendent shall attend weekly progress meetings with the Engineer at the Engineer's office or another mutually agreed upon location. The superintendent shall communicate with the Engineer in the field during weed control activities to facilitate accurate completion of work while it is occurring. At the request of the Engineer, the Contractor shall provide a cell phone number where the superintendent can be reached during working hours. The Contractor shall notify the Engineer at least twenty-four (24) hours in advance of either discontinuing or resuming operations.

Notification of Pesticide Application

The Contractor will be required to properly provide notification of pesticide application as required by the IL Public Act 103-0976 (Pesticide Application on Rights-of Way Notification Act).

Two weeks prior to the application of pesticides, including but not limited to herbicides, insecticides, algaecides, and fungicides, the Contractor shall complete Operations form "OPER 758" which may be found at the following link: <https://idot.illinois.gov/resources/forms.html>

The Contractor shall return the completed form to the Engineer. The completed form will be uploaded on the IDOT website as required by the Department of Agriculture and IL Public Act 103-0976 at:

<https://idot.illinois.gov/transportation-system/environment/natural-resources/roadside-maintenance/pesticide-application.html>

The Contractor shall confirm submission of the form has been uploaded before starting spraying operations. Submissions will be sorted by District (One) and county (Cook, DuPage, Kane, Lake, McHenry, or Will). Allow at least a week for notifications to be uploaded.

Pesticide Application Daily Spray Record

The Contractor will be required to properly track pesticide applications as required by the ILG87 Permit. Reported data from this form will be collected and compiled annually and reported to the IEPA as required.

Within 48 hours of the application of pesticides, including but not limited to herbicides, insecticides, algaecides, and fungicides, the Contractor shall complete and return to the Engineer, Operations form "OPER 2720". OPER 2720 may be found at the following link:

<https://idot.illinois.gov/resources/forms.html>

HOT-MIX ASPHALT BINDER AND SURFACE COURSE (D-1)

Effective: November 1, 2019

Revised: April 1, 2026

Add the following to the end of Article 406.06(c) of the Standard Specifications:

“The amount of HMA binder course placed shall be limited to that which can be surfaced during the same construction season.”

Revise the fifteenth through eighteenth paragraphs of Article 406.14 of the Standard Specifications to read:

“The mixture used in constructing acceptable HMA test strips will be paid for at the contract unit price. Unacceptable HMA test strips shall be removed and replaced at no additional cost to the Department.”

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 Standard 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, SMA 9.5 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.

Mix Design	Voids in the Mineral Aggregate (VMA), % Minimum for Ndesign				
	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 steel slag sand, shall have minimum surge bin storage plus haul time of 1.5 hours.”

Revise the first and second paragraphs of Articles 1030.06(c)(2) of the Standard Specifications to read:

“(2) Personnel. The Contractor shall provide a QC Manager who shall have overall responsibility and authority for quality control. This individual shall maintain active certification as a Hot-Mix Asphalt Level II technician.

In addition to the QC Manager, the Contractor shall provide sufficient personnel to perform the required visual inspections, sampling, testing, and documentation in a timely manner. Mix designs shall be developed by personnel with an active certification as a Hot-Mix Asphalt Level III technician. Technicians performing mix design testing and plant sampling/testing shall maintain active certification as a Hot-Mix Asphalt Level I technician. The Contractor may provide a technician trainee who has successfully completed the Department’s “Hot-Mix Asphalt Trainee Course” to assist in the activities completed by a Hot-Mix Asphalt Level I technician for a period of one year after the course completion date. The Contractor may also provide a Gradation Technician who has successfully completed the Department’s “Gradation Technician Course” to run gradation tests only under the supervision of a Hot-Mix Asphalt Level II Technician. The Contractor shall provide a Hot-Mix Asphalt Density Tester who has successfully completed the Department’s “Nuclear Density Testing” course to run all nuclear density tests on the job site.”

Add Article 1030.06(d)(3) to the Standard Specifications to read:

“(3) The Contractor shall take possession of any Department unused backup or dispute resolution HMA mixture samples or density specimens upon notification by the Engineer. The Contractor shall collect the HMA mixture samples or density specimens from the location designated by the Engineer and may add these materials to RAP stockpiles according to Section 1031.”

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 (Gmm) will be based on the running average of four available Department test results for that project. If less than four Gmm test results are available, an average of all available Department test results for that project will be used. The initial Gmm 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 Gmm.”

Revise the Quality Control Limits table in Article 1030.09(c) to read:

CONTROL LIMITS			
Parameter	IL-19.0, IL-9.5,	SMA-12.5, SMA-9.5	IL-4.75

	IL-9.5FG, IL-19.0L, IL-9.5L					
	Individual Test	Moving Avg. of 4	Individual Test	Moving Avg. of 4	Individual Test	Moving Avg. of 4
% Passing: ^{1/}						
1/2 in. (12.5 mm)	± 6 %	± 4 %	± 6 %	± 4 %		
3/8 in. (9.5mm)			± 4 %	± 3 %		
# 4 (4.75 mm)	± 5 %	± 4 %	± 5 %	± 4 %		
# 8 (2.36 mm)	± 5 %	± 3 %	± 4 %	± 2 %		
# 16 (1.18 mm)			± 4 %	± 2 %	± 4 %	± 3 %
# 30 (600 µm)	± 4 %	± 2.5 %	± 4 %	± 2.5 %		
Total Dust Content # 200 (75 µm)	± 1.5 %	± 1.0 %			± 1.5 %	± 1.0 %
Asphalt Binder Content	± 0.3 %	± 0.2 %	± 0.2 %	± 0.1 %	± 0.3 %	± 0.2 %
Air Voids ^{2/}	± 1.2 %	± 1.0 %	± 1.2 %	± 1.0 %	± 1.2 %	± 1.0 %
Field VMA ^{3/}	-0.7 %	-0.5 %	-0.7 %	-0.5 %	-0.7 %	-0.5 %

1/ Based on washed ignition oven or solvent extraction gradation.

2/ The air voids target shall be 3.2 to 4.8 percent.

3/ Allowable limit below minimum design VMA requirement.

Revise Article 1030.09(g)(1) of the Supplemental Specifications with the following:

“(1) The Contractor shall sample approximately 200 lb (91 kg) of mix as required for the Department’s random mixture verification tests according to Article 1030.09(h)(1).”

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

“(2)The Contractor shall complete split verification sample tests listed in the Limits of Precision table in Article 1030.09(h)(1).”

Revise the second sentence of Article 1030.09(h)(1) of the Supplemental Specifications with the following:

“The random verification mixture sampling interval will be a maximum of 3,000 tons (2,720 metric tons). The Engineer will randomly identify one sample per interval, with a minimum of one sample per mix. If the remaining mix quantity is 600 tons (544 metric tons) or less, the quantity will be combined with the previous interval in the Engineer’s random sample identification. If the required tonnage of a mixture for a single pay item is less than 250 tons (225 metric tons) in total, the Engineer will waive mixture verification sampling and testing.”

Revise the third paragraph of Article 1030.09(h)(1) of the Standard Specifications to read:

“If comparisons of the mixture verification test results are outside the above limits of precision, the Department will verify the results by testing the retained split sample. The retest results will replace all the original results.”

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.”

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 fourth 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. To be considered acceptable to remain in place, the Department’s mixture test results shall meet the acceptable limits stated in Article 1030.09(i)(1). In addition, no visible pavement distress such as, but not limited to, segregation, excessive coarse aggregate fracturing outside of growth curves, excessive dust balls, or flushing shall be present as determined by the Engineer.”

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

Effective: January 1, 2019

Revised: January 1, 2026

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, 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.

In the Supplemental Specifications, replace the addition of the paragraph between the third and fourth paragraphs of Article 1030.10 with the following:

“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.”

Replace the eleventh paragraph of Article 1030.10 of the Standard Specifications with the following:

“If an initial Hamburg wheel or I-FIT test fails to meet the requirements of Article 1030.05(d), the Department will verify the results by testing the retained gyratory cylinders. Upon notification by the Engineer of a Hamburg wheel or I-FIT test failure on the retained gyratory cylinders, the Contractor shall substitute an approved mix design, submit a new mix design for mix verification testing according to Article 1030.05(d), or pave 250 tons with or without an adjustment and resample for Department Hamburg wheel and I-FIT testing as directed by the Engineer. Paving may continue as long as all other mixture criteria is being met. If Hamburg wheel or I-FIT tests on the resampled HMA fail, production of the affected mixture shall cease and the Contractor shall substitute an approved mix design or submit a new mix design for mix verification testing according to Article 1030.05(d).”

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.”

MAINTENANCE OF LIGHTING SYSTEMS

Effective: December 1, 2024

Replace Article 801.11 and 801.12 of the Standard Specifications with the following:

Effective the date the Contractor's activities (electrical or otherwise) at the job site begin, the Contractor shall be responsible for the proper operation and maintenance of all existing and proposed lighting systems which are part of, or which may be affected by the work until final acceptance or as otherwise determined by the Engineer.

Before performing any excavation, removal, or installation work (electrical or otherwise) at the site, the Contractor shall initiate a request for a maintenance transfer and preconstruction inspection, as specified elsewhere herein, to be held in the presence of the Engineer and a representative of the party or parties responsible for maintenance of any lighting systems which may be affected by the work. During the maintenance preconstruction inspection, the party responsible for existing maintenance shall perform testing of the existing system in accordance with Article 801.13a. The Contractor shall request a date for the preconstruction inspection no less than fourteen (14) days prior to the desired date of the inspection.

The Engineer will document all test results and note deficiencies. All substandard equipment will be repaired or replaced by the existing maintenance contractor, or the Engineer can direct the Contractor to make the necessary repairs under Section 109.04.

Existing lighting systems, when depicted on the plans, are intended only to indicate the general equipment installation of the systems involved and shall not be construed as an exact representation of the field conditions. It remains the Contractor's responsibility to visit the site to confirm and ascertain the exact condition of the electrical equipment and systems to be maintained. Contract documents shall indicate the circuit limits.

Maintenance of Existing Lighting Systems

Existing lighting systems. Existing lighting systems shall be defined as any lighting system or part of a lighting system in service at the time of contract Letting regardless of the number of lighting controllers involved. The contract drawings indicate the general extent of any existing lighting, but whether indicated or not, it remains the Contractor's responsibility to ascertain the extent of effort required for compliance with these specifications and failure to do so will not be justification for extra payment or reduced responsibilities.

Extent of Maintenance.

Partial Maintenance. Unless otherwise indicated, if the number of circuits affected by the contract is equal to or less than 40% of the total number of circuits in each controller and the controller is not part of the contract work, the Contractor needs only to maintain the affected circuits within the project limits. The project limits are defined as those limits indicated in the contract plans. Equipment outside of the project limits, on the affected circuits shall be maintained and paid for under Article 109.04. The affected circuits shall be isolated by means of in-line waterproof

fuse holders as specified elsewhere and as approved by the Engineer. The unaffected circuits and the controller will remain under the maintenance of the State.

Full Maintenance. If the number of circuits affected by the contract is greater than 40% of the total number of circuits in each controller, or if the controller is modified in any way under the contract work, the Contractor shall maintain the entire controller and all associated circuits within the project limits. Equipment outside of the project limits shall be maintained and paid for under Article 109.04.

If the existing equipment is damaged by normal vehicular traffic, not contractor operations, is beyond repair and cannot be re-set, the contractor shall replace the equipment in kind with payment made for such equipment under Article 109.04. If the equipment damaged by any construction operations, not normal vehicular traffic, is beyond repair and cannot be re-set, the contractor shall replace the equipment in kind and the cost of the equipment shall be included in the cost of this pay item and shall not be paid for separately.

Maintenance of Proposed Lighting Systems

Proposed Lighting Systems. Proposed lighting systems shall be defined as any lighting system or part of a lighting system, temporary or permanent, which is to be constructed under this contract regardless of the project limits indicated in the plans.

The Contractor shall be fully responsible for maintenance of all items installed under this contract. Maintenance shall include, but not be limited to, any equipment failures or malfunctions as well as equipment damage either by the motoring public, Contractor operations, vandalism, or other means. The potential cost of replacing or repairing any malfunctioning, damaged, or vandalized equipment shall be included in the bid price of this item and will not be paid for separately.

The Contractor shall be responsible for locating cables installed under this contract to prevent damage from construction operations.

Lighting System Maintenance Operations

The Contractor's responsibility shall include all applicable responsibilities of the Electrical Maintenance Contract, State of Illinois, Department of Transportation, Division of Highways, District One. These responsibilities shall include the maintenance of lighting units (including sign lighting), cable runs and lighting controls. Responsibilities shall also include the coordination and installation of replacement equipment for existing equipment which has failed within the warranty period for that equipment. The coordination shall include correspondence with the manufacturer regarding the warranty claim. In the case of a pole knockdown or sign light damage, the Contractor shall promptly clear the lighting unit and circuit discontinuity and restore the system to service. The equipment shall then be re-set by the contractor within the time limits specified herein.

If the existing equipment is damaged by normal vehicular traffic, not contractor operations, is beyond repair and cannot be re-set, the contractor shall replace the equipment in kind with payment made for such equipment under Article 109.04. If the equipment damaged by any construction operations, not normal vehicular traffic, is beyond repair and cannot be re-set, the contractor shall

replace the equipment in kind and the cost of the equipment shall be included in the cost of this pay item and shall not be paid for separately.

Responsibilities shall also include weekly night-time patrol of the lighting system, with patrol reports filed immediately with the Engineer and with deficiencies corrected within 24 hours of the patrol. Patrol reports shall be presented on standard forms as designated by the Engineer. Uncorrected deficiencies may be designated by the Engineer as necessitating emergency repairs as described elsewhere herein.

The following chart lists the maximum response, service restoration, and permanent repair time the Contractor will be allowed to perform corrective action on specific lighting system equipment.

INCIDENT OR PROBLEM	SERVICE RESPONSE TIME	SERVICE RESTORATION TIME	PERMANENT REPAIR TIME
Control cabinet out	1 hour	4 hours	7 Calendar days
Hanging mast arm	1 hour to clear	na	7 Calendar days
Radio problem	1 hour	4 hours	7 Calendar days
Motorist caused damage or leaning light pole 10 degrees or more	1 hour to clear	4 hours	7 Calendar days
Circuit out – Needs to reset breaker	1 hour	4 hours	na
Circuit out – Cable trouble	1 hour	24 hours	21 Calendar days
Outage of 3 or more successive lights	1 hour	4 hours	na
Outage of 75% of lights on one tower	1 hour	4 hours	na
Outage of light nearest RR crossing approach, Islands and gores	1 hour	4 hours	na
Outage (single or multiple) found on night outage survey or reported to EMC	na	na	7 Calendar days
Navigation light outage	na	na	24 hours

- **Service Response Time** -- amount of time from the initial notification to the Contractor until a patrolman physically arrives at the location.
- **Service Restoration Time** – amount of time from the initial notification to the Contractor until the time the system is fully operational again (In cases of motorist caused damage the undamaged portions of the system are operational.)

- **Permanent Repair Time** – amount of time from initial notification to the Contractor until the time permanent repairs are made if the Contractor was required to make temporary repairs to meet the service restoration requirement.

Failure to provide this service will result in liquidated damages of \$500 per day per occurrence. In addition, the Department reserves the right to assign any work not completed within this timeframe to the Electrical Maintenance Contractor. All costs associated to repair this uncompleted work shall be the responsibility of the Contractor. Failure to pay these costs to the Electrical Maintenance Contractor within one month after the incident will result in additional liquidated damages of \$500 per month per occurrence. Unpaid bills will be deducted from any monies owed to the Contractor. Repeated failures and/or a gross failure of maintenance shall result in the State's Electrical Maintenance Contractor being directed to correct all deficiencies and the resulting costs deducted from any monies owed the contractor.

Damage caused by the Contractor's operations shall be repaired at no additional cost to the Contract.

Operation of Lighting

The lighting shall be operational every night, dusk to dawn. Duplicate lighting systems (such as temporary lighting and proposed new lighting) shall not be operated simultaneously. Lighting systems shall not be kept in operation during long daytime periods.

Method of Measurement

The contractor shall demonstrate to the satisfaction of the Engineer that the lighting system is fully operational prior to submitting a pay request. Failure to do so will be grounds for denying the pay request. Months in which the lighting systems are not maintained and not operational will not be paid. Payment shall not be made retroactively for months in which lighting systems were not operational.

Basis of Payment. Maintenance of lighting systems shall be paid for at the contract unit price per calendar month for **MAINTENANCE OF LIGHTING SYSTEM.**

MINERALIZED CARBON DIOXIDE CONCRETE (D-1)

Effective: January 1, 2026

Description. This work shall consist of the proportioning, mixing, placement, curing, and evaluation testing of portland cement concrete that utilizes an admixture which promotes carbon dioxide (CO₂) mineralization or an equivalent effect at the Contractor's option.

Materials. Materials shall be according to the following.

<u>Item</u>	<u>Article/Section</u>
(a) Portland Cement Concrete (Note 1)	1020
(b) Concrete Admixtures (Note 2)	1021

Note 1: Concrete shall meet the requirements of Class SI concrete used for the construction of curb and gutter, driveways, sidewalks and other applications as allowed by the Engineer. However, the mix design cement content shall be reduced by 3 to 6 % and an admixture which promotes CO₂ mineralization, or an equivalent effect shall utilized.

Note 2: The admixture which promotes CO₂ mineralization, or an equivalent effect shall be food grade quality from a nearby supplier. In addition, it shall, at a minimum, be according to AASHTO M 194 , Type S (specific performance). The Department also reserves the right to require other testing, as determined by the Engineer, to show evidence of specific performance characteristics. Testing according to AASHTO M 194 and other testing if required by the Engineer shall be by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete. Test data required to be submitted to AASHTO Product Eval and Audit according to Article 1021.01 and other testing data, if required by the Engineer, shall be submitted to the Department. The independent accredited lab report shall show the results of physical tests conducted no more than five years prior to the time of submittal.

Mix Design Verification and Evaluation. The mineralized CO₂ concrete mix design will be verified by the Engineer. Verification of a mix design shall in no manner be construed as acceptance of any mixture produced.

Equipment. Equipment shall be according to applicable portions of Sections 420, 424, 483, and 606; except special equipment needed for production of mineralized CO₂ concrete shall be approved by the Engineer.

Construction Requirements. Construction requirements shall be according to applicable portions of Sections 420, 424, 483, and 606.

The placement locations for the mineralized CO₂ concrete shall be according to the plans or as directed by the Engineer.

The same mixture proportions shall be used for the entire project, unless otherwise stated in the project documents. If during the project there is a change in the type or source of the cement, finely divided minerals, aggregates, or CO₂ mineralization admixture; the mixing shall be suspended, and a new mix design shall be developed, and re-verified.

The cost of this work shall be included in the contract unit price of the PCC pay item involved.

PUBLIC CONVENIENCE AND SAFETY (DIST 1)

Effective: May 1, 2012

Revised: July 15, 2012

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

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

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

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

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

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

SEEDING, CLASS 4A (MODIFIED)

This work shall consist of preparing the seed bed, placing the seed, and other materials required in the seeding operation in areas as shown in the plans.

All work, materials and equipment shall conform to Section 250 and 1081 of the Standard Specifications except as modified herein.

The Class 4A (Modified) seed mixture shall be supplied in pounds of Pure Live Seed. All native seed species will be local genotype and verified that original seed collection source must originate from a radius of 200 miles from the project site. Fertilizer is not required.

Article 250.07 Seeding Mixtures – Add the following to Table 1:

<u>CLASS – TYPE</u>	<u>SEEDS</u>	<u>PURE LIVE SEED LB/ACRE</u>
4A (Modified) Native Grass		9.0
	Bouteloua curtipendula (Side Oats Grama)	2.0
	Carex bicknellii (Copper-Shouldered Oval Sedge)	0.5
	Carex brevior (Plains Oval Sedge)	0.5
	Elymus canadensis (Canada Wild Rye)	1.0
	Koeleria macrantha (June Grass)	0.5
	Panicum virgatum (Switchgrass)	1.5
	Schizachyrium scoparium (Little Bluestem)	3.0
Temporary Cover		20 (lb/acre)
Fall/Winter:	Elymus canadensis	

Spring:	(Canada Wild Rye) Avena sativa	3.0
	(Annual Oats)	20.0

Variation in the Class 3, 4, 5, or 6 seed quantities or varieties may be allowed in the event of a crop failure or other unforeseen conditions. Quantities of proposed substitutions shall be determined by seed count. The Contractor shall provide for the approval of the Engineer a written description of the proposed changes to the Class 3, 4, 5, or 6 Mixture(s), the reasons for the change, and the name of the seed suppliers who were contacted in an effort to obtain the specified species. Adjustments will be made at no cost to the contract. Approval of substitutes shall in no way waive any requirements of the contract

Seeding Time:

Seeding shall be completed between October 15 to April 30 but not when raining or when the ground is covered with snow unless prior written approval is received from Engineer. No seed shall be sown when the ground is not in proper condition for seeding. Seeding done outside of this time frame will not be measured for payment unless approved in writing by Engineer in advance.

The Contractor shall schedule work so that final grade is achieved during the specified seeding times. Any seeding must be incorporated into the soil surface, but no deeper than ¼ inch, such as by rangeland type seed drill, harrow, hand rake, or other method approved by the Engineer.

Bagging, Transporting, and Storing Seed:

Seed mixtures of the specified classes shall be thoroughly mixed, labeled and bagged by the supplier. Purity and germination tests no older than twelve months old must be submitted for all seed supplied to verify quantities of bulk seed required to achieve LB PLS specified.

Seed shall be thoroughly mixed, labeled and bagged by the supplier. Seed shall be bagged, transported, and stored in such a manner to protect it from damage and to maintain the viability of the seed. All seed mixtures shall be brought to the site in clearly labeled and unopened bags.

Seed shall be adequately protected from rain, temperature extremes, rodents, insects, and other such factors that could adversely affect seed viability during transport or while being stored prior to planting. Bags of seed that are leaking, wet, moldy, or otherwise damaged shall be rejected and promptly removed from the site of work. Prior to application, the Engineer must approve the seed mix in the bags on site.

Layout of Seeding:

The Contractor shall be responsible for filed verifying the acreage of the area(s) to be seeded. The amount of seed ordered shall match the area(s) to be seeded during the pending planting season. A minimum of 30 days shall be allowed for seed acquisition, testing, and inspection.

The Contractor shall demarcate all areas to be seeded and estimate quantities of each area to determine the quantity of seed necessary to achieve the specified seed rate per acre. The Contractor shall delineate the perimeter of the seedbed with wooden lathe. The wooden lathe

shall remain in place. The contractor shall provide a minimum of seven calendar days notice to the Engineer to allow for review and approval of seeding layout.

Inspection:

The Engineer must witness the delivery of seed with original labels attached in the field. A bag ticket must be affixed to each bag of seed upon delivery, and shall not be removed until the Engineer has reviewed and accepted each bag of seed. The label shall bear the dealer's guarantee of mixture and year grown, purity and germination, and date of test.

Seed Bed Preparation:

All area(s) to be seeded must be properly prepared prior to planting seed.

Bare earth seeding refers to sowing seed upon soils with no existing vegetative cover. In areas with existing vegetation, the vegetation shall be eradicated as specified or as directed by the Engineer. Seed bed preparation shall not be started until all requirements of Section 212 have been completed. The area to be seeded shall be worked to a minimum depth of 3 in. (75 mm) with a disk, tiller, box rake, or other equipment approved by the Engineer. In areas with heavy soils, tilling or power raking will be required to achieve the proper depth. All soil clods shall be reduced to a size not larger than ½ in. (13 mm) in the largest dimension to create a friable, pulverized topsoil surface suitable for seeding. Dragging the soil surface with the blade of a loader or dozer will not be an acceptable method of seed bed preparation. The prepared surface shall be relatively free of weeds, stones, roots, sticks, debris, rills, gullies, crusting, caking, and compaction. No seed shall be sown until the seed bed has been approved by the Engineer.

Seeding Methods:

No seed shall be sown when wind gusts exceed 25 miles per hour or when the ground is not in a proper condition for seeding, nor shall any seed be sown until the purity test has been completed for the seeds to be used, and said tests show that the seed meets the noxious weed seed requirements. All equipment shall be approved by the Engineer prior to being used. Prior to starting work, seeders shall be calibrated and adjusted to sow seeds at the required seeding rate. Equipment shall be operated in a manner to ensure complete coverage of the entire area to be seeded. The Engineer shall be notified 48 hours prior to beginning the seeding operations so that the Engineer may determine by trial runs that a calibration of the seeder will provide uniform distribution at the specified rate per acre.

Seeding Classes 3, 4, 5, and 6 shall be sown with a broadcast seeder or a rangeland type seed drill.

Hand broadcasting and other methods of sowing seed will be allowed in special circumstances as approved by the Engineer. Special circumstances include but are not necessarily limited to steep slopes (over 1:3 (V:H)), inaccessible areas, wet areas, or other unique situations where the use of the specified equipment is not possible.

Method of Measurement:

SEEDING, CLASS 4A (MODIFIED) will be measured for payment in acres of surface area of seeding for the seed mix type specified.

Basis of Payment: SEEDING, CLASS 4A (MODIFIED) shall be paid at the Contract unit price per acre. Payment shall be in full for seed, planting, and furnishing all labor to complete the work as set forth above.

SEEDING, CLASS 5A (MODIFIED)

This work shall consist of Seeding of Class 5A (Modified) in areas as shown in the plans or a directed by the Engineer.

All work, materials, and equipment shall conform to Sections 250 and 1081 of the Standard Specifications except as modified herein.

The Class 5A (Modified) seed mixture shall be supplied in labeled bags which the Resident Engineer will inspect prior to opening the bag. All native species will be local genotype and will be from a radius of 150 miles from the project area. The Class 5A (Modified) seed mix shall be supplied with the appropriate inoculants. The seed shall be sown as soon as possible after inoculation. Seed that has been stored more than 30 days after inoculation shall be reinoculated before sowing. Fertilizer is not required.

Article 250.07 Seeding Mixtures – Delete sentence 4. Add the following to Table 1 – Seeding Mixtures:

<u>CLASS – TYPE</u>	<u>SEEDS</u>	<u>LBS/ACRE</u>
5A (Modified)	Tall Native Forb Mixture:	12.0
	Amorpha canescens (Leadplant)	0.15
	Asclepias incarnata (Swamp Milkweed)	0.15
	Asclepias syriaca (Common Milkweed)	0.20
	Chamaecrista fasciculata (Partridge Pea)	1.50
	Coreopsis palmata (Prairie Coreopsis)	0.30
	Dalea candida (White Prairie Clover)	0.50
	Dalea purpurea (Purple Prairie Clover)	1.00
	Echinacea pallida (Pale Purple Coneflower)	0.15
	Echinacea purpurea (Purple Coneflower)	2.00
	Eryngium yuccifolium (Rattlesnake Master)	0.25
	Liatris pycnostachya (Prairie Blazing Star)	0.15

Monarda fistulosa (Bergamot)	0.25
Penstemon digitalis (Smooth penstemon)	0.35
Pycnanthemum virginianum (Common Mountain Mint)	0.10
Ratibida pinnata (Gray-headed Coneflower)	0.50
Rudbeckia hirta (Black-Eyed Susan)	4.00
Solidago speciosa (Showy Goldenrod)	0.10
Symphotrichum oolentangiense (Sky Blue Aster)	0.15
Tradescantia ohimensis (Ohio Spiderwort)	0.20

Variation in the Class 3, 4, 5, or 6 seed quantities or varieties may be allowed in the event of a crop failure or other unforeseen conditions. Quantities of proposed substitutions shall be determined by seed count. The Contractor shall provide for the approval of the Engineer a written description of the proposed changes to the Class 3, 4, 5, or 6 Mixture(s), the reasons for the change, and the name of the seed suppliers who were contacted in an effort to obtain the specified species. Adjustments will be made at no cost to the contract. Approval of substitutes shall in no way waive any requirements of the contract.

Seeding Time:

Seeding shall be completed between October 15 to April 30 but not when raining or when the ground is covered with snow unless prior written approval is received from Engineer. No seed shall be sown when the ground is not in proper condition for seeding. Seeding done outside of this time frame will not be measured for payment unless approved in writing by Engineer in advance.

The Contractor shall schedule work so that final grade is achieved during the specified seeding times. Any seeding installed on or after March 1 must be incorporated into the soil surface, but no deeper than ¼ inch, such as by rangeland type seed drill, harrow, hand rake, or other method approved by the Engineer.

Bagging, Transporting, and Storing Seed:

Seed mixtures of the specified classes shall be thoroughly mixed, labeled and bagged by the supplier. Purity and germination tests no older than twelve months old must be submitted for all seed supplied to verify quantities of bulk seed required to achieve LB PLS specified.

Seed shall be thoroughly mixed, labeled and bagged by the supplier. Seed shall be bagged, transported, and stored in such a manner to protect it from damage and to maintain the viability of the seed. All seed mixtures shall be brought to the site in clearly labeled and unopened bags.

Seed shall be adequately protected from rain, temperature extremes, rodents, insects, and other such factors that could adversely affect seed viability during transport or while being stored prior to planting. Bags of seed that are leaking, wet, moldy, or otherwise damaged shall be rejected and promptly removed from the site of work. Prior to application, the Engineer must approve the seed mix in the bags on site.

Layout of Seeding:

The Contractor shall be responsible for filed verifying the acreage of the area(s) to be seeded. The amount of seed ordered shall match the area(s) to be seeded during the pending planting season. A minimum of 30 days shall be allowed for seed acquisition, testing, and inspection.

The Contractor shall demarcate all areas to be seeded and estimate quantities of each area to determine the quantity of seed necessary to achieve the specified seed rate per acre. The Contractor shall delineate the perimeter of the seedbed with wooden lathe. The wooden lathe shall remain in place. The contractor shall provide a minimum of seven calendar days notice to the Engineer to allow for review and approval of seeding layout.

Inspection:

The Engineer must witness the delivery of seed with original labels attached in the field. A bag ticket must be affixed to each bag of seed upon delivery and shall not be removed until the Engineer has reviewed and accepted each bag of seed. The label shall bear the dealer's guarantee of mixture and year grown, purity and germination, and date of test.

Seed Bed Preparation:

All area(s) to be seeded must be properly prepared prior to planting seed.

Bare earth seeding refers to sowing seed upon soils with no existing vegetative cover. In areas with existing vegetation, the vegetation shall be eradicated as specified or as directed by the Engineer. Seed bed preparation shall not be started until all requirements of Section 212 have been completed. The area to be seeded shall be worked to a minimum depth of 3 inches with a disk, tiller, box rake, or other equipment approved by the Engineer. In areas with heavy soils, tilling or power raking will be required to achieve the proper depth. All soil clods shall be reduced to a size not larger than ½ inch in the largest dimension to create a friable, pulverized topsoil surface suitable for seeding. Dragging the soil surface with the blade of a loader or dozer will not be an acceptable method of seed bed preparation. The prepared surface shall be relatively free of weeds, stones, roots, sticks, debris, rills, gullies, crusting, caking, and compaction. No seed shall be sown until the seed bed has been approved by the Engineer.

Seeding Methods:

No seed shall be sown when wind gusts exceed 25 miles per hour or when the ground is not in a proper condition for seeding, nor shall any seed be sown until the purity test has been completed for the seeds to be used, and said tests show that the seed meets the noxious weed seed requirements. All equipment shall be approved by the Engineer prior to being used. Prior to starting work, seeders shall be calibrated and adjusted to sow seeds at the required seeding rate. Equipment shall be operated in a manner to ensure complete coverage of the entire area to be seeded. The Engineer shall be notified 48 hours prior to beginning the seeding operations so that

the Engineer may determine by trial runs that a calibration of the seeder will provide uniform distribution at the specified rate per acre.

All legumes (Canada Milk Vetch, White Prairie Clover, Purple Prairie Clover, White Wild Indigo, and Illinois Bundleflower) shall be inoculated with the proper rhizobial bacteria in the amounts and manner recommended by the seed supplier before sowing or being mixed with other seeds for sowing. The inoculant shall be furnished by the Contractor and shall be approved by the Engineer.

Seeding Classes 3, 4, 5, and 6 shall be sown with a broadcast seeder or a rangeland type seed drill.

Hand broadcasting and other methods of sowing seed will be allowed in special circumstances as approved by the Engineer. Special circumstances include but are not necessarily limited to steep slopes (over 1:3 (V:H)), inaccessible areas, wet areas, or other unique situations where the use of the specified equipment is not possible.

Method of Measurement:

SEEDING, CLASS 5A (MODIFIED) will be measured for payment in acres of surface area of seeding for the seed mix type specified.

Basis of Payment:

SEEDING, CLASS 5A (MODIFIED) shall be paid at the Contract unit price per acre. Payment shall be in full for seed, planting, and furnishing all labor to complete the work as set forth above.

TRAFFIC CONTROL PLAN

Traffic Control shall be according to the applicable sections of the Standard Specifications, the Supplemental Specifications, the "Illinois Manual of 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 Articles 107.09 of the Standard Specifications and the following Highway Standards, Details, Quality Standard for Work Zone Traffic Control Devices, Special Provisions, and Recurring Special Provisions contained herein, relating to traffic control.

The Contractor shall contact the engineer, the District 1 Bureau of Traffic, and Village of Carol Stream at least 72 hours in advance of beginning work.

STANDARDS: 701001-02, 701006-05, 701011-04, 701301-04, 701311-03, 701501-06, 701502-09, 701701-10, 701801-06, 701901-11

DETAILS: TC-10 – Traffic Control and Protection for Side Roads, Intersections, and Driveways
TC-13 – District One Typical Pavement Markings
TC-14 – Traffic Control and Protection at Turn Bays (To Remain Open to Traffic)

TC-16 – Short Term Pavement Marking Letters and Symbols
TC-26 – Driveway Entrance Signing

SPECIAL PROVISIONS: Maintenance of Roadways
LRS 3 – Work Zone Traffic Control Surveillance
Public Convenience and Safety
Pavement Marking Inspection (BDE)
Short Term and Temporary Pavement Markings (BDE)
Vehicle and Equipment Warning Lights (BDE)
Work Zone Traffic Control Devices (BDE)

UNDERGROUND RACEWAYS

Effective: March 1, 2015

Revise Article 810.04 of the Standard Specifications to read:

“Installation. All underground conduits shall have a minimum depth of 30-inches (700 mm) below the finished grade.”

Add the following to Article 810.04 of the Standard Specifications:

“All metal conduit installed underground shall be Rigid Steel Conduit unless otherwise indicated on the plans.”

Add the following to Article 810.04 of the Standard Specifications:

“All raceways which extend outside of a structure or duct bank but are not terminated in a cabinet, junction box, pull box, handhole, post, pole, or pedestal shall extend a minimum of 300 mm (12”) or the length shown on the plans beyond the structure or duct bank. The end of this extension shall be capped and sealed with a cap designed for the conduit to be capped.

The ends of rigid metal conduit to be capped shall be threaded, the threads protected with full galvanizing, and capped with a threaded galvanized steel cap.

The ends of rigid nonmetallic conduit and coilable nonmetallic conduit shall be capped with a rigid PVC cap of not less than 3 mm (0.125”) thick. The cap shall be sealed to the conduit using a room-temperature-vulcanizing (RTV) sealant compatible with the material of both the cap and the conduit. A washer or similar metal ring shall be glued to the inside center of the cap with epoxy, and the pull cord shall be tied to this ring.”

UNIT DUCT

Effective: January 1, 2012

Revise the first paragraph of Article 810.04 to read:

“The unit duct shall be installed at a minimum depth of 30-inches (760 mm) unless otherwise directed by the Engineer.”

Revise Article 1088.01(c) to read:

“(c) Coilable Nonmetallic Conduit.

General:

The duct shall be a plastic duct which is intended for underground use and which can be manufactured and coiled or reeled in continuous transportable lengths and uncoiled for further processing and/or installation without adversely affecting its properties of performance. The duct shall be a plastic duct which is intended for underground use and can be manufactured and coiled or reeled in continuous transportable lengths and uncoiled for further processing and/or installation without adversely affecting its properties of performance.

The duct shall be made of high density polyethylene which shall meet the requirements of ASTM D 2447, for schedule 40. The duct shall be composed of black high density polyethylene meeting the requirements of ASTM D 3350, Class C, Grade P33. The wall thickness shall be in accordance with Table 2 for ASTM D 2447.

The duct shall be UL Listed per 651-B for continuous length HDPE coiled conduit. The duct shall also comply with NEC Article 354.100 and 354.120.

Submittal information shall demonstrate compliance with the details of these requirements.

Dimensions: Duct dimensions shall conform to the standards listed in ASTM D2447. Submittal information shall demonstrate compliance with these requirements.

Nominal Size		Nominal I.D.		Nominal O.D.		Minimum Wall	
mm	in	mm	in	mm	in	mm	in
31.75	1.25	35.05	1.380	42.16	1.660	3.556 +0.51	0.140 +0.020
38.1	1.50	40.89	1.610	48.26	1.900	3.683 +0.51	0.145 +0.020

Nominal Size		Pulled Tensile	
mm	in	N	lbs
31.75	1.25	3322	747
38.1	1.50	3972	893

Marking:

As specified in NEMA Standard Publication No. TC-7, the duct shall be clearly and durably marked at least every 3.05 meters (10 feet) with the material designation (HDPE for high density polyethylene), nominal size of the duct and the name and/or trademark of the manufacturer.

Performance Tests:

Polyethylene Duct testing procedures and test results shall meet the requirements of UL 651. Certified copies of the test report shall be submitted to the Engineer prior to the installation of the duct. Duct crush test results shall meet or exceed the following requirements:

Duct Diameter		Min. force required to deform sample 50%	
mm	in	N	lbs
35	1.25	4937	1110
41	1.5	4559	1025

WEED CONTROL, AQUATIC

Revised: January 17, 2016

Description: This work shall consist of the application of a non-selective and non-residual herbicide for weed control in wet areas. Applications may only be made for the control of undesirable vegetation in and around standing and flowing water. Equal formulation must be approved to use in or near water.

Materials: The herbicide shall have the following formulation and must be labeled for use in wetlands and over water:

Active Ingredient:

*Glyphosate, N-(phosphonomethyl) glycine, in the form of its isopropylamine salt	53.80%
Inert Ingredients	46.20%
<hr/>	
TOTAL	100.00%

The Contractor shall submit a certificate, including the following, prior to starting work:

1. The chemical names of the compound and the percentage by weight of the ingredients which must match the above specified formulation.
2. A statement that the material is in a solution which will form a satisfactory emulsion for use when diluted with water for normal spraying conditions.
3. A statement that the herbicide, when mixed with water, will be completely soluble and dispersible and remain in suspension with continuous agitation.
4. A statement describing the products proposed for use when the manufacturer requires that surfactants, drift control agents, or other additives be used with the product. These tank mix additives shall be used as specified by the manufacturer. Required additives will not be paid for separately.

All material shall be brought to the spray area in the original, unopened containers supplied by the manufacturer.

Application Rate: The herbicide shall be applied at the rate of 1 gallon per acre. Formulation shall be diluted with a minimum of twenty-five (25) gallons of water and applied as a mixture. Water for dilution of the mixture will not be paid for separately.

Method of Measurement: Weed Control, Aquatic will be measured for payment in gallons of undiluted herbicide applied as specified. The gallons for payment will be determined based on the gallons specified on the label attached to the original container supplied by the manufacturer.

Basis of Payment: Weed Control, Aquatic will be paid for at the contract unit price per gallon for WEED CONTROL, AQUATIC. Water for dilution of the mixture and additives required for application will not be paid for as separate items, but the costs shall be considered as included in the contract price for WEED CONTROL, AQUATIC, and no additional compensation will be allowed.

WIRE AND CABLE

Effective: January 1, 2012

Add the following to the first paragraph of Article 1066.02(a):

“The cable shall be rated at a minimum of 90°C dry and 75°C wet and shall be suitable for installation in wet and dry locations, and shall be resistant to oils and chemicals.”

Revise the Aerial Electric Cable Properties table of Article 1066.03(a)(3) to read:

Phase Conductor		Messenger wire			
Size AWG	Stranding	Average Insulation Thickness		Minimum Size AWG	Stranding
		mm	mils		
6	7	1.1	(45)	6	6/1
4	7	1.1	(45)	4	6/1
2	7	1.1	(45)	2	6/1
1/0	19	1.5	(60)	1/0	6/1
2/0	19	1.5	(60)	2/0	6/1
3/0	19	1.5	(60)	3/0	6/1
4/0	19	1.5	(60)	4/0	6/1

Add the following to Article 1066.03(b) of the Standard Specifications:

“Cable sized No. 2 AWG and smaller shall be U.L. listed Type RHH/RHW and may be Type RHH/RHW/USE. Cable sized larger than No. 2 AWG shall be U.L. listed Type RHH/RHW/USE.”

Revise Article 1066.04 to read:

“Aerial Cable Assembly. The aerial cable shall be an assembly of insulated aluminum conductors according to Section 1066.02 and 1066.03. Unless otherwise indicated, the cable assembly shall be composed of three insulated conductors and a steel reinforced bare aluminum conductor (ACSR) to be used as the ground conductor. Unless otherwise indicated, the code word designation of this cable assembly is “Palomino”. The steel reinforced aluminum conductor shall conform to ASTM B-232. The cable shall be assembled according to ANSI/ICEA S-76-474.”

Revise the second paragraph of Article 1066.05 to read:

“The tape shall have reinforced metallic detection capabilities consisting of a woven reinforced polyethylene tape with a metallic core or backing.”

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 1.

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

To receive payment, the Contractor must provide training opportunities aimed at developing a full 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.

LR107-4 – SPECIAL PROVISION FOR INSURANCE

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 Carol Stream

DuPage County

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

LR1030-2 – LOCAL QUALITY ASSURANCE/QUALITY MANAGEMENT QC/QA

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	
<input type="checkbox"/>	Cores
<input checked="" type="checkbox"/>	Nuclear Density Gauge (Correlated when paving \geq 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."



Storm Water Pollution Prevention Plan

Route	Marked Route	Section Number
FAU Route 1379	Fullerton Avenue	24-00071-00-RS
Project Number	County	Contract Number
SCTX(733)	DuPage	61L84

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.

Permittee Signature & Date

SWPPP Notes

Preparing BDE 2342 (Storm Water Pollution Prevent Plan)

Guidance on preparing each section of BDE 2342 (Storm Water Pollution Prevention Plan) is found in Chapter 41 of the IDOT Bureau of Design and Environment (BDE) Manual, please consult this chapter during SWPPP preparation. Please note that the Illinois Environmental Protection Agency (IEPA) has 30 days to review the Notice of Intent (NOI) prior to project approval and any deficiencies can result in construction delays.

The Notice of Intent contains the following documents:

- BDE 2342 (Storm Water Pollution Prevention Plan)
- BDE 2342 A (Contractor Certification Statement)
- Erosion and Sediment Control Plan (See Section 63-4.09 of the BDE Manual)

Non-applicable information

If any section of the SWPPP is not applicable put "N/A" in box rather than leaving blank.

National Pollutant Discharge Elimination System (NPDES) Compliance

Description of Work: This work shall consist of those efforts necessary for compliance with the requirements of the Clean Water Act, Section 402 (NPDES), and the Illinois Environment Protection Act. This provision also provides the background information needed to comply with ILR10 and ILR40 permits for this project.

NPDES COMPLIANCE REQUIREMENTS

Part I: Site Description

1. Describe the project location; include latitude and longitude, section, town, and range.

The project is located along Fullerton Avenue from Gary Avenue to Schmale Road within the Village of Carol Stream, DuPage County. (41^55'00"N, 88^06'38"W). Township 40N, Range 10E, Sections 28, 29, 32 and 33.

2. Describe the nature of the construction activity or demolition work.

Earth excavation, minor drainage work, proposed landscaping. No in-stream work. Installation and maintenance of inlet filters and perimeter erosion barrier.

3. Describe the intended sequence of major activities which disturb soils for major portions of the site (e.g. clearing, grubbing, excavation, grading, on-site or off-site stockpiling of soils, on-site or off-site storage of materials).

Removal and disposal of unsuitable soils, earth excavation/grading for sidewalk, and furnishing and placing topsoil, 4".

4. The total area of the construction site is estimated to be 7.2 acres.

5. The total area of the site estimated to be disturbed by excavation, grading or other activities is 1.0 acres.

6. Determine an estimate of the runoff coefficient of the site after construction activities are completed.

C=0.8

7. Provide the existing information describing the potential erosivity of the soil at discharge locations at the project site.

The soils at discharge locations at the project site are vegetated with seeding or brush/trees to keep the soils from eroding.

8. Erosion and Sediment Control Plan (Graphic Plan) is included in the contract. Yes No

9. List all soils found within project boundaries; include map until name, slope information, and erosivity.

Orthents, clayey, undulating (805B), Varna silt loam, 2 to 4 percent slopes (223B), Elliott silt loam, 0 to 2 percent slopes (146A), Ashkum silty clay loam, 0 to 2 percent slopes (232A), Varna silt loam, 4 to 6 percent slopes, eroded (223C2),

10. List of all MS4 permittees in the area of this project

Village of Carol Stream

Note: For sites discharging to an MS4, a separate map identifying the location of the construction site and the location where the MS4 discharges to surface water must be included.

Part II: Waters of the US

1. List the nearest named receiving water(s) and ultimate receiving waters.

Klein Creek, West Branch DuPage River

2. Are wetlands present in the project area? Yes No

If yes, describe the areal extent of the wetland acreage at the site.

3. Natural buffers:

For any storm water discharges from construction activities within 50 feet of a Waters of the United States, except for activities for water-dependent structures authorized by a Section 404 permit, the following shall apply:

(i) A 50-foot undisturbed natural buffer between the construction activity and the Waters of the United States has been provided

Yes No; and/or

(ii) Additional erosion and sediment controls within that area has been provided

Yes No; and Describe: _____

Part III. Water Quality

1. Water Quality Standards

As determined by the Illinois Pollution Control Board, Illinois waters have defined numeric limits of pollutants under the umbrella term "Water Quality Standards." In the following table are commonly used chemicals/practices used on a construction site. These chemicals if spilled into a waterway, could potentially contribute to a violation of a Water Quality Standard. If other chemicals that could contribute a violation of a Water Quality Standard, add as needed.

- | | |
|---|--|
| <input checked="" type="checkbox"/> Fertilizer (check as appropriate) | <input checked="" type="checkbox"/> Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) |
| <input checked="" type="checkbox"/> Nitrogen | <input checked="" type="checkbox"/> Waste water for concrete washout station |
| <input type="checkbox"/> Phosphorus, and/or | <input type="checkbox"/> Coal tar Pitch Emulsion |
| <input checked="" type="checkbox"/> Potassium | <input checked="" type="checkbox"/> Other (Specify) <u>Concrete Curing Compounds</u> |
| <input type="checkbox"/> Herbicide | <input checked="" type="checkbox"/> Other (Specify) <u>Solid Waste Debris</u> |

Table 1: Common chemicals/potential pollutants used during construction

If no boxes are checked in Table 1 above, check the following box:

- There are no chemicals on site that will exceed a Water Quality Standards if spilled.

If any boxes are checked in Table 1 above, check the following box:

There are chemicals on site that if spilled could potentially cause an exceedance of a Water Quality Standard. The Department shall implement Pollution Prevention/Good Housekeeping Practices as described in the Department's ILR40 Discharge for Small

- Municipal Separate Storm Sewer Systems (MS4) reiterated below and Part VIII. Unexpected Regulated Substances/Chemical Spill Procedures:

Pollution Prevention:

The Department will design, and the contractor shall, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants from construction activities. At a minimum, such measures must be designed, installed, implemented and maintained to:

- (a) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge.
- (b) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, chemical storage tanks, deicing material storage facilities and temporary stockpiles, detergents, sanitary waste, and other materials present on the site exposed to precipitation and to storm water.
- (c) Minimize the discharge of pollutants from spills, leaks and vehicle and equipment maintenance and repair activities and implement chemical spill and leak prevention and response procedures;
- (d) Minimize the exposure of fuel, oil, hydraulic fluids, other petroleum products, and other chemicals by storing in covered areas or containment areas. Any chemical container with a storage of 55 gallons or more must be stored a minimum of 50 feet from receiving waters, constructed or natural site drainage features, and storm drain inlets. If infeasible due to site constraints, store containers as far away as the site permits and document in your SWPPP the specific reasons why the 50-foot setback is infeasible and how the containers will be stored.
- (e) The contractor is to provide regular inspection of their construction activities and Best Management Practices (BMPs). Based on inspection findings, the contractor shall determine if repair, replacement, or maintenance measures are necessary in order to ensure the structural integrity, proper function, and treatment effectiveness of structural storm water BMPs. Necessary maintenance shall be completed as soon as conditions allow to prevent or reduce the discharge of pollutants to storm water or as ordered by the Engineer. The Engineer shall conduct inspections required in Section XI Inspections, and report to the contractor deficiencies noted. These Department conducted inspections do not relieve the contractor from their responsibility to inspect their operations and perform timely maintenance; and
- (f) In addition, all IDOT projects are screened for Regulated Substances as described in Section 27-3 of the BDE Manual and implemented via Section 669: Removal and Disposal of Regulated substances in the Standard Specifications for Road and Bridge Construction.

Approved alterations to the Department's provided SWPPP, including those necessary to protect Contractor Borrow, Use and Waste areas, shall be designed, installed, implemented and maintained by the Contractor in accordance with IDOT Standard Specifications Section 280.

2. 303(d) Impaired Waterways

Does the project area have any 303(d) impaired waterways with the following impairments?

- suspended solids
- turbidity, and or
- siltation

Yes No

If yes, list the name(s) of the listed water body and the impairment(s)

303(d) waterbody	Impairments(s)

In addition, It is paramount that the project does not increase the level of the impairment(s) described above. Discuss which BMPs will be implemented to reduce the risk of impairment increase

3. Total Maximum Daily Load (TMDL)

Does the project include any receiving waters with a TMDL for sediment, total suspended solids, turbidity or siltation? Yes No

If yes, List TMDL waterbodies below and describe associated TMDL

TMDL waterbody	TMDL

TMDL waterbody	TMDL

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

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

Part IV. Temporary Erosion and Sediment Controls

Stabilization efforts must be initiated within 1 working day of cessation of construction activity and completed within 14 days. Areas must be stabilized if they will not be disturbed for at least 14 calendar days. Exceptions to this time frame include:

- (i) Where the initiation of stabilization measures is precluded by snow cover, stabilization measures must be initiated as soon as practicable,
- (ii) On areas where construction activities have temporarily ceased and will resume after 14 days, a temporary stabilization method can be used (temporary stabilization techniques must be described), and
- (iii) Stabilization is not required for exit points at linear utility construction site that are used only episodically and for very short durations over the life of the project, provided other exit point controls are implemented to minimize sediment track-out.

Additionally, a record must be kept with the SWPPP throughout construction of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated.

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.

Note: For practices below, consult relevant design criteria in Chapter 41 of the BDE Manual and maintenance criteria in Erosion and Sediment Control Field Guide for Construction.

1. Erosion Control:

The following are erosion control practices which may be used on a project (place a check by each practice that will be utilized on the project, add additional practices as needed):

- | | |
|---|---|
| <input type="checkbox"/> Mulch
<input checked="" type="checkbox"/> Erosion Control Blanket
<input type="checkbox"/> Turf Reinforcement Mat
<input type="checkbox"/> Sodding
<input checked="" type="checkbox"/> Geotextile fabric | <input checked="" type="checkbox"/> Preservation of existing vegetation
<input type="checkbox"/> Temporary Turf Cover Mixture (Class 7)
<input checked="" type="checkbox"/> Permanent seeding (Class 1-6)
<input checked="" type="checkbox"/> Other (Specify) <u>Temporary Erosion Control Seeding</u>
<input checked="" type="checkbox"/> Other (Specify) <u>Seeding (Special)</u>
<input type="checkbox"/> Other (Specify) _____ |
|---|---|

2. Sediment Control:

The following sediment control devices will be implemented on this project:

- | | |
|---|---|
| <input type="checkbox"/> Ditch Checks
<input checked="" type="checkbox"/> Inlet and Pipe protection
<input type="checkbox"/> Hay or Straw bales | <input checked="" type="checkbox"/> Perimeter Erosion Barrier
<input checked="" type="checkbox"/> Rolled Excelsior
<input type="checkbox"/> Silt Filter Fence |
|---|---|

- Above grade inlet filters (fitted)
- Above grade inlet filters (non-fitted)
- Inlet filters

- Urethane foam/geotextiles
- Other (Specify) _____
- Other (Specify) _____
- Other (Specify) _____

3. Structural Practices:

Provide below is a description of structural practices that will be implemented:

- | | |
|--|--|
| <input type="checkbox"/> Aggregate Ditch | <input type="checkbox"/> Stabilized Construction Exits |
| <input type="checkbox"/> Articulated Block Revetment Mat | <input type="checkbox"/> Stabilized Trench Flow |
| <input type="checkbox"/> Barrier (Permanent) | <input type="checkbox"/> Sediment Basin |
| <input type="checkbox"/> Concrete Revetment Mats | <input type="checkbox"/> Retaining Walls |
| <input checked="" type="checkbox"/> Dewatering Filtering | <input checked="" type="checkbox"/> Riprap |
| <input type="checkbox"/> Gabions | <input checked="" type="checkbox"/> Storm Drain Inlet Protection |
| <input type="checkbox"/> In-Stream or Wetland Work | <input type="checkbox"/> Slope Walls |
| <input type="checkbox"/> Level Spreaders | <input type="checkbox"/> Sediment Trap |
| <input type="checkbox"/> Paved Ditch | <input type="checkbox"/> Other (Specify) _____ |
| <input type="checkbox"/> Permanent Check Dams | <input type="checkbox"/> Other (Specify) _____ |
| <input type="checkbox"/> Precast Block Revetment Mat | <input type="checkbox"/> Other (Specify) _____ |
| <input type="checkbox"/> Rock Outlet Protection | <input type="checkbox"/> Other (Specify) _____ |

4. Polymer Flocculants

Design guidance for polymer flocculants is available in Chapter 41 of the BDE Manual. In addition, Polymer Flocculants may only be used by district Special Provision.

If polymer flocculants are used for this project, the following must be adhered to and described below:

- Identify the use of all polymer flocculants at the site.
- Dosage of treatment chemicals shall be identified along with any information from any Material Safety Data Sheet.
- Describe the location of all storage areas for chemicals.
- Include any information from the manufacturer's specifications.
- Treatment chemicals must be stored in areas where they will not be exposed to precipitation.
- The SWPPP must describe procedures for use of treatment chemicals and staff responsible for use/application of treatment chemicals must be trained on the established procedures.

N/A

Part V. Other Conditions

1. Dewatering

Will dewatering be required for this project? Yes No

If yes, the following applies:

- Dewatering discharges shall be routed through a sediment control (e.g., sediment trap or basin, pumped water filter bag) designed to minimize discharges with visual turbidity;
- The discharge shall not include visible floating solids or foam;
- The discharge must not cause the formation of a visible sheen on the water surface, or visible oily deposits on the bottom or shoreline of the receiving water. An oil-water separator or suitable filtration device shall be used to treat oil, grease, or other similar products if dewatering water is found to or expected to contain these materials;
- To the extent feasible, use well-vegetated (e.g., grassy or wooded), upland areas of the site to infiltrate dewatering water before discharge;
- You are prohibited from using receiving waters as part of the treatment area;
- To minimize dewatering-related erosion and related sediment discharges, use stable, erosion-resistant surfaces (e.g., well-vegetated grassy areas, clean filler stone, geotextile underlayment) to discharge from dewatering controls. Do not place dewatering controls, such as pumped water filter bags, on steep slopes (15% or greater in grade);
- Backwash water (water used to backwash/clean any filters used as part of storm water treatment) must be properly treated or hauled off-site for disposal;
- Dewatering treatment devices shall be properly maintained; and
- See Part XI (Inspections) for inspection requirement.

Part VI. Permanent (i.e., Post-Construction) Storm Water Management Controls

Provided below is a description of measures that may be installed during the construction process to control volume and therefore the amount pollutants in storm water runoff that can occur after construction operations have been completed.

Practices may include but are not limited to the following:

- Aggregate ditch checks;
- bioswales,
- detention pond(s),
- infiltration trench;
- retention pond(s),
- open vegetated swales and natural depressions,
- treatment train (sequential system which combine several practices).
- Velocity dissipation devices (See Structural Practices above)

Describe these practices below

Erosion Control Blanket/Seeding/Trees/Mulch/Bushes

Part VII. Additional Practices Incorporated From Local Ordinance(s)

In some instances, an additional practice from a local ordinance may be included in the project. If so, describe below (Note: the Department is not subject to local ordinances)

Part VIII. Unexpected Regulated Substances/Chemical Spill Procedures

When Unexpected Regulated Substances or chemical spills occur, Article 107.19 of the Standard Specifications for Road and Bridge Construction shall apply. In addition, it is the contractor's responsibility to notify the Engineer in the event of a chemical spill into a ditch or waterway, the Engineer will then notify appropriate IEPA and IEMA personnel for the appropriate cleanup procedures.

Part IX. 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 construction entrances and exits to be used and how they will be maintained)
- 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. Specifically, any chemical stored in a 55 gallon drum provided by the contractor.
- 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.
- 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.

Additional measures indicated in the plan

Part X. Maintenance

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. However, 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. Any damage or undermining shall be repaired immediately.

For Inlet Protection: Where there is evidence of sediment accumulation adjacent to the inlet protection measure, the deposited sediment must be removed by the following business day.

Below, describe procedures to maintain in good and effective operating conditions

Seeding - all erodible bare earth areas will be temporarily seeded on a weekly basis.

Perimeter Erosion Barrier - Sediment will be removed when it exceeds half the height of the fence and any fence what collapses will be replaced immediately.

Erosion Control - Any areas which fail will be repaired immediately.

In concentrated flow such as erosion control blanket and other erosion controls will be inspected after every runoff event and maintained as needed.

Inlet filters will be inspected after every runoff event and maintained as needed.

Permanent Seeding - Monitoring of the establishment of the post-construction seeding for one year will ensure the establishment of vegetation. Areas where vegetation fails to establish will be reseeded.

Part XI. Inspections

Qualified personnel shall inspect disturbed areas of the construction site that have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site at least once every seven calendar days and within 24 hours of the end of a storm or by the end of the following business or workday that is 0.50 inches or greater or equivalent snowmelt (except as allowed for Frozen Conditions).

In addition, all areas where storm water typically flows within the site should be inspected periodically to check for evidence of pollutants entering the drainage system, as well as all locations where stabilization measures have been implemented to ensure they are operating correctly.

Inspections shall be documented on the form BC 2259 (Storm Water Pollution Prevention Plan Erosion Control Inspection Report).

The Erosion and Sediment Control Field Guide for Construction Inspection shall be consulted as needed.

Dewatering

For site(s) discharging dewatering water, an inspection during the discharge shall be done once per day on which the discharge occurs and record the following in a report within 24 hours of completing the Inspection:

- The inspection date;
- Names and titles of personnel performing the inspection;
- Approximate times that the dewatering discharge began and ended on the day of inspection;
- Estimates of the rate (in gallons per day) of discharge on the day of inspection;
- Whether or not any of the following indications of pollutant discharge were observed at the point of discharge: a sediment plume, suspended solids, unusual color, presence of odor, decreased clarity, or presence of foam; and/or a visible sheen on the water surface or visible oily deposits on the bottom or shoreline of the receiving water.

Frozen Conditions

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

Flooding or unsafe conditions

Areas that are inaccessible during required inspections due to flooding or other unsafe conditions must be inspected within 72 hours of becoming accessible.

Part XII. Incidence of Noncompliance (ION)

The Department shall notify the appropriate Agency Field Operations Section office by email as described on the IEPA ION form, within 24 hours of any incidence of noncompliance for any violation of the storm water pollution prevention plan observed during any inspection conducted, or for violations of any condition of this permit.

The Department shall complete and submit within 5 days an "Incidence of Noncompliance" (ION) report for any violation of the storm water pollution prevention plan observed during any Inspection conducted, or for violations of any condition of this permit. Submission shall be on forms provided by the IEPA and 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. Corrective actions must be undertaken immediately to address the identified non-compliance issue(s).

Illinois EPA
2520 W. Iles Ave./P.O. Box 19276
Springfield, IL 62794-9276

Please note that if these are delivered via FedEx or UPS, these carriers cannot deliver to our P.O. Box and this number must be excluded from the mailing address.

Part XIII. Corrective Actions

Corrective actions must be taken when:

- A storm water control needs repair or replacement;
- A storm water control necessary to comply with the requirements of this permit was never installed, or was installed incorrectly;
- Discharges are causing an exceedance of applicable water quality standards; or
- A prohibited discharge has occurred.

Corrective Actions must be completed as soon as possible and documented within 7 days in an Inspection Report or report of noncompliance. If it is infeasible to complete the installation or repair within 7 calendar days, it must be documented in the records why it is infeasible to complete the installation or repair within the 7 day time-frame and document the schedule for installing the storm water control(s) and making it operational as soon as feasible after the 7-day time-frame.. In the event that maintenance is required for the same storm water control at the same location three or more times, the control must be repaired in a manner that prevents continued failure to the extent feasible, and it must be documented the condition and how it was repaired in the records. Alternatively, it must be documented why the specific re-occurrence of this same issue must continue to be addressed as a routine maintenance fix.

Part XIV. Retention of Records

The Department must retain copies of the SWPPP and all reports and notices required by this permit, records of all data used to complete the NOI to be covered by this permit, and the Agency Notice of Permit Coverage letter for at least three years from the date that the permit coverage expires or is terminated. the permittee must retain a copy of the SWPPP and any revisions to the SWPPP required by this permit at the construction site from the date of project initiation to the date of final stabilization. Any manuals or other documents referenced in the SWPPP must also be retained at the construction site.

Part XV. 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 (See Article 105.03 Conformity with Contract)

Part XVI. Keeping the SWPPP (“plan”) Current

IDOT shall amend the plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to Waters of the United States and which has not otherwise been addressed in the plan or if the plan proves to be ineffective in eliminating or significantly minimizing sediment and/or pollutants identified under paragraph Part II. Water Quality or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with construction site activity.

In addition, the plan shall be amended to identify any new contractor and/or subcontractor that will implement a measure of the plan. Amendments to the plan may be reviewed by the IEPA the same manner as the SWPPP and Erosion and Sediment Control Plan (ESCP) submitted as part of the Notice of Intent (NOI). The SWPPP and site map must be modified within 7 days for any changes to construction plans, storm water controls or other activities at the site that are no longer accurately reflected in the SWPPP.

In addition, the NOI shall be modified using the CDX system for any substantial modifications to the project such as:

- address changes
- new contractors
- area coverage
- additional discharges to Waters of the United States, or
- other substantial modifications (e.g. addition of dewatering activities).

The notice of intent shall be modified within 30 days of the modification to the project.

Part XVII: Notifications

In addition to the NOI submitted to IEPA, all MS4 permittees identified in Part I. Site Description shall receive a copy of the NOI.

Part XVIII. Notice of Termination

Where a site has completed final stabilization and all storm water discharges from construction activities that are authorized by this permit are eliminated, the permittee must submit a completed Notice of Termination (NOT) that is signed in accordance with ILR10 permit.

Method of Measurement: NPDES Compliance shall not be measured for payment separately. Measurement for payment for Temporary Erosion and Sediment Control shall be in accordance with Section 280 or as otherwise provided in the contract. Permanent BMPs necessary to comply with this provision shall be measured for payment in accordance with their respective provisions in the contract.

Basis of Payment: NPDES Compliance shall not be paid for separately. Payment for Temporary Erosion and Sediment Control shall be in accordance with Section 280 or as otherwise provided in the contract. Permanent BMPs necessary to comply with this provision shall be paid for in accordance with their respective payment provisions in the contract.



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 Part IX. Contractor Required Submittals of the Storm Water Pollution Prevention Plan (SWPPP) which will be handled by the Contractor/subcontractor completing this form.

Route FAU Route 1379	Marked Route Fullerton Avenue	Section Number 24-00071-00-RS
Project Number SCTX(733)	County DuPage	Contract Number 61L84

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

2520 West Iles Avenue • 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

OWNER INFORMATION

Permit No. ILR10 _____

Company/Owner Name: Village of Carol Stream
Mailing Address: 500 North Gary Avenue Phone: 630.871.6220
City: Carol Stream State: IL Zip: 60188 Fax: 630.665.1064
Contact Person: Adam Frederick, P.E. E-mail: afrederick@carolstream.org
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: Fullerton Avenue Resurfacing County: DuPage
Street Address: Fullerton Avenue City: Carol Stream IL Zip: 60188
Latitude: 41 55 00 Longitude: 88 06 38 28,29,3 40N 10E
(Deg) (Min) (Sec) (Deg) (Min) (Sec) Section Township Range
Approximate Construction Start Date March 1, 2026 Approximate Construction End Date July 30, 2026

Total size of construction site in acres: 7.2
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: 500 North Gary Avenue City: Carol Stream

SWPPP contact information: Inspector qualifications: _____
Other _____
Contact Name: Adam Frederick, P.E.

Phone: (630) 868-2263 Fax: 630.665.1064 E-mail: afrederick@carolstream.org

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:

Milling and Resurfacing of Fullerton Avenue from Gary Avenue to Schmale Road. Construct new sidewalk along the north side of roadway from Gary Avenue to the existing sidewalk south of Center Avenue, including earth excavation, drainage improvements, street lighting, signing, pavement markings, and restoration.

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 Carol Stream

Name of closest receiving water body to which you discharge: Klein Creek

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:

Adam Frederick, P.E.

Printed Name:



Date:

Director of Engineering Services

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

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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: Fullerton Avenue Office Phone Number, if available: _____

Physical Site Location (address, including number and street):

Fullerton Avenue (from Gary Avenue to Schmale Road)

City: Carol Stream State: IL Zip Code: 60188

County: DuPage Township: Bloomingtondale

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 41.91639 Longitude: - 88.12031

(Decimal Degrees)

(-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

IEPA Site Number(s), if assigned: BOL: _____ BOW: _____ BOA: _____

Approximate Start Date (mm/dd/yyyy): _____ Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 465

II. Owner/Operator Information for Source Site

Site Owner

Name: Village of Carol Stream

Street Address: 500 N Gary Avenue

PO Box: _____

City: Carol Stream State: IL

Zip Code: 60188 Phone: 360-871-6220

Contact: Greg Ulreich

Email, if available: gulreich@carolstream.org

Site Operator

Name: To be determined

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.

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):

See attached.

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]:

See attached.

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Kate Kasch Schulstad, PE (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: Hampton, Lenzini and Renwick, Inc.
Street Address: 1707 N Randall Road, Suite 100
City: Elgin State: IL Zip Code: 60123
Phone: 847-697-6700

Kate Kasch Schulstad
Printed Name:

Kate Kasch Schulstad
Licensed Professional Engineer or
Licensed Professional Geologist Signature:

7/2/2025
Date: Expires 11/30/2025



P. E. Seal:
Kate Kasch Schulstad



Hampton, Lenzini and Renwick, Inc.

Civil Engineers • Structural Engineers • Land Surveyors • Environmental Specialists
www.hltreengineering.com

LPC-663 Attachment

III.

- a) A database review was conducted for potential historical and environmental issues in the project area. The site was inspected on May 7, 2025, to identify any potential hazards or indicators of environmental concerns. Nine soil samples were taken within the excavation area along Fullerton Avenue. Samples were spaced to delineate potential areas of contamination along the corridor adjacent to potentially impacted properties, with the exception of the railroad right-of-way. The samples were submitted to an accredited laboratory for analysis of potential contamination.
- b) The soil testing results indicate all but one sample are within the MSA County (outside of Chicago) Maximum Allowable Concentrations (MAC) table values for the tested constituents of concern: VOCs, Semi-VOCs, Pesticides/Herbicides, PCBs and RCRA Metals. One compound, Benzo(b)fluoranthene, present in SB-2, indicates an exceedance of the MAC for an MSA County outside of Chicago. No other samples had constituents that exceeded the MAC for an MSA county. No soil samples were taken from the railroad right-of-way and thus all material from that right-of-way is also excluded from CCDD disposal. The exclusion zones encompass Station 115+000 to 128+00 RT and Station 127+00 to 128+00 LT. The soil was also analyzed for soil pH and was within the range of 6.25 to 9.0, with values of 7.70 to 8.06. Soil samples were collected between 18" and 24" in depth to represent the maximum depth of excavation for the majority of proposed work. The sample location map and analytical results document from Pace Analytical Services are attached.

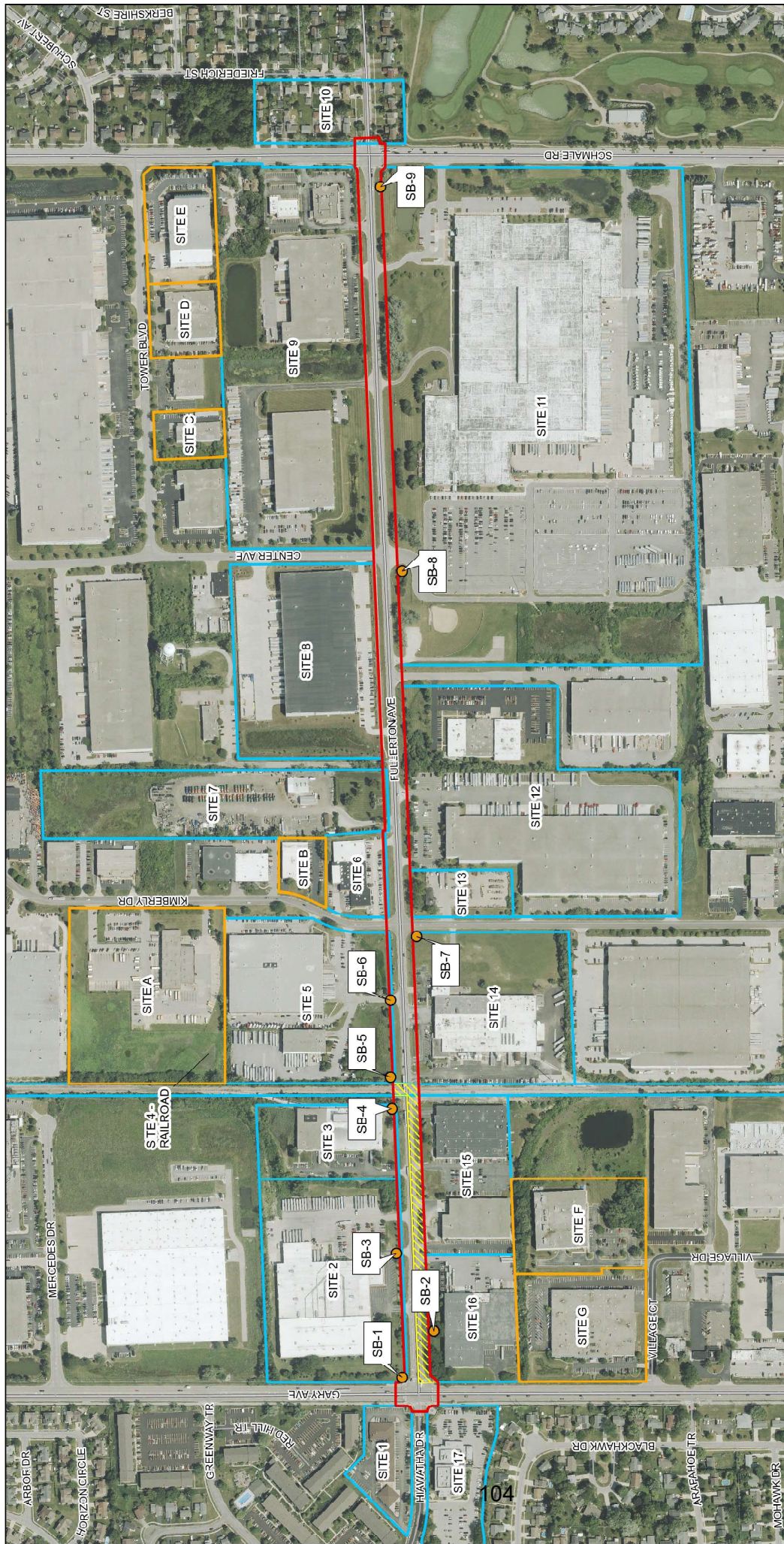


Figure 1

Fullerton Avenue

Evaluated Site Locations
Scale: 1:4,800

Hampton, Lenzini and Benwick, Inc.
 Civil & Structural Engineers • Land Surveyors • Estimators • Specialists
 ECA • CRYSTAL LAKE • STONINGTON • WILMINGTON • WIT. CERTIFIED
 www.hamptonlbenwick.com

↑ N

RECs were identified at the following Sites along the project:

- Site 1 Greenway Shoppes. REC(s): former or present hazardous chemical use, de minimis condition(s); potential ACM and lead paint.
- Site 2 International Paper Co., REC(s): former chemical/petroleum leaks/spills, potential UST(s), solid waste, and potential chemical use, de minimis condition(s); potential ACM and lead paint.
- Site 4 Canadian National Railway, REC(s): railroad corridor.
- Site 5 Midwest Star Group, REC(s): Spills (non-hazardous and hazardous materials).
- Site 11 United States Postal Service, REC(s): USTs, Gasoline and diesel spill, large unknown barrels and lead paint.
- Site 13 Neenah Foundry, REC(s): UST and potential chemical use, de minimis condition(s); potential ACM and lead paint.
- Site 14 Tri-Sure Carol Stream, REC(s): UST and spills, de minimis condition(s); potential chemical use, potential ACM, and lead paint.
- Site 16 Time Messenger & Trucking Ltd, REC(s): SRP, de minimis condition(s); potential ACM and lead paint.

Imagery: 2023 National Agriculture Imagery Program

Project Description	Project Area	Sample Location
	Evaluated Site Locations	Preliminary Exclusion Zone
	Adjoining Sites	

1 inch = 400 feet
 0 100 200 400 Feet

USDA FSA-AAPFC Aerial Photography Field Office, Photo View, FEMA, USGS, US Census, IDOT

Table 3-1

Client: Hampton Lenzini and Renwick Inc
 Project Number: 24.0043-Fullerton PSI
 Work Order: IE01764



Chemical Name	CCDD Limits	IE01764-01	IE01764-02	IE01764-03	IE01764-04	IE01764-05	IE01764-06	IE01764-07	IE01764-08	IE01764-09
		SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8	SB-9
		05/07/2025	05/07/2025	05/07/2025	05/07/2025	05/07/2025	05/07/2025	05/07/2025	05/07/2025	05/07/2025
VOAs										
EPA 8260B (mg/kg dry)										
Acetone	25	0,113	0,0863	0,107	0,0414	0,0501	0,0412	0,0628	< 0,0297	< 0,117
Acrolein	~	< 0,0427	< 0,0404	< 0,0553	< 0,0373	< 0,0403	< 0,0319	< 0,0387	< 0,0297	< 0,0389
Acrylonitrile	~	< 0,0427	< 0,0404	< 0,0553	< 0,0373	< 0,0403	< 0,0319	< 0,0387	< 0,0297	< 0,0389
Benzene	0,03	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
Bromobenzene	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
Bromochloromethane	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
Bromodichloromethane	0,6	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
Bromoform	0,8	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
Bromomethane	0,2	< 0,00854	< 0,00808	< 0,0111	< 0,00747	< 0,00807	< 0,00637	< 0,00774	< 0,00594	< 0,00777
2-Butanone	17	0,0114	< 0,00808	< 0,0111	< 0,00747	< 0,00807	< 0,00637	< 0,00774	< 0,00594	< 0,00777
n-Butylbenzene	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
sec-Butylbenzene	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
tert-Butylbenzene	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
Carbon disulfide	9	< 0,00854	< 0,00808	< 0,0111	< 0,00747	< 0,00807	< 0,00637	< 0,00774	< 0,00594	< 0,00777
Carbon tetrachloride	0,07	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
Chlorobenzene	1	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
Chloroethane	~	< 0,00854	< 0,00808	< 0,0111	< 0,00747	< 0,00807	< 0,00637	< 0,00774	< 0,00594	< 0,00777
Chloroform	0,3	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
Chloromethane	~	< 0,00854	< 0,00808	< 0,0111	< 0,00747	< 0,00807	< 0,00637	< 0,00774	< 0,00594	< 0,00777
2-Chlorotoluene	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
4-Chlorotoluene	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
1,2-Dibromo-3-chloropropane	0,002	< 7.91E-5	< 7.48E-5	< 0,000102	< 6.92E-5	< 7.47E-5	< 5.90E-5	< 7.18E-5	< 5.50E-5	< 7.20E-5
Dibromochloromethane	0,4	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
1,2-Dibromoethane	0,005	< 4.27E-5	< 4.04E-5	< 5.53E-5	< 3.73E-5	< 4.03E-5	< 3.19E-5	< 3.87E-5	< 2.97E-5	< 3.89E-5
Dibromomethane	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
1,2-Dichlorobenzene	17	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
1,3-Dichlorobenzene	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
1,4-Dichlorobenzene	2	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
Dichlorodifluoromethane	~	< 0,00854	< 0,00808	< 0,0111	< 0,00747	< 0,00807	< 0,00637	< 0,00774	< 0,00594	< 0,00777
1,1-Dichloroethane	23	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
1,2-Dichloroethane	0,02	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
1,1-Dichloroethene	0,06	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
cis-1,2-Dichloroethene	0,4	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
trans-1,2-Dichloroethene	0,7	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
1,2-Dichloroethene- Total	~	< 0,00854	< 0,00808	< 0,0111	< 0,00747	< 0,00807	< 0,00637	< 0,00774	< 0,00594	< 0,00777
1,2-Dichloropropane	0,03	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
1,3-Dichloropropane	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
2,2-Dichloropropane	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
1,1-Dichloropropene	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
cis-1,3-Dichloropropene	0,005	< 0,00256	< 0,00242	< 0,00332	< 0,00224	< 0,00242	< 0,00191	< 0,00232	< 0,00178	< 0,00233
trans-1,3-Dichloropropene	0,005	< 0,00256	< 0,00242	< 0,00332	< 0,00224	< 0,00242	< 0,00191	< 0,00232	< 0,00178	< 0,00233
1,3-Dichloropropene - Total	~	< 0,00342	< 0,00323	< 0,00442	< 0,00299	< 0,00323	< 0,00255	< 0,00310	< 0,00237	< 0,00311
Diethyl ether	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
Ethyl acetate	~	< 0,00854	< 0,00808	< 0,0111	< 0,00747	< 0,00807	< 0,00637	< 0,00774	< 0,00594	< 0,00777
Ethylbenzene	13	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
Hexachlorobutadiene	~	< 0,00854	< 0,00808	< 0,0111	< 0,00747	< 0,00807	< 0,00637	< 0,00774	< 0,00594	< 0,00777
n-Hexane	~	0,00564	0,00437	0,00600	< 0,00373	< 0,00403	< 0,00319	0,00482	< 0,00297	< 0,00389
2-Hexanone	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
Isopropylbenzene	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
p-Isopropyl toluene	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
MTBE	0,32	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
4-Methyl-2-pentanone	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
Methylene chloride	0,02	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
Naphthalene	1,8	< 0,0102	< 0,00969	< 0,0133	< 0,00896	< 0,00968	< 0,00764	< 0,00929	< 0,00712	< 0,00933
n-Propylbenzene	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
Styrene	4	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
1,1,1,2-Tetrachloroethane	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
1,1,2,2-Tetrachloroethane	~	< 0,00171	< 0,00162	< 0,00221	< 0,00149	< 0,00161	< 0,00127	< 0,00155	< 0,00119	< 0,00155
Tetrachloroethene	0,06	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
Toluene	12	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
1,1,2-Trichloro-1,2,2-trifluoroeth	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
1,2,3-Trichlorobenzene	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
1,2,4-Trichlorobenzene	5	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
1,1,1-Trichloroethane	2	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
1,1,2-Trichloroethane	0,02	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
Trichloroethene	0,06	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
Trichlorofluoromethane	~	< 0,00854	< 0,00808	< 0,0111	< 0,00747	< 0,00807	< 0,00637	< 0,00774	< 0,00594	< 0,00777
1,2,3-Trichloropropane	~	< 0,00427	< 0,00404	< 0,00553	< 0,00373	< 0,00403	< 0,00319	< 0,00387	< 0,00297	< 0,00389
1,2,4-Trimethylbenzene	~	< 0,00427	< 0,00404	<						

Table 3-2

Client: Hampton Lenzini and Renwick Inc
 Project Number: 24.0043-Fullerton PSI
 Work Order: IE01764



Ineligible										
Chemical Name	CCDD Limits (MSA Co)	IE01764-01	IE01764-02	IE01764-03	IE01764-04	IE01764-05	IE01764-06	IE01764-07	IE01764-08	IE01764-09
		SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8	SB-9
		05/07/2025	05/07/2025	05/07/2025	05/07/2025	05/07/2025	05/07/2025	05/07/2025	05/07/2025	05/07/2025
BNAs										
<i>EPA 8270C (mg/kg dry)</i>										
Acenaphthene	570	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
Acenaphthylene	85	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
Anthracene	12000	< 0.382	< 0.414	0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
Benzo(a)anthracene	1.8	< 0.382	1.27	1.21	0.446	0.665	0.494	< 0.396	< 0.383	< 0.401
Benzo(b)fluoranthene	2.1	< 0.382	2.38	2.01	0.732	1.31	0.888	0.420	< 0.383	< 0.401
Benzo(k)fluoranthene	9	< 0.382	0.758	0.628	< 0.395	0.474	< 0.391	< 0.396	< 0.383	< 0.401
Benzo(g,h,i)perylene	2300	< 0.382	0.994	1.01	0.434	0.678	0.547	< 0.396	< 0.383	< 0.401
Benzo(a)pyrene	2.1	0.194	1.59	1.36	0.517	0.847	0.607	0.270	< 0.0690	< 0.0722
Bis(2-chloroethoxy) methane	~	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
Bis(2-chloroisopropyl) ether	~	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
Bis(2-ethylhexyl) phthalate	46	< 0.382	< 0.414	< 0.418	< 0.395	8.74	< 0.391	< 0.396	< 0.383	< 0.401
4-Bromophenyl phenyl ether	~	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
Butyl benzyl phthalate	930	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
Carbazole	0.6	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
4-Chloro-3-methylphenol	~	< 0.763	< 0.829	< 0.835	< 0.791	< 0.814	< 0.781	< 0.792	< 0.766	< 0.801
4-Chloroaniline	0.7	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
2-Chloronaphthalene	~	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
2-Chlorophenol	1.5	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
4-Chlorophenylphenyl ether	~	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
Chrysene	88	< 0.382	1.64	1.44	0.564	0.920	0.646	< 0.396	< 0.383	< 0.401
Di-n-butyl phthalate	2300	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
Di-n-octyl phthalate	1600	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
Dibenzo(a,h)anthracene	0.42	< 0.0687	0.271	0.237	0.0939	0.160	0.112	< 0.0714	< 0.0690	< 0.0722
Dibenzofuran	~	< 1.91	< 2.07	< 2.09	< 1.98	< 2.04	< 1.95	< 1.92	< 1.92	< 2.00
1,2-Dichlorobenzene	17	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
1,3-Dichlorobenzene	~	< 0.115	< 0.124	< 0.125	< 0.119	< 0.122	< 0.117	< 0.119	< 0.115	< 0.120
1,4-Dichlorobenzene	2	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
2,4-Dichlorophenol	0.48	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
Diethyl phthalate	470	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
Dimethyl phthalate	~	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
2,4-Dimethylphenol	9	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
2,4-Dinitrophenol	3.3	< 0.115	< 0.124	< 0.125	< 0.119	< 0.122	< 0.117	< 0.119	< 0.115	< 0.120
Fluoranthene	3100	< 0.382	3.15	3.21	1.14	1.72	1.20	0.462	< 0.383	< 0.401
Fluorene	560	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
Hexachlorobenzene	0.4	< 0.115	< 0.124	< 0.125	< 0.119	< 0.122	< 0.117	< 0.119	< 0.115	< 0.120
Hexachlorobutadiene	~	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
Hexachlorocyclopentadiene	1.1	< 0.763	< 0.829	< 0.835	< 0.791	< 0.814	< 0.781	< 0.792	< 0.766	< 0.801
Hexachloroethane	0.5	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
Indeno(1,2,3-cd)pyrene	1.6	< 0.382	1.06	0.905	< 0.395	0.652	0.463	< 0.396	< 0.383	< 0.401
Isophorone	8	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
2-Methylnaphthalene	~	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
2-Methylphenol	15	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
3- & 4-Methylphenol	~	< 0.115	< 0.124	< 0.125	< 0.119	< 0.122	< 0.117	< 0.119	< 0.115	< 0.120
Naphthalene	1.8	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
2-Nitroaniline	~	< 0.115	< 0.124	< 0.125	< 0.119	< 0.122	< 0.117	< 0.119	< 0.115	< 0.120
3-Nitroaniline	~	< 5.73	< 6.22	< 6.27	< 5.94	< 6.11	< 5.87	< 5.95	< 5.75	< 6.02
4-Nitroaniline	~	< 0.0687	< 0.0746	< 0.0752	< 0.0712	< 0.0734	< 0.0704	< 0.0714	< 0.0690	< 0.0722
Nitrobenzene	0.26	< 0.0687	< 0.0746	< 0.0752	< 0.0712	< 0.0734	< 0.0704	< 0.0714	< 0.0690	< 0.0722
2-Nitrophenol	~	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
4-Nitrophenol	~	< 1.91	< 2.07	< 2.09	< 1.98	< 2.04	< 1.95	< 1.92	< 1.92	< 2.00
N-Nitrosodiphenylamine	1	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
Phenanthrene	210	< 0.382	1.23	1.30	0.467	0.559	0.406	< 0.396	< 0.383	< 0.401
Phenol	100	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
Pyrene	2300	< 0.382	2.56	2.65	0.888	1.32	0.925	< 0.396	< 0.383	< 0.401
1,2,4-Trichlorobenzene	5	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
2,4,5-Trichlorophenol	26	< 0.382	< 0.414	< 0.418	< 0.395	< 0.407	< 0.391	< 0.396	< 0.383	< 0.401
2,4,6-Trichlorophenol	0.66	< 0.115	< 0.124	< 0.125	< 0.119	< 0.122	< 0.117	< 0.119	< 0.115	< 0.120
Bis(2-chloroethyl) ether	0.66	< 0.000367	< 0.000398	< 0.000401	< 0.000380	< 0.000391	< 0.000375	< 0.000381	< 0.000368	< 0.000385
3,3'-Dichlorobenzidine	1.3	< 0.00642	< 0.00697	< 0.00702	< 0.00665	< 0.00685	< 0.00657	< 0.00666	< 0.00644	< 0.00674
4,6-Dinitro-2-methylphenol	~	< 0.00137	< 0.00149	< 0.00150	< 0.00142	< 0.00147	< 0.00141	< 0.00143	< 0.00138	< 0.00144
2,4-Dinitrotoluene	0.25	< 0.000665	< 0.000722	< 0.000727	< 0.000688	< 0.000709	< 0.000681	< 0.000690	< 0.000667	< 0.000698
2,6-Dinitrotoluene	0.26	< 0.000619	< 0.000672	< 0.000677	< 0.000641	< 0.000660	< 0.000634	< 0.000642	< 0.000621	< 0.000650
Hexachlorobenzene	0.4	< 0.0378	< 0.0411	< 0.0414	< 0.0392	< 0.0404	< 0.0387	< 0.0393	< 0.0380	< 0.0397
N-Nitrosodi-n-propylamine	0.0018	< 0.000412	< 0.000448	< 0.000451	< 0.000427	< 0.000440	< 0.000422	< 0.000428	< 0.000414	< 0.000433
Pentachlorophenol	0.02	< 0.00107	< 0.00116	< 0.00117	< 0.00110	< 0.00114	< 0.00109	< 0.00111	< 0.00107	0.00360

Notes:
 All results are reported as mg/kg-dry unless otherwise noted.
 Gray Bold/Shaded results indicate concentrations exceeding CCDD MACS for non-MSA county
 Yellow shaded results indicate concentrations exceeding CCDD MAC for MSA county outside of Chicago

Table 3-3

Client: Hampton Lenzini and Renwick Inc
 Project Number: 24.0043-Fullerton PSI
 Work Order: IE01764



Chemical Name	CCDD Limits	IE01764-01	IE01764-02	IE01764-03	IE01764-04	IE01764-05	IE01764-06	IE01764-07	IE01764-08	IE01764-09
		SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8	SB-9
		05/07/2025	05/07/2025	05/07/2025	05/07/2025	05/07/2025	05/07/2025	05/07/2025	05/07/2025	05/07/2025
INORG										
EPA 6010B (mg/kg dry)										
Silver	4.4	< 0.377	< 0.494	< 0.461	< 0.366	< 0.450	< 0.444	< 0.465	< 0.300	< 0.463
Barium	1500	74.5	98.5	108	102	83.2	55.3	94.3	20.4	93.5
Cadmium	5.2	< 0.377	0.931	0.533	< 0.366	< 0.450	< 0.444	< 0.465	< 0.300	< 0.463
Chromium	21	23.9	33.5	32.0	25.8	24.9	7.68	28.9	4.75	23.5
Lead	107	18.9	42.6	38.8	22.5	23.5	25.0	22.0	4.71	20.0
Selenium	1.3	< 0.738	< 0.967	< 0.903	< 0.717	< 0.880	< 0.870	< 0.910	< 0.587	< 0.906
EPA 6020A (mg/kg dry)										
Arsenic	13	6.48	7.16	7.52	6.73	7.60	< 3.56	8.23	< 2.40	7.68
EPA 9045D (pH Units)										
pH	9	8.06	7.83	7.93	7.90	7.97	8.06	7.79	7.91	7.70
SM 2540G (%)										
Solids - total solids (TS)	~	87	80	80	84	82	85	84	87	83
SW 7471 (mg/kg dry)										
Mercury	0.89	0.0534	0.0552	0.0542	0.0522	< 0.0422	< 0.0469	< 0.0410	0.0413	< 0.0401
TCLP										
EPA 6010B (mg/L)										
Chromium	21	< 0.00556		< 0.00556	< 0.00556	< 0.00556		< 0.00556		< 0.00556

Notes:

All results are reported as mg/kg-dry unless otherwise noted.
 Bold/Shaded results indicate concentrations exceeding CCDD MACS

Table 3-4

Client: Hampton Lenzini and Renwick Inc

Project Number: 24.0043-Fullerton PSI

Work Order: IE01764



Chemical Name	CCDD Limits	IE01764-01	IE01764-02	IE01764-03	IE01764-04	IE01764-05	IE01764-06	IE01764-07	IE01764-08	IE01764-09
		SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8	SB-9
		05/07/2025	05/07/2025	05/07/2025	05/07/2025	05/07/2025	05/07/2025	05/07/2025	05/07/2025	05/07/2025
OTHER_ORG										
EPA 8082 (mg/kg dry)										
Aroclor 1016	1	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Aroclor 1221	1	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Aroclor 1232	1	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Aroclor 1242	1	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Aroclor 1248	1	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Aroclor 1254	1	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Aroclor 1260	1	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Aroclor 1262	~	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Aroclor 1268	~	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Aroclors - Total	~	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
EPA 8081B (mg/kg dry)										
Aldrin	0.94	< 0.00191	< 0.00208	< 0.00209	< 0.00198	< 0.00204	< 0.00196	< 0.00199	< 0.00192	< 0.00201
alpha-BHC	0.0074	< 0.00191	< 0.00208	< 0.00209	< 0.00198	< 0.00204	< 0.00196	< 0.00199	< 0.00192	< 0.00201
beta-BHC	~	< 0.00191	< 0.00208	< 0.00209	< 0.00198	< 0.00204	< 0.00196	< 0.00199	< 0.00192	< 0.00201
delta-BHC	~	< 0.00191	< 0.00208	< 0.00209	< 0.00198	< 0.00204	< 0.00196	< 0.00199	< 0.00192	< 0.00201
gamma-BHC (Lindane)	0.009	< 0.00191	< 0.00208	< 0.00209	< 0.00198	< 0.00204	< 0.00196	< 0.00199	< 0.00192	< 0.00201
alpha-Chlordane	~	< 0.00191	< 0.00208	< 0.00209	< 0.00198	< 0.00204	< 0.00196	< 0.00199	< 0.00192	< 0.00201
gamma-Chlordane	~	< 0.00191	< 0.00208	< 0.00209	< 0.00198	< 0.00204	< 0.00196	< 0.00199	< 0.00192	< 0.00201
Chlordane (technical)	1.8	< 0.0286	< 0.0311	< 0.0313	< 0.0297	< 0.0306	< 0.0293	< 0.0297	< 0.0288	< 0.0301
4,4'-DDD	3	< 0.00191	0.0113	0.00236	< 0.00198	< 0.00204	< 0.00196	< 0.00199	< 0.00192	< 0.00201
4,4'-DDE	2	< 0.00191	0.0455	0.00683	< 0.00198	< 0.00204	< 0.00196	< 0.00199	< 0.00192	< 0.00201
4,4'-DDT	2	< 0.00191	0.0151	0.00453	< 0.00198	< 0.00204	< 0.00196	< 0.00199	< 0.00192	< 0.00201
Dieldrin	0.603	< 0.00191	0.00356	0.00369	< 0.00198	< 0.00204	< 0.00196	< 0.00199	0.00209	0.00294
Endosulfan I	18	< 0.00191	< 0.00208	< 0.00209	< 0.00198	< 0.00204	< 0.00196	< 0.00199	< 0.00192	< 0.00201
Endosulfan II	~	< 0.00191	< 0.00208	< 0.00209	< 0.00198	< 0.00204	< 0.00196	< 0.00199	< 0.00192	< 0.00201
Endosulfan sulfate	~	< 0.00191	< 0.00208	< 0.00209	< 0.00198	< 0.00204	< 0.00196	< 0.00199	< 0.00192	< 0.00201
Endrin	1	< 0.00191	< 0.00208	< 0.00209	< 0.00198	< 0.00204	< 0.00196	< 0.00199	< 0.00192	< 0.00201
Endrin aldehyde	~	< 0.00191	< 0.00208	< 0.00209	< 0.00198	< 0.00204	< 0.00196	< 0.00199	< 0.00192	< 0.00201
Endrin ketone	~	< 0.00191	< 0.00208	< 0.00209	< 0.00198	< 0.00204	< 0.00196	< 0.00199	< 0.00192	< 0.00201
Heptachlor	0.871	< 0.00191	< 0.00208	< 0.00209	< 0.00198	< 0.00204	< 0.00196	< 0.00199	< 0.00192	< 0.00201
Heptachlor epoxide	1.005	< 0.00191	< 0.00208	< 0.00209	< 0.00198	< 0.00204	< 0.00196	< 0.00199	< 0.00192	< 0.00201
Methoxychlor	160	< 0.00191	< 0.00208	< 0.00209	< 0.00198	< 0.00204	< 0.00196	< 0.00199	< 0.00192	< 0.00201
Toxaphene	0.6	< 0.0764	< 0.0830	< 0.0836	< 0.0792	< 0.0816	< 0.0783	< 0.0793	< 0.0767	< 0.0803

Notes:

All results are reported as mg/kg-dry unless otherwise noted.

Bold/Shaded results indicate concentrations exceeding CCDD MACS



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

June 03, 2025

Kate Kasch Schulstad
Hampton Lenzini and Renwick Inc
380 Shepard Dr
Elgin, IL 60123

RE: 24.0043-Fullerton PSI

Dear Kate Kasch Schulstad:

Please find enclosed the analytical results for the **9** sample(s) the laboratory received on **5/8/25 12:30 pm** and logged in under work order **IE01764**. All testing is performed according to our current TNI accreditations unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of Pace Analytical Services, LLC.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

Pace Analytical Services appreciates the opportunity to provide you with analytical expertise. We are always trying to improve our customer service and we welcome you to contact the General Manager, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lisa.grant@pacelabs.com.

A handwritten signature in black ink that reads "Diane Billings".

Diane Billings
Project Manager



ANALYTICAL RESULTS

Sample: IE01764-01
Name: SB-1
Matrix: Solid - Grab

Sampled: 05/07/25 10:20
Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
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General Chemistry - STL

pH	8.06	pH Units		1		0.0100	05/12/25 13:39	ALH	EPA 9045D
Solids - total solids (TS)	87	%		1		0.050	05/11/25 01:04	AAG/ALH	SM 2540G

Metals by ICP-MS - STL

Arsenic	6.48	mg/kg dry		50	2.07	3.02	05/09/25 20:38	DAS	EPA 6020A
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Polychlorinated Biphenyls (PCBs) - STL

Aroclor 1016	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 08:45	KMS	EPA 8082
Aroclor 1221	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 08:45	KMS	EPA 8082
Aroclor 1232	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 08:45	KMS	EPA 8082
Aroclor 1242	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 08:45	KMS	EPA 8082
Aroclor 1248	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 08:45	KMS	EPA 8082
Aroclor 1254	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 08:45	KMS	EPA 8082
Aroclor 1260	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 08:45	KMS	EPA 8082
Aroclor 1262	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 08:45	KMS	EPA 8082
Aroclor 1268	< 0.02	mg/kg dry		1	0.007	0.02	05/16/25 08:45	KMS	EPA 8082
Aroclors - Total	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 08:45	KMS	EPA 8082

Semivolatile Organics - STL

Acenaphthene	< 0.382	mg/kg dry		1	0.0427	0.382	05/12/25 17:00	EMR	EPA 8270C
Acenaphthylene	< 0.382	mg/kg dry		1	0.0378	0.382	05/12/25 17:00	EMR	EPA 8270C
Anthracene	< 0.382	mg/kg dry		1	0.0396	0.382	05/12/25 17:00	EMR	EPA 8270C
Benzo(a)anthracene	< 0.382	mg/kg dry		1	0.0375	0.382	05/12/25 17:00	EMR	EPA 8270C
Benzo(b)fluoranthene	< 0.382	mg/kg dry		1	0.0405	0.382	05/12/25 17:00	EMR	EPA 8270C
Benzo(k)fluoranthene	< 0.382	mg/kg dry		1	0.0474	0.382	05/12/25 17:00	EMR	EPA 8270C
Benzo(g,h,i)perylene	< 0.382	mg/kg dry		1	0.0390	0.382	05/12/25 17:00	EMR	EPA 8270C
Benzo(a)pyrene	0.194	mg/kg dry		1	0.0367	0.0687	05/12/25 17:00	EMR	EPA 8270C
Bis(2-chloroethoxy) methane	< 0.382	mg/kg dry		1	0.0420	0.382	05/12/25 17:00	EMR	EPA 8270C
Bis(2-chloroethyl) ether	< 0.000367	mg/kg dry	Mrl	1	0.000367	0.0378	05/12/25 15:26	EMR	EPA 8270C
Bis(2-chloroisopropyl) ether	< 0.382	mg/kg dry		1	0.0321	0.382	05/12/25 17:00	EMR	EPA 8270C
Bis(2-ethylhexyl) phthalate	< 0.382	mg/kg dry		1	0.0334	0.382	05/12/25 17:00	EMR	EPA 8270C
4-Bromophenyl phenyl ether	< 0.382	mg/kg dry		1	0.0390	0.382	05/12/25 17:00	EMR	EPA 8270C
Butyl benzyl phthalate	< 0.382	mg/kg dry		1	0.0315	0.382	05/12/25 17:00	EMR	EPA 8270C
Carbazole	< 0.382	mg/kg dry		1	0.0430	0.382	05/12/25 17:00	EMR	EPA 8270C
4-Chloro-3-methylphenol	< 0.763	mg/kg dry		1	0.0385	0.763	05/12/25 17:00	EMR	EPA 8270C
4-Chloroaniline	< 0.382	mg/kg dry		1	0.0386	0.382	05/12/25 17:00	EMR	EPA 8270C
2-Chloronaphthalene	< 0.382	mg/kg dry		1	0.0442	0.382	05/12/25 17:00	EMR	EPA 8270C
2-Chlorophenol	< 0.382	mg/kg dry		1	0.0428	0.382	05/12/25 17:00	EMR	EPA 8270C
4-Chlorophenylphenyl ether	< 0.382	mg/kg dry		1	0.0417	0.382	05/12/25 17:00	EMR	EPA 8270C
Chrysene	< 0.382	mg/kg dry		1	0.0361	0.382	05/12/25 17:00	EMR	EPA 8270C



ANALYTICAL RESULTS

Sample: IE01764-01
Name: SB-1
Matrix: Solid - Grab

Sampled: 05/07/25 10:20
Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
Di-n-butyl phthalate	< 0.382	mg/kg dry		1	0.0360	0.382	05/12/25 17:00	EMR	EPA 8270C
Di-n-octyl phthalate	< 0.382	mg/kg dry		1	0.0325	0.382	05/12/25 17:00	EMR	EPA 8270C
Dibenzo(a,h)anthracene	< 0.0687	mg/kg dry		1	0.0392	0.0687	05/12/25 17:00	EMR	EPA 8270C
Dibenzofuran	< 1.91	mg/kg dry		1	0.0432	1.91	05/12/25 17:00	EMR	EPA 8270C
1,2-Dichlorobenzene	< 0.382	mg/kg dry		1	0.0365	0.382	05/12/25 17:00	EMR	EPA 8270C
1,3-Dichlorobenzene	< 0.115	mg/kg dry		1	0.0405	0.115	05/12/25 17:00	EMR	EPA 8270C
1,4-Dichlorobenzene	< 0.382	mg/kg dry		1	0.0391	0.382	05/12/25 17:00	EMR	EPA 8270C
3,3'-Dichlorobenzidine	< 0.00642	mg/kg dry	Mrl	1	0.00642	0.0189	05/12/25 15:26	EMR	EPA 8270C
2,4-Dichlorophenol	< 0.382	mg/kg dry		1	0.0357	0.382	05/12/25 17:00	EMR	EPA 8270C
Diethyl phthalate	< 0.382	mg/kg dry		1	0.0347	0.382	05/12/25 17:00	EMR	EPA 8270C
Dimethyl phthalate	< 0.382	mg/kg dry		1	0.0401	0.382	05/12/25 17:00	EMR	EPA 8270C
2,4-Dimethylphenol	< 0.382	mg/kg dry		1	0.0430	0.382	05/12/25 17:00	EMR	EPA 8270C
4,6-Dinitro-2-methylphenol	< 0.00137	mg/kg dry	Mrl	1	0.00137	0.0378	05/12/25 15:26	EMR	EPA 8270C
2,4-Dinitrophenol	< 0.115	mg/kg dry		1	0.0630	0.115	05/12/25 17:00	EMR	EPA 8270C
2,4-Dinitrotoluene	< 0.000665	mg/kg dry	Mrl	1	0.000665	0.0378	05/12/25 15:26	EMR	EPA 8270C
2,6-Dinitrotoluene	< 0.000619	mg/kg dry	Mrl, V2	1	0.000619	0.0378	05/13/25 15:02	EMR	EPA 8270C
Fluoranthene	< 0.382	mg/kg dry		1	0.0407	0.382	05/12/25 17:00	EMR	EPA 8270C
Fluorene	< 0.382	mg/kg dry		1	0.0412	0.382	05/12/25 17:00	EMR	EPA 8270C
Hexachlorobenzene	< 0.0378	mg/kg dry	Mrl	1	0.0378	0.0378	05/13/25 15:02	EMR	EPA 8270C
Hexachlorobenzene	< 0.115	mg/kg dry		1	0.0378	0.115	05/12/25 17:00	EMR	EPA 8270C
Hexachlorobutadiene	< 0.382	mg/kg dry		1	0.0297	0.382	05/12/25 17:00	EMR	EPA 8270C
Hexachlorocyclopentadiene	< 0.763	mg/kg dry		1	0.0238	0.763	05/12/25 17:00	EMR	EPA 8270C
Hexachloroethane	< 0.382	mg/kg dry		1	0.0362	0.382	05/12/25 17:00	EMR	EPA 8270C
Indeno(1,2,3-cd)pyrene	< 0.382	mg/kg dry		1	0.0410	0.382	05/12/25 17:00	EMR	EPA 8270C
Isophorone	< 0.382	mg/kg dry		1	0.0278	0.382	05/12/25 17:00	EMR	EPA 8270C
2-Methylnaphthalene	< 0.382	mg/kg dry		1	0.0338	0.382	05/12/25 17:00	EMR	EPA 8270C
2-Methylphenol	< 0.382	mg/kg dry		1	0.0452	0.382	05/12/25 17:00	EMR	EPA 8270C
3- & 4-Methylphenol	< 0.115	mg/kg dry		1	0.0471	0.115	05/12/25 17:00	EMR	EPA 8270C
Naphthalene	< 0.382	mg/kg dry		1	0.0355	0.382	05/12/25 17:00	EMR	EPA 8270C
2-Nitroaniline	< 0.115	mg/kg dry		1	0.0304	0.115	05/12/25 17:00	EMR	EPA 8270C
3-Nitroaniline	< 5.73	mg/kg dry		1	0.0786	5.73	05/12/25 17:00	EMR	EPA 8270C
4-Nitroaniline	< 0.0687	mg/kg dry		1	0.0673	0.0687	05/12/25 17:00	EMR	EPA 8270C
Nitrobenzene	< 0.0687	mg/kg dry		1	0.0335	0.0687	05/12/25 17:00	EMR	EPA 8270C
2-Nitrophenol	< 0.382	mg/kg dry		1	0.0310	0.382	05/12/25 17:00	EMR	EPA 8270C
4-Nitrophenol	< 1.91	mg/kg dry		1	0.164	1.91	05/12/25 17:00	EMR	EPA 8270C
N-Nitrosodi-n-propylamine	< 0.000412	mg/kg dry	Mrl	1	0.000412	0.00378	05/12/25 15:26	EMR	EPA 8270C
N-Nitrosodiphenylamine	< 0.382	mg/kg dry		1	0.0310	0.382	05/12/25 17:00	EMR	EPA 8270C
Pentachlorophenol	< 0.00107	mg/kg dry	Mrl, V2	1	0.00107	0.00378	05/12/25 15:26	EMR	EPA 8270C
Phenanthrene	< 0.382	mg/kg dry		1	0.0447	0.382	05/12/25 17:00	EMR	EPA 8270C
Phenol	< 0.382	mg/kg dry		1	0.0470	0.382	05/12/25 17:00	EMR	EPA 8270C
Pyrene	< 0.382	mg/kg dry		1	0.0407	0.382	05/12/25 17:00	EMR	EPA 8270C
1,2,4-Trichlorobenzene	< 0.382	mg/kg dry		1	0.0312	0.382	05/12/25 17:00	EMR	EPA 8270C



ANALYTICAL RESULTS

Sample: IE01764-01
 Name: SB-1
 Matrix: Solid - Grab

Sampled: 05/07/25 10:20
 Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
2,4,5-Trichlorophenol	< 0.382	mg/kg dry		1	0.0372	0.382	05/12/25 17:00	EMR	EPA 8270C
2,4,6-Trichlorophenol	< 0.115	mg/kg dry		1	0.0372	0.115	05/12/25 17:00	EMR	EPA 8270C
Surrogate: 2-Fluorobiphenyl	67 %	34-120					05/12/25 17:00	EMR	EPA 8270C
Surrogate: 2-Fluorophenol	57 %	12.6-123					05/12/25 17:00	EMR	EPA 8270C
Surrogate: Nitrobenzene-d5	59 %	31.6-120					05/12/25 17:00	EMR	EPA 8270C
Surrogate: Phenol-d6	63 %	30.9-121					05/12/25 17:00	EMR	EPA 8270C
Surrogate: 4-Terphenyl-d14	69 %	33.3-120					05/12/25 17:00	EMR	EPA 8270C
Surrogate: 2,4,6-Tribromophenol	87 %	26.1-124					05/12/25 17:00	EMR	EPA 8270C
<u>TCLP Metals - STL</u>									
Chromium	< 0.00556	mg/L	BS1	1	0.000733	0.00556	05/29/25 15:30	BCH	EPA 6010B
<u>Total Metals - STL</u>									
Mercury	0.0534	mg/kg dry		1	0.0192	0.0382	05/12/25 16:03	RPB	SW 7471
Barium	74.5	mg/kg dry		1	0.150	0.754	05/12/25 14:32	BCH	EPA 6010B
Cadmium	< 0.377	mg/kg dry		1	0.0235	0.377	05/12/25 14:32	BCH	EPA 6010B
Chromium	23.9	mg/kg dry		1	0.116	0.377	05/12/25 14:32	BCH	EPA 6010B
Lead	18.9	mg/kg dry		1	0.474	3.02	05/12/25 14:32	BCH	EPA 6010B
Selenium	< 0.738	mg/kg dry	Mrl, V2	1	0.738	0.980	05/12/25 14:32	BCH	EPA 6010B
Silver	< 0.377	mg/kg dry	V2	1	0.111	0.377	05/12/25 14:32	BCH	EPA 6010B
<u>Volatile Organics - STL</u>									
Acetone	0.113	mg/kg dry		1	0.00509	0.0427	05/12/25 12:02	NHL	EPA 8260B
Acrolein	< 0.0427	mg/kg dry		1	0.00625	0.0427	05/12/25 12:02	NHL	EPA 8260B
Acrylonitrile	< 0.0427	mg/kg dry		1	0.00887	0.0427	05/12/25 12:02	NHL	EPA 8260B
Benzene	< 0.00427	mg/kg dry		1	0.000309	0.00427	05/12/25 12:02	NHL	EPA 8260B
Bromobenzene	< 0.00427	mg/kg dry		1	0.000533	0.00427	05/12/25 12:02	NHL	EPA 8260B
Bromochloromethane	< 0.00427	mg/kg dry		1	0.000429	0.00427	05/12/25 12:02	NHL	EPA 8260B
Bromodichloromethane	< 0.00427	mg/kg dry		1	4.00E-5	0.00427	05/12/25 12:02	NHL	EPA 8260B
Bromoform	< 0.00427	mg/kg dry		1	8.57E-5	0.00427	05/12/25 12:02	NHL	EPA 8260B
Bromomethane	< 0.00854	mg/kg dry		1	0.00170	0.00854	05/12/25 12:02	NHL	EPA 8260B
2-Butanone	0.0114	mg/kg dry		1	0.00307	0.00854	05/12/25 12:02	NHL	EPA 8260B
n-Butylbenzene	< 0.00427	mg/kg dry		1	0.00273	0.00427	05/12/25 12:02	NHL	EPA 8260B
sec-Butylbenzene	< 0.00427	mg/kg dry		1	0.00186	0.00427	05/12/25 12:02	NHL	EPA 8260B
tert-Butylbenzene	< 0.00427	mg/kg dry		1	0.00170	0.00427	05/12/25 12:02	NHL	EPA 8260B
Carbon disulfide	< 0.00854	mg/kg dry		1	0.000911	0.00854	05/12/25 12:02	NHL	EPA 8260B
Carbon tetrachloride	< 0.00427	mg/kg dry		1	0.00111	0.00427	05/12/25 12:02	NHL	EPA 8260B
Chlorobenzene	< 0.00427	mg/kg dry		1	0.000518	0.00427	05/12/25 12:02	NHL	EPA 8260B
Chloroethane	< 0.00854	mg/kg dry		1	0.000348	0.00854	05/12/25 12:02	NHL	EPA 8260B
Chloroform	< 0.00427	mg/kg dry		1	5.47E-5	0.00427	05/12/25 12:02	NHL	EPA 8260B
Chloromethane	< 0.00854	mg/kg dry		1	0.000913	0.00854	05/12/25 12:02	NHL	EPA 8260B
2-Chlorotoluene	< 0.00427	mg/kg dry		1	0.00184	0.00427	05/12/25 12:02	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-01

Name: SB-1

Matrix: Solid - Grab

Sampled: 05/07/25 10:20

Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
4-Chlorotoluene	< 0.00427	mg/kg dry		1	0.00250	0.00427	05/12/25 12:02	NHL	EPA 8260B
1,2-Dibromo-3-chloropropane	< 7.91E-5	mg/kg dry	Mrl	1	7.91E-5	7.91E-5	05/12/25 12:02	NHL	EPA 8260B
Dibromochloromethane	< 0.00427	mg/kg dry		1	0.000742	0.00427	05/12/25 12:02	NHL	EPA 8260B
1,2-Dibromoethane	< 4.27E-5	mg/kg dry	Mrl	1	4.27E-5	4.27E-5	05/12/25 12:02	NHL	EPA 8260B
Dibromomethane	< 0.00427	mg/kg dry		1	0.000764	0.00427	05/12/25 12:02	NHL	EPA 8260B
1,2-Dichlorobenzene	< 0.00427	mg/kg dry		1	0.000706	0.00427	05/12/25 12:02	NHL	EPA 8260B
1,3-Dichlorobenzene	< 0.00427	mg/kg dry		1	0.000633	0.00427	05/12/25 12:02	NHL	EPA 8260B
1,4-Dichlorobenzene	< 0.00427	mg/kg dry		1	0.000561	0.00427	05/12/25 12:02	NHL	EPA 8260B
Dichlorodifluoromethane	< 0.00854	mg/kg dry		1	0.00109	0.00854	05/12/25 12:02	NHL	EPA 8260B
1,1-Dichloroethane	< 0.00427	mg/kg dry		1	0.000585	0.00427	05/12/25 12:02	NHL	EPA 8260B
1,2-Dichloroethane	< 0.00427	mg/kg dry		1	0.000272	0.00427	05/12/25 12:02	NHL	EPA 8260B
1,1-Dichloroethene	< 0.00427	mg/kg dry		1	0.000535	0.00427	05/12/25 12:02	NHL	EPA 8260B
cis-1,2-Dichloroethene	< 0.00427	mg/kg dry		1	0.000519	0.00427	05/12/25 12:02	NHL	EPA 8260B
trans-1,2-Dichloroethene	< 0.00427	mg/kg dry		1	0.00136	0.00427	05/12/25 12:02	NHL	EPA 8260B
1,2-Dichloroethene- Total	< 0.00854	mg/kg dry		1	0.00157	0.00854	05/12/25 12:02	NHL	EPA 8260B
1,2-Dichloropropane	< 0.00427	mg/kg dry		1	0.000570	0.00427	05/12/25 12:02	NHL	EPA 8260B
1,3-Dichloropropane	< 0.00427	mg/kg dry		1	0.00141	0.00427	05/12/25 12:02	NHL	EPA 8260B
2,2-Dichloropropane	< 0.00427	mg/kg dry		1	0.00201	0.00427	05/12/25 12:02	NHL	EPA 8260B
1,1-Dichloropropene	< 0.00427	mg/kg dry		1	0.000530	0.00427	05/12/25 12:02	NHL	EPA 8260B
cis-1,3-Dichloropropene	< 0.00256	mg/kg dry		1	4.00E-5	0.00256	05/12/25 12:02	NHL	EPA 8260B
trans-1,3-Dichloropropene	< 0.00256	mg/kg dry		1	4.97E-5	0.00256	05/12/25 12:02	NHL	EPA 8260B
1,3-Dichloropropene - Total	< 0.00342	mg/kg dry		1	0.00130	0.00342	05/12/25 12:02	NHL	EPA 8260B
Diethyl ether	< 0.00427	mg/kg dry		1	8.54E-7	0.00427	05/12/25 12:02	NHL	EPA 8260B
Ethyl acetate	< 0.00854	mg/kg dry		1	8.54E-7	0.00854	05/12/25 12:02	NHL	EPA 8260B
Ethylbenzene	< 0.00427	mg/kg dry		1	0.00120	0.00427	05/12/25 12:02	NHL	EPA 8260B
Hexachlorobutadiene	< 0.00854	mg/kg dry		1	0.000374	0.00854	05/12/25 12:02	NHL	EPA 8260B
n-Hexane	0.00564	mg/kg dry		1	8.54E-7	0.00427	05/12/25 12:02	NHL	EPA 8260B
2-Hexanone	< 0.00427	mg/kg dry		1	0.00255	0.00427	05/12/25 12:02	NHL	EPA 8260B
Isopropylbenzene	< 0.00427	mg/kg dry		1	0.00122	0.00427	05/12/25 12:02	NHL	EPA 8260B
p-Isopropyl toluene	< 0.00427	mg/kg dry		1	0.00258	0.00427	05/12/25 12:02	NHL	EPA 8260B
MTBE	< 0.00427	mg/kg dry		1	0.000579	0.00427	05/12/25 12:02	NHL	EPA 8260B
4-Methyl-2-pentanone (MIBK)	< 0.00427	mg/kg dry		1	0.00302	0.00427	05/12/25 12:02	NHL	EPA 8260B
Methylene chloride	< 0.00427	mg/kg dry		1	0.000456	0.00427	05/12/25 12:02	NHL	EPA 8260B
Naphthalene	< 0.0102	mg/kg dry		1	0.00258	0.0102	05/12/25 12:02	NHL	EPA 8260B
n-Propylbenzene	< 0.00427	mg/kg dry		1	0.00143	0.00427	05/12/25 12:02	NHL	EPA 8260B
Styrene	< 0.00427	mg/kg dry		1	0.00101	0.00427	05/12/25 12:02	NHL	EPA 8260B
1,1,1,2-Tetrachloroethane	< 0.00427	mg/kg dry		1	0.000626	0.00427	05/12/25 12:02	NHL	EPA 8260B
1,1,2,2-Tetrachloroethane	< 0.00171	mg/kg dry		1	4.26E-5	0.00171	05/12/25 12:02	NHL	EPA 8260B
Tetrachloroethene	< 0.00427	mg/kg dry		1	0.000775	0.00427	05/12/25 12:02	NHL	EPA 8260B
Toluene	< 0.00427	mg/kg dry		1	0.00129	0.00427	05/12/25 12:02	NHL	EPA 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon)	< 0.00427	mg/kg dry		1	0.000511	0.00427	05/12/25 12:02	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-01
Name: SB-1
Matrix: Solid - Grab

Sampled: 05/07/25 10:20
Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
1,2,3-Trichlorobenzene	< 0.00427	mg/kg dry		1	0.000816	0.00427	05/12/25 12:02	NHL	EPA 8260B
1,2,4-Trichlorobenzene	< 0.00427	mg/kg dry		1	0.000822	0.00427	05/12/25 12:02	NHL	EPA 8260B
1,1,1-Trichloroethane	< 0.00427	mg/kg dry		1	0.000565	0.00427	05/12/25 12:02	NHL	EPA 8260B
1,1,2-Trichloroethane	< 0.00427	mg/kg dry		1	0.000636	0.00427	05/12/25 12:02	NHL	EPA 8260B
Trichloroethene	< 0.00427	mg/kg dry		1	0.000863	0.00427	05/12/25 12:02	NHL	EPA 8260B
Trichlorofluoromethane	< 0.00854	mg/kg dry		1	0.00133	0.00854	05/12/25 12:02	NHL	EPA 8260B
1,2,3-Trichloropropane	< 0.00427	mg/kg dry		1	0.000800	0.00427	05/12/25 12:02	NHL	EPA 8260B
1,2,4-Trimethylbenzene	< 0.00427	mg/kg dry		1	0.00334	0.00427	05/12/25 12:02	NHL	EPA 8260B
1,3,5-Trimethylbenzene	< 0.00427	mg/kg dry		1	0.000529	0.00427	05/12/25 12:02	NHL	EPA 8260B
Vinyl acetate	< 0.00427	mg/kg dry		1	0.00143	0.00427	05/12/25 12:02	NHL	EPA 8260B
Vinyl chloride	< 0.00427	mg/kg dry		1	0.00121	0.00427	05/12/25 12:02	NHL	EPA 8260B
Xylenes- Total	< 0.0128	mg/kg dry		1	0.00182	0.0128	05/12/25 12:02	NHL	EPA 8260B
Surrogate: 4-Bromofluorobenzene	84 %	53.6-133					05/12/25 12:02	NHL	EPA 8260B
Surrogate: 1,2-Dichloroethane-d4	112 %	60.2-146					05/12/25 12:02	NHL	EPA 8260B
Surrogate: Toluene-d8	94 %	64.6-128					05/12/25 12:02	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-02

Name: SB-2

Matrix: Solid - Grab

Sampled: 05/07/25 10:45

Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
General Chemistry - STL									
pH	7.83	pH Units		1		0.0100	05/12/25 13:39	ALH	EPA 9045D
Solids - total solids (TS)	80	%		1		0.050	05/11/25 01:04	AAG/ALH	SM 2540G
Metals by ICP-MS - STL									
Arsenic	7.16	mg/kg dry	Xb	50	2.71	3.95	05/09/25 20:44	DAS	EPA 6020A
Polychlorinated Biphenyls (PCBs) - STL									
Aroclor 1016	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:02	KMS	EPA 8082
Aroclor 1221	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:02	KMS	EPA 8082
Aroclor 1232	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:02	KMS	EPA 8082
Aroclor 1242	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:02	KMS	EPA 8082
Aroclor 1248	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:02	KMS	EPA 8082
Aroclor 1254	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:02	KMS	EPA 8082
Aroclor 1260	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:02	KMS	EPA 8082
Aroclor 1262	< 0.02	mg/kg dry		1	0.005	0.02	05/16/25 09:02	KMS	EPA 8082
Aroclor 1268	< 0.02	mg/kg dry		1	0.007	0.02	05/16/25 09:02	KMS	EPA 8082
Aroclors - Total	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:02	KMS	EPA 8082
Semivolatile Organics - STL									
Acenaphthene	< 0.414	mg/kg dry		1	0.0463	0.414	05/12/25 17:29	EMR	EPA 8270C
Acenaphthylene	< 0.414	mg/kg dry		1	0.0410	0.414	05/12/25 17:29	EMR	EPA 8270C
Anthracene	< 0.414	mg/kg dry		1	0.0430	0.414	05/12/25 17:29	EMR	EPA 8270C
Benzo(a)anthracene	1.27	mg/kg dry		1	0.0408	0.414	05/12/25 17:29	EMR	EPA 8270C
Benzo(b)fluoranthene	2.38	mg/kg dry		1	0.0440	0.414	05/12/25 17:29	EMR	EPA 8270C
Benzo(k)fluoranthene	0.758	mg/kg dry		1	0.0515	0.414	05/12/25 17:29	EMR	EPA 8270C
Benzo(g,h,i)perylene	0.994	mg/kg dry		1	0.0423	0.414	05/12/25 17:29	EMR	EPA 8270C
Benzo(a)pyrene	1.59	mg/kg dry		1	0.0398	0.0746	05/12/25 17:29	EMR	EPA 8270C
Bis(2-chloroethoxy) methane	< 0.414	mg/kg dry		1	0.0457	0.414	05/12/25 17:29	EMR	EPA 8270C
Bis(2-chloroethyl) ether	< 0.000398	mg/kg dry	Mrl	1	0.000398	0.0411	05/12/25 15:54	EMR	EPA 8270C
Bis(2-chloroisopropyl) ether	< 0.414	mg/kg dry		1	0.0349	0.414	05/12/25 17:29	EMR	EPA 8270C
Bis(2-ethylhexyl) phthalate	< 0.414	mg/kg dry		1	0.0362	0.414	05/12/25 17:29	EMR	EPA 8270C
4-Bromophenyl phenyl ether	< 0.414	mg/kg dry		1	0.0423	0.414	05/12/25 17:29	EMR	EPA 8270C
Butyl benzyl phthalate	< 0.414	mg/kg dry		1	0.0342	0.414	05/12/25 17:29	EMR	EPA 8270C
Carbazole	< 0.414	mg/kg dry		1	0.0467	0.414	05/12/25 17:29	EMR	EPA 8270C
4-Chloro-3-methylphenol	< 0.829	mg/kg dry		1	0.0418	0.829	05/12/25 17:29	EMR	EPA 8270C
4-Chloroaniline	< 0.414	mg/kg dry		1	0.0419	0.414	05/12/25 17:29	EMR	EPA 8270C
2-Chloronaphthalene	< 0.414	mg/kg dry		1	0.0480	0.414	05/12/25 17:29	EMR	EPA 8270C
2-Chlorophenol	< 0.414	mg/kg dry		1	0.0465	0.414	05/12/25 17:29	EMR	EPA 8270C
4-Chlorophenylphenyl ether	< 0.414	mg/kg dry		1	0.0452	0.414	05/12/25 17:29	EMR	EPA 8270C
Chrysene	1.64	mg/kg dry		1	0.0392	0.414	05/12/25 17:29	EMR	EPA 8270C



ANALYTICAL RESULTS

Sample: IE01764-02

Name: SB-2

Matrix: Solid - Grab

Sampled: 05/07/25 10:45

Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
Di-n-butyl phthalate	< 0.414	mg/kg dry		1	0.0391	0.414	05/12/25 17:29	EMR	EPA 8270C
Di-n-octyl phthalate	< 0.414	mg/kg dry		1	0.0353	0.414	05/12/25 17:29	EMR	EPA 8270C
Dibenzo(a,h)anthracene	0.271	mg/kg dry		1	0.0426	0.0746	05/12/25 17:29	EMR	EPA 8270C
Dibenzofuran	< 2.07	mg/kg dry		1	0.0469	2.07	05/12/25 17:29	EMR	EPA 8270C
1,2-Dichlorobenzene	< 0.414	mg/kg dry		1	0.0396	0.414	05/12/25 17:29	EMR	EPA 8270C
1,3-Dichlorobenzene	< 0.124	mg/kg dry		1	0.0439	0.124	05/12/25 17:29	EMR	EPA 8270C
1,4-Dichlorobenzene	< 0.414	mg/kg dry		1	0.0424	0.414	05/12/25 17:29	EMR	EPA 8270C
3,3'-Dichlorobenzidine	< 0.00697	mg/kg dry	Mrl	1	0.00697	0.0205	05/12/25 15:54	EMR	EPA 8270C
2,4-Dichlorophenol	< 0.414	mg/kg dry		1	0.0387	0.414	05/12/25 17:29	EMR	EPA 8270C
Diethyl phthalate	< 0.414	mg/kg dry		1	0.0376	0.414	05/12/25 17:29	EMR	EPA 8270C
Dimethyl phthalate	< 0.414	mg/kg dry		1	0.0435	0.414	05/12/25 17:29	EMR	EPA 8270C
2,4-Dimethylphenol	< 0.414	mg/kg dry		1	0.0466	0.414	05/12/25 17:29	EMR	EPA 8270C
4,6-Dinitro-2-methylphenol	< 0.00149	mg/kg dry	Mrl	1	0.00149	0.0411	05/12/25 15:54	EMR	EPA 8270C
2,4-Dinitrophenol	< 0.124	mg/kg dry		1	0.0684	0.124	05/12/25 17:29	EMR	EPA 8270C
2,4-Dinitrotoluene	< 0.000722	mg/kg dry	Mrl	1	0.000722	0.0411	05/12/25 15:54	EMR	EPA 8270C
2,6-Dinitrotoluene	< 0.000672	mg/kg dry	Mrl, V2	1	0.000672	0.0411	05/13/25 15:31	EMR	EPA 8270C
Fluoranthene	3.15	mg/kg dry		1	0.0442	0.414	05/12/25 17:29	EMR	EPA 8270C
Fluorene	< 0.414	mg/kg dry		1	0.0447	0.414	05/12/25 17:29	EMR	EPA 8270C
Hexachlorobenzene	< 0.0411	mg/kg dry	Mrl	1	0.0411	0.0411	05/13/25 15:31	EMR	EPA 8270C
Hexachlorobenzene	< 0.124	mg/kg dry		1	0.0411	0.124	05/12/25 17:29	EMR	EPA 8270C
Hexachlorobutadiene	< 0.414	mg/kg dry		1	0.0322	0.414	05/12/25 17:29	EMR	EPA 8270C
Hexachlorocyclopentadiene	< 0.829	mg/kg dry		1	0.0258	0.829	05/12/25 17:29	EMR	EPA 8270C
Hexachloroethane	< 0.414	mg/kg dry		1	0.0393	0.414	05/12/25 17:29	EMR	EPA 8270C
Indeno(1,2,3-cd)pyrene	1.06	mg/kg dry		1	0.0445	0.414	05/12/25 17:29	EMR	EPA 8270C
Isophorone	< 0.414	mg/kg dry		1	0.0301	0.414	05/12/25 17:29	EMR	EPA 8270C
2-Methylnaphthalene	< 0.414	mg/kg dry		1	0.0367	0.414	05/12/25 17:29	EMR	EPA 8270C
2-Methylphenol	< 0.414	mg/kg dry		1	0.0491	0.414	05/12/25 17:29	EMR	EPA 8270C
3- & 4-Methylphenol	< 0.124	mg/kg dry		1	0.0511	0.124	05/12/25 17:29	EMR	EPA 8270C
Naphthalene	< 0.414	mg/kg dry		1	0.0386	0.414	05/12/25 17:29	EMR	EPA 8270C
2-Nitroaniline	< 0.124	mg/kg dry		1	0.0330	0.124	05/12/25 17:29	EMR	EPA 8270C
3-Nitroaniline	< 6.22	mg/kg dry		1	0.0853	6.22	05/12/25 17:29	EMR	EPA 8270C
4-Nitroaniline	< 0.0746	mg/kg dry		1	0.0731	0.0746	05/12/25 17:29	EMR	EPA 8270C
Nitrobenzene	< 0.0746	mg/kg dry		1	0.0363	0.0746	05/12/25 17:29	EMR	EPA 8270C
2-Nitrophenol	< 0.414	mg/kg dry		1	0.0336	0.414	05/12/25 17:29	EMR	EPA 8270C
4-Nitrophenol	< 2.07	mg/kg dry		1	0.178	2.07	05/12/25 17:29	EMR	EPA 8270C
N-Nitrosodi-n-propylamine	< 0.000448	mg/kg dry	Mrl	1	0.000448	0.00411	05/12/25 15:54	EMR	EPA 8270C
N-Nitrosodiphenylamine	< 0.414	mg/kg dry		1	0.0337	0.414	05/12/25 17:29	EMR	EPA 8270C
Pentachlorophenol	< 0.00116	mg/kg dry	Mrl, V2	1	0.00116	0.00411	05/12/25 15:54	EMR	EPA 8270C
Phenanthrene	1.23	mg/kg dry		1	0.0486	0.414	05/12/25 17:29	EMR	EPA 8270C
Phenol	< 0.414	mg/kg dry		1	0.0510	0.414	05/12/25 17:29	EMR	EPA 8270C
Pyrene	2.56	mg/kg dry		1	0.0442	0.414	05/12/25 17:29	EMR	EPA 8270C
1,2,4-Trichlorobenzene	< 0.414	mg/kg dry		1	0.0339	0.414	05/12/25 17:29	EMR	EPA 8270C



ANALYTICAL RESULTS

Sample: IE01764-02
 Name: SB-2
 Matrix: Solid - Grab

Sampled: 05/07/25 10:45
 Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
2,4,5-Trichlorophenol	< 0.414	mg/kg dry		1	0.0403	0.414	05/12/25 17:29	EMR	EPA 8270C
2,4,6-Trichlorophenol	< 0.124	mg/kg dry		1	0.0404	0.124	05/12/25 17:29	EMR	EPA 8270C
Surrogate: 2-Fluorobiphenyl	78 %	34-120					05/12/25 17:29	EMR	EPA 8270C
Surrogate: 2-Fluorophenol	71 %	12.6-123					05/12/25 17:29	EMR	EPA 8270C
Surrogate: Nitrobenzene-d5	71 %	31.6-120					05/12/25 17:29	EMR	EPA 8270C
Surrogate: Phenol-d6	77 %	30.9-121					05/12/25 17:29	EMR	EPA 8270C
Surrogate: 4-Terphenyl-d14	83 %	33.3-120					05/12/25 17:29	EMR	EPA 8270C
Surrogate: 2,4,6-Tribromophenol	112 %	26.1-124					05/12/25 17:29	EMR	EPA 8270C
<u>Total Metals - STL</u>									
Mercury	0.0552	mg/kg dry		1	0.0250	0.0498	05/12/25 16:03	RPB	SW 7471
Barium	98.5	mg/kg dry	Q4, R	1	0.196	0.987	05/12/25 14:34	BCH	EPA 6010B
Cadmium	0.931	mg/kg dry		1	0.0308	0.494	05/12/25 14:34	BCH	EPA 6010B
Chromium	33.5	mg/kg dry	Xc	1	0.152	0.494	05/12/25 14:34	BCH	EPA 6010B
Lead	42.6	mg/kg dry	Q3, R	1	0.621	3.95	05/12/25 14:34	BCH	EPA 6010B
Selenium	< 0.967	mg/kg dry	Mrl, V2	1	0.967	1.28	05/12/25 14:34	BCH	EPA 6010B
Silver	< 0.494	mg/kg dry	V2	1	0.145	0.494	05/12/25 14:34	BCH	EPA 6010B
<u>Volatile Organics - STL</u>									
Acetone	0.0863	mg/kg dry		1	0.00482	0.0404	05/12/25 12:28	NHL	EPA 8260B
Acrolein	< 0.0404	mg/kg dry		1	0.00592	0.0404	05/12/25 12:28	NHL	EPA 8260B
Acrylonitrile	< 0.0404	mg/kg dry		1	0.00839	0.0404	05/12/25 12:28	NHL	EPA 8260B
Benzene	< 0.00404	mg/kg dry		1	0.000292	0.00404	05/12/25 12:28	NHL	EPA 8260B
Bromobenzene	< 0.00404	mg/kg dry		1	0.000504	0.00404	05/12/25 12:28	NHL	EPA 8260B
Bromochloromethane	< 0.00404	mg/kg dry		1	0.000406	0.00404	05/12/25 12:28	NHL	EPA 8260B
Bromodichloromethane	< 0.00404	mg/kg dry		1	3.79E-5	0.00404	05/12/25 12:28	NHL	EPA 8260B
Bromoform	< 0.00404	mg/kg dry		1	8.10E-5	0.00404	05/12/25 12:28	NHL	EPA 8260B
Bromomethane	< 0.00808	mg/kg dry		1	0.00161	0.00808	05/12/25 12:28	NHL	EPA 8260B
2-Butanone	< 0.00808	mg/kg dry		1	0.00291	0.00808	05/12/25 12:28	NHL	EPA 8260B
n-Butylbenzene	< 0.00404	mg/kg dry		1	0.00258	0.00404	05/12/25 12:28	NHL	EPA 8260B
sec-Butylbenzene	< 0.00404	mg/kg dry		1	0.00176	0.00404	05/12/25 12:28	NHL	EPA 8260B
tert-Butylbenzene	< 0.00404	mg/kg dry		1	0.00160	0.00404	05/12/25 12:28	NHL	EPA 8260B
Carbon disulfide	< 0.00808	mg/kg dry		1	0.000862	0.00808	05/12/25 12:28	NHL	EPA 8260B
Carbon tetrachloride	< 0.00404	mg/kg dry		1	0.00105	0.00404	05/12/25 12:28	NHL	EPA 8260B
Chlorobenzene	< 0.00404	mg/kg dry		1	0.000490	0.00404	05/12/25 12:28	NHL	EPA 8260B
Chloroethane	< 0.00808	mg/kg dry		1	0.000329	0.00808	05/12/25 12:28	NHL	EPA 8260B
Chloroform	< 0.00404	mg/kg dry		1	5.17E-5	0.00404	05/12/25 12:28	NHL	EPA 8260B
Chloromethane	< 0.00808	mg/kg dry		1	0.000864	0.00808	05/12/25 12:28	NHL	EPA 8260B
2-Chlorotoluene	< 0.00404	mg/kg dry		1	0.00174	0.00404	05/12/25 12:28	NHL	EPA 8260B
4-Chlorotoluene	< 0.00404	mg/kg dry		1	0.00237	0.00404	05/12/25 12:28	NHL	EPA 8260B
1,2-Dibromo-3-chloropropane	< 7.48E-5	mg/kg dry	Mrl	1	7.48E-5	7.48E-5	05/12/25 12:28	NHL	EPA 8260B
Dibromochloromethane	< 0.00404	mg/kg dry		1	0.000702	0.00404	05/12/25 12:28	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-02

Name: SB-2

Matrix: Solid - Grab

Sampled: 05/07/25 10:45

Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
1,2-Dibromoethane	< 4.04E-5	mg/kg dry	Mrl	1	4.04E-5	4.04E-5	05/12/25 12:28	NHL	EPA 8260B
Dibromomethane	< 0.00404	mg/kg dry		1	0.000723	0.00404	05/12/25 12:28	NHL	EPA 8260B
1,2-Dichlorobenzene	< 0.00404	mg/kg dry		1	0.000668	0.00404	05/12/25 12:28	NHL	EPA 8260B
1,3-Dichlorobenzene	< 0.00404	mg/kg dry		1	0.000599	0.00404	05/12/25 12:28	NHL	EPA 8260B
1,4-Dichlorobenzene	< 0.00404	mg/kg dry		1	0.000531	0.00404	05/12/25 12:28	NHL	EPA 8260B
Dichlorodifluoromethane	< 0.00808	mg/kg dry		1	0.00103	0.00808	05/12/25 12:28	NHL	EPA 8260B
1,1-Dichloroethane	< 0.00404	mg/kg dry		1	0.000553	0.00404	05/12/25 12:28	NHL	EPA 8260B
1,2-Dichloroethane	< 0.00404	mg/kg dry		1	0.000258	0.00404	05/12/25 12:28	NHL	EPA 8260B
1,1-Dichloroethene	< 0.00404	mg/kg dry		1	0.000506	0.00404	05/12/25 12:28	NHL	EPA 8260B
cis-1,2-Dichloroethene	< 0.00404	mg/kg dry		1	0.000491	0.00404	05/12/25 12:28	NHL	EPA 8260B
trans-1,2-Dichloroethene	< 0.00404	mg/kg dry		1	0.00128	0.00404	05/12/25 12:28	NHL	EPA 8260B
1,2-Dichloroethene- Total	< 0.00808	mg/kg dry		1	0.00148	0.00808	05/12/25 12:28	NHL	EPA 8260B
1,2-Dichloropropane	< 0.00404	mg/kg dry		1	0.000539	0.00404	05/12/25 12:28	NHL	EPA 8260B
1,3-Dichloropropane	< 0.00404	mg/kg dry		1	0.00134	0.00404	05/12/25 12:28	NHL	EPA 8260B
2,2-Dichloropropane	< 0.00404	mg/kg dry		1	0.00190	0.00404	05/12/25 12:28	NHL	EPA 8260B
1,1-Dichloropropene	< 0.00404	mg/kg dry		1	0.000502	0.00404	05/12/25 12:28	NHL	EPA 8260B
cis-1,3-Dichloropropene	< 0.00242	mg/kg dry		1	3.79E-5	0.00242	05/12/25 12:28	NHL	EPA 8260B
trans-1,3-Dichloropropene	< 0.00242	mg/kg dry		1	4.70E-5	0.00242	05/12/25 12:28	NHL	EPA 8260B
1,3-Dichloropropene - Total	< 0.00323	mg/kg dry		1	0.00123	0.00323	05/12/25 12:28	NHL	EPA 8260B
Diethyl ether	< 0.00404	mg/kg dry		1	8.08E-7	0.00404	05/12/25 12:28	NHL	EPA 8260B
Ethyl acetate	< 0.00808	mg/kg dry		1	8.08E-7	0.00808	05/12/25 12:28	NHL	EPA 8260B
Ethylbenzene	< 0.00404	mg/kg dry		1	0.00114	0.00404	05/12/25 12:28	NHL	EPA 8260B
Hexachlorobutadiene	< 0.00808	mg/kg dry		1	0.000354	0.00808	05/12/25 12:28	NHL	EPA 8260B
n-Hexane	0.00437	mg/kg dry		1	8.08E-7	0.00404	05/12/25 12:28	NHL	EPA 8260B
2-Hexanone	< 0.00404	mg/kg dry		1	0.00241	0.00404	05/12/25 12:28	NHL	EPA 8260B
Isopropylbenzene	< 0.00404	mg/kg dry		1	0.00116	0.00404	05/12/25 12:28	NHL	EPA 8260B
p-Isopropyl toluene	< 0.00404	mg/kg dry		1	0.00244	0.00404	05/12/25 12:28	NHL	EPA 8260B
MTBE	< 0.00404	mg/kg dry		1	0.000548	0.00404	05/12/25 12:28	NHL	EPA 8260B
4-Methyl-2-pentanone (MIBK)	< 0.00404	mg/kg dry		1	0.00286	0.00404	05/12/25 12:28	NHL	EPA 8260B
Methylene chloride	< 0.00404	mg/kg dry		1	0.000431	0.00404	05/12/25 12:28	NHL	EPA 8260B
Naphthalene	< 0.00969	mg/kg dry		1	0.00244	0.00969	05/12/25 12:28	NHL	EPA 8260B
n-Propylbenzene	< 0.00404	mg/kg dry		1	0.00135	0.00404	05/12/25 12:28	NHL	EPA 8260B
Styrene	< 0.00404	mg/kg dry		1	0.000959	0.00404	05/12/25 12:28	NHL	EPA 8260B
1,1,1,2-Tetrachloroethane	< 0.00404	mg/kg dry		1	0.000592	0.00404	05/12/25 12:28	NHL	EPA 8260B
1,1,1,2,2-Tetrachloroethane	< 0.00162	mg/kg dry		1	4.04E-5	0.00162	05/12/25 12:28	NHL	EPA 8260B
Tetrachloroethene	< 0.00404	mg/kg dry		1	0.000733	0.00404	05/12/25 12:28	NHL	EPA 8260B
Toluene	< 0.00404	mg/kg dry		1	0.00122	0.00404	05/12/25 12:28	NHL	EPA 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon)	< 0.00404	mg/kg dry		1	0.000484	0.00404	05/12/25 12:28	NHL	EPA 8260B
1,2,3-Trichlorobenzene	< 0.00404	mg/kg dry		1	0.000772	0.00404	05/12/25 12:28	NHL	EPA 8260B
1,2,4-Trichlorobenzene	< 0.00404	mg/kg dry		1	0.000777	0.00404	05/12/25 12:28	NHL	EPA 8260B
1,1,1-Trichloroethane	< 0.00404	mg/kg dry		1	0.000534	0.00404	05/12/25 12:28	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-02
Name: SB-2
Matrix: Solid - Grab

Sampled: 05/07/25 10:45
Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
1,1,2-Trichloroethane	< 0.00404	mg/kg dry		1	0.000602	0.00404	05/12/25 12:28	NHL	EPA 8260B
Trichloroethene	< 0.00404	mg/kg dry		1	0.000816	0.00404	05/12/25 12:28	NHL	EPA 8260B
Trichlorofluoromethane	< 0.00808	mg/kg dry		1	0.00126	0.00808	05/12/25 12:28	NHL	EPA 8260B
1,2,3-Trichloropropane	< 0.00404	mg/kg dry		1	0.000757	0.00404	05/12/25 12:28	NHL	EPA 8260B
1,2,4-Trimethylbenzene	< 0.00404	mg/kg dry		1	0.00316	0.00404	05/12/25 12:28	NHL	EPA 8260B
1,3,5-Trimethylbenzene	< 0.00404	mg/kg dry		1	0.000501	0.00404	05/12/25 12:28	NHL	EPA 8260B
Vinyl acetate	< 0.00404	mg/kg dry		1	0.00135	0.00404	05/12/25 12:28	NHL	EPA 8260B
Vinyl chloride	< 0.00404	mg/kg dry		1	0.00114	0.00404	05/12/25 12:28	NHL	EPA 8260B
Xylenes- Total	< 0.0121	mg/kg dry		1	0.00172	0.0121	05/12/25 12:28	NHL	EPA 8260B
Surrogate: 4-Bromofluorobenzene	91 %	53.6-133					05/12/25 12:28	NHL	EPA 8260B
Surrogate: 1,2-Dichloroethane-d4	106 %	60.2-146					05/12/25 12:28	NHL	EPA 8260B
Surrogate: Toluene-d8	94 %	64.6-128					05/12/25 12:28	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-03
 Name: SB-3
 Matrix: Solid - Grab

Sampled: 05/07/25 11:15
 Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
<u>General Chemistry - STL</u>									
pH	7.93	pH Units		1		0.0100	05/12/25 13:39	ALH	EPA 9045D
Solids - total solids (TS)	80	%		1		0.050	05/11/25 01:04	AAG/ALH	SM 2540G
<u>Metals by ICP-MS - STL</u>									
Arsenic	7.52	mg/kg dry		50	2.53	3.69	05/09/25 21:23	DAS	EPA 6020A
<u>Polychlorinated Biphenyls (PCBs) - STL</u>									
Aroclor 1016	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:20	KMS	EPA 8082
Aroclor 1221	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:20	KMS	EPA 8082
Aroclor 1232	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:20	KMS	EPA 8082
Aroclor 1242	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:20	KMS	EPA 8082
Aroclor 1248	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:20	KMS	EPA 8082
Aroclor 1254	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:20	KMS	EPA 8082
Aroclor 1260	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:20	KMS	EPA 8082
Aroclor 1262	< 0.02	mg/kg dry		1	0.005	0.02	05/16/25 09:20	KMS	EPA 8082
Aroclor 1268	< 0.02	mg/kg dry		1	0.007	0.02	05/16/25 09:20	KMS	EPA 8082
Aroclors - Total	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:20	KMS	EPA 8082
<u>Semivolatile Organics - STL</u>									
Acenaphthene	< 0.418	mg/kg dry		1	0.0467	0.418	05/12/25 17:58	EMR	EPA 8270C
Acenaphthylene	< 0.418	mg/kg dry		1	0.0413	0.418	05/12/25 17:58	EMR	EPA 8270C
Anthracene	0.418	mg/kg dry		1	0.0433	0.418	05/12/25 17:58	EMR	EPA 8270C
Benzo(a)anthracene	1.21	mg/kg dry		1	0.0411	0.418	05/12/25 17:58	EMR	EPA 8270C
Benzo(b)fluoranthene	2.01	mg/kg dry		1	0.0443	0.418	05/12/25 17:58	EMR	EPA 8270C
Benzo(k)fluoranthene	0.628	mg/kg dry		1	0.0519	0.418	05/12/25 17:58	EMR	EPA 8270C
Benzo(g,h,i)perylene	1.01	mg/kg dry		1	0.0427	0.418	05/12/25 17:58	EMR	EPA 8270C
Benzo(a)pyrene	1.36	mg/kg dry		1	0.0401	0.0752	05/12/25 17:58	EMR	EPA 8270C
Bis(2-chloroethoxy) methane	< 0.418	mg/kg dry		1	0.0460	0.418	05/12/25 17:58	EMR	EPA 8270C
Bis(2-chloroethyl) ether	< 0.000401	mg/kg dry	Mrl	1	0.000401	0.0414	05/12/25 16:23	EMR	EPA 8270C
Bis(2-chloroisopropyl) ether	< 0.418	mg/kg dry		1	0.0352	0.418	05/12/25 17:58	EMR	EPA 8270C
Bis(2-ethylhexyl) phthalate	< 0.418	mg/kg dry		1	0.0365	0.418	05/12/25 17:58	EMR	EPA 8270C
4-Bromophenyl phenyl ether	< 0.418	mg/kg dry		1	0.0426	0.418	05/12/25 17:58	EMR	EPA 8270C
Butyl benzyl phthalate	< 0.418	mg/kg dry		1	0.0345	0.418	05/12/25 17:58	EMR	EPA 8270C
Carbazole	< 0.418	mg/kg dry		1	0.0470	0.418	05/12/25 17:58	EMR	EPA 8270C
4-Chloro-3-methylphenol	< 0.835	mg/kg dry		1	0.0421	0.835	05/12/25 17:58	EMR	EPA 8270C
4-Chloroaniline	< 0.418	mg/kg dry		1	0.0422	0.418	05/12/25 17:58	EMR	EPA 8270C
2-Chloronaphthalene	< 0.418	mg/kg dry		1	0.0484	0.418	05/12/25 17:58	EMR	EPA 8270C
2-Chlorophenol	< 0.418	mg/kg dry		1	0.0469	0.418	05/12/25 17:58	EMR	EPA 8270C
4-Chlorophenylphenyl ether	< 0.418	mg/kg dry		1	0.0456	0.418	05/12/25 17:58	EMR	EPA 8270C
Chrysene	1.44	mg/kg dry		1	0.0395	0.418	05/12/25 17:58	EMR	EPA 8270C



ANALYTICAL RESULTS

Sample: IE01764-03

Name: SB-3

Matrix: Solid - Grab

Sampled: 05/07/25 11:15

Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
Di-n-butyl phthalate	< 0.418	mg/kg dry		1	0.0394	0.418	05/12/25 17:58	EMR	EPA 8270C
Di-n-octyl phthalate	< 0.418	mg/kg dry		1	0.0356	0.418	05/12/25 17:58	EMR	EPA 8270C
Dibenzo(a,h)anthracene	0.237	mg/kg dry		1	0.0429	0.0752	05/12/25 17:58	EMR	EPA 8270C
Dibenzofuran	< 2.09	mg/kg dry		1	0.0473	2.09	05/12/25 17:58	EMR	EPA 8270C
1,2-Dichlorobenzene	< 0.418	mg/kg dry		1	0.0399	0.418	05/12/25 17:58	EMR	EPA 8270C
1,3-Dichlorobenzene	< 0.125	mg/kg dry		1	0.0443	0.125	05/12/25 17:58	EMR	EPA 8270C
1,4-Dichlorobenzene	< 0.418	mg/kg dry		1	0.0428	0.418	05/12/25 17:58	EMR	EPA 8270C
3,3'-Dichlorobenzidine	< 0.00702	mg/kg dry	Mrl	1	0.00702	0.0207	05/12/25 16:23	EMR	EPA 8270C
2,4-Dichlorophenol	< 0.418	mg/kg dry		1	0.0390	0.418	05/12/25 17:58	EMR	EPA 8270C
Diethyl phthalate	< 0.418	mg/kg dry		1	0.0379	0.418	05/12/25 17:58	EMR	EPA 8270C
Dimethyl phthalate	< 0.418	mg/kg dry		1	0.0439	0.418	05/12/25 17:58	EMR	EPA 8270C
2,4-Dimethylphenol	< 0.418	mg/kg dry		1	0.0470	0.418	05/12/25 17:58	EMR	EPA 8270C
4,6-Dinitro-2-methylphenol	< 0.00150	mg/kg dry	Mrl	1	0.00150	0.0414	05/12/25 16:23	EMR	EPA 8270C
2,4-Dinitrophenol	< 0.125	mg/kg dry		1	0.0689	0.125	05/12/25 17:58	EMR	EPA 8270C
2,4-Dinitrotoluene	< 0.000727	mg/kg dry	Mrl	1	0.000727	0.0414	05/12/25 16:23	EMR	EPA 8270C
2,6-Dinitrotoluene	< 0.000677	mg/kg dry	Mrl, V2	1	0.000677	0.0414	05/13/25 15:59	EMR	EPA 8270C
Fluoranthene	3.21	mg/kg dry		1	0.0446	0.418	05/12/25 17:58	EMR	EPA 8270C
Fluorene	< 0.418	mg/kg dry		1	0.0451	0.418	05/12/25 17:58	EMR	EPA 8270C
Hexachlorobenzene	< 0.0414	mg/kg dry	Mrl, X	1	0.0414	0.0414	05/13/25 15:59	EMR	EPA 8270C
Hexachlorobenzene	< 0.125	mg/kg dry		1	0.0414	0.125	05/12/25 17:58	EMR	EPA 8270C
Hexachlorobutadiene	< 0.418	mg/kg dry		1	0.0325	0.418	05/12/25 17:58	EMR	EPA 8270C
Hexachlorocyclopentadiene	< 0.835	mg/kg dry		1	0.0260	0.835	05/12/25 17:58	EMR	EPA 8270C
Hexachloroethane	< 0.418	mg/kg dry		1	0.0396	0.418	05/12/25 17:58	EMR	EPA 8270C
Indeno(1,2,3-cd)pyrene	0.905	mg/kg dry		1	0.0449	0.418	05/12/25 17:58	EMR	EPA 8270C
Isophorone	< 0.418	mg/kg dry		1	0.0304	0.418	05/12/25 17:58	EMR	EPA 8270C
2-Methylnaphthalene	< 0.418	mg/kg dry		1	0.0369	0.418	05/12/25 17:58	EMR	EPA 8270C
2-Methylphenol	< 0.418	mg/kg dry		1	0.0495	0.418	05/12/25 17:58	EMR	EPA 8270C
3- & 4-Methylphenol	< 0.125	mg/kg dry		1	0.0515	0.125	05/12/25 17:58	EMR	EPA 8270C
Naphthalene	< 0.418	mg/kg dry		1	0.0389	0.418	05/12/25 17:58	EMR	EPA 8270C
2-Nitroaniline	< 0.125	mg/kg dry		1	0.0333	0.125	05/12/25 17:58	EMR	EPA 8270C
3-Nitroaniline	< 6.27	mg/kg dry		1	0.0860	6.27	05/12/25 17:58	EMR	EPA 8270C
4-Nitroaniline	< 0.0752	mg/kg dry		1	0.0737	0.0752	05/12/25 17:58	EMR	EPA 8270C
Nitrobenzene	< 0.0752	mg/kg dry		1	0.0366	0.0752	05/12/25 17:58	EMR	EPA 8270C
2-Nitrophenol	< 0.418	mg/kg dry		1	0.0339	0.418	05/12/25 17:58	EMR	EPA 8270C
4-Nitrophenol	< 2.09	mg/kg dry		1	0.180	2.09	05/12/25 17:58	EMR	EPA 8270C
N-Nitrosodi-n-propylamine	< 0.000451	mg/kg dry	Mrl	1	0.000451	0.00414	05/12/25 16:23	EMR	EPA 8270C
N-Nitrosodiphenylamine	< 0.418	mg/kg dry		1	0.0340	0.418	05/12/25 17:58	EMR	EPA 8270C
Pentachlorophenol	< 0.00117	mg/kg dry	Mrl, V2	1	0.00117	0.00414	05/12/25 16:23	EMR	EPA 8270C
Phenanthrene	1.30	mg/kg dry		1	0.0489	0.418	05/12/25 17:58	EMR	EPA 8270C
Phenol	< 0.418	mg/kg dry		1	0.0514	0.418	05/12/25 17:58	EMR	EPA 8270C
Pyrene	2.65	mg/kg dry		1	0.0445	0.418	05/12/25 17:58	EMR	EPA 8270C
1,2,4-Trichlorobenzene	< 0.418	mg/kg dry		1	0.0342	0.418	05/12/25 17:58	EMR	EPA 8270C



ANALYTICAL RESULTS

Sample: IE01764-03
 Name: SB-3
 Matrix: Solid - Grab

Sampled: 05/07/25 11:15
 Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
2,4,5-Trichlorophenol	< 0.418	mg/kg dry		1	0.0407	0.418	05/12/25 17:58	EMR	EPA 8270C
2,4,6-Trichlorophenol	< 0.125	mg/kg dry		1	0.0407	0.125	05/12/25 17:58	EMR	EPA 8270C
Surrogate: 2-Fluorobiphenyl	85 %	34-120					05/12/25 17:58	EMR	EPA 8270C
Surrogate: 2-Fluorophenol	70 %	12.6-123					05/12/25 17:58	EMR	EPA 8270C
Surrogate: Nitrobenzene-d5	69 %	31.6-120					05/12/25 17:58	EMR	EPA 8270C
Surrogate: Phenol-d6	79 %	30.9-121					05/12/25 17:58	EMR	EPA 8270C
Surrogate: 4-Terphenyl-d14	99 %	33.3-120					05/12/25 17:58	EMR	EPA 8270C
Surrogate: 2,4,6-Tribromophenol	106 %	26.1-124					05/12/25 17:58	EMR	EPA 8270C
<u>TCLP Metals - STL</u>									
Chromium	< 0.00556	mg/L	BS1	1	0.000733	0.00556	05/29/25 15:32	BCH	EPA 6010B
<u>Total Metals - STL</u>									
Mercury	0.0542	mg/kg dry		1	0.0225	0.0448	05/12/25 16:03	RPB	SW 7471
Barium	108	mg/kg dry		1	0.183	0.922	05/12/25 14:45	BCH	EPA 6010B
Cadmium	0.533	mg/kg dry		1	0.0288	0.461	05/12/25 14:45	BCH	EPA 6010B
Chromium	32.0	mg/kg dry		1	0.142	0.461	05/12/25 14:45	BCH	EPA 6010B
Lead	38.8	mg/kg dry		1	0.580	3.69	05/12/25 14:45	BCH	EPA 6010B
Selenium	< 0.903	mg/kg dry	Mrl, V2	1	0.903	1.20	05/12/25 14:45	BCH	EPA 6010B
Silver	< 0.461	mg/kg dry	V2	1	0.136	0.461	05/12/25 14:45	BCH	EPA 6010B
<u>Volatile Organics - STL</u>									
Acetone	0.107	mg/kg dry		1	0.00659	0.0553	05/12/25 12:55	NHL	EPA 8260B
Acrolein	< 0.0553	mg/kg dry		1	0.00810	0.0553	05/12/25 12:55	NHL	EPA 8260B
Acrylonitrile	< 0.0553	mg/kg dry		1	0.0115	0.0553	05/12/25 12:55	NHL	EPA 8260B
Benzene	< 0.00553	mg/kg dry		1	0.000400	0.00553	05/12/25 12:55	NHL	EPA 8260B
Bromobenzene	< 0.00553	mg/kg dry		1	0.000690	0.00553	05/12/25 12:55	NHL	EPA 8260B
Bromochloromethane	< 0.00553	mg/kg dry		1	0.000556	0.00553	05/12/25 12:55	NHL	EPA 8260B
Bromodichloromethane	< 0.00553	mg/kg dry		1	5.18E-5	0.00553	05/12/25 12:55	NHL	EPA 8260B
Bromoform	< 0.00553	mg/kg dry		1	0.000111	0.00553	05/12/25 12:55	NHL	EPA 8260B
Bromomethane	< 0.0111	mg/kg dry		1	0.00220	0.0111	05/12/25 12:55	NHL	EPA 8260B
2-Butanone	< 0.0111	mg/kg dry		1	0.00398	0.0111	05/12/25 12:55	NHL	EPA 8260B
n-Butylbenzene	< 0.00553	mg/kg dry		1	0.00354	0.00553	05/12/25 12:55	NHL	EPA 8260B
sec-Butylbenzene	< 0.00553	mg/kg dry		1	0.00241	0.00553	05/12/25 12:55	NHL	EPA 8260B
tert-Butylbenzene	< 0.00553	mg/kg dry		1	0.00220	0.00553	05/12/25 12:55	NHL	EPA 8260B
Carbon disulfide	< 0.0111	mg/kg dry		1	0.00118	0.0111	05/12/25 12:55	NHL	EPA 8260B
Carbon tetrachloride	< 0.00553	mg/kg dry		1	0.00143	0.00553	05/12/25 12:55	NHL	EPA 8260B
Chlorobenzene	< 0.00553	mg/kg dry		1	0.000671	0.00553	05/12/25 12:55	NHL	EPA 8260B
Chloroethane	< 0.0111	mg/kg dry		1	0.000450	0.0111	05/12/25 12:55	NHL	EPA 8260B
Chloroform	< 0.00553	mg/kg dry		1	7.08E-5	0.00553	05/12/25 12:55	NHL	EPA 8260B
Chloromethane	< 0.0111	mg/kg dry		1	0.00118	0.0111	05/12/25 12:55	NHL	EPA 8260B
2-Chlorotoluene	< 0.00553	mg/kg dry		1	0.00238	0.00553	05/12/25 12:55	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-03
Name: SB-3
Matrix: Solid - Grab

Sampled: 05/07/25 11:15
Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
4-Chlorotoluene	< 0.00553	mg/kg dry		1	0.00324	0.00553	05/12/25 12:55	NHL	EPA 8260B
1,2-Dibromo-3-chloropropane	< 0.000102	mg/kg dry	Mrl	1	0.000102	0.000102	05/12/25 12:55	NHL	EPA 8260B
Dibromochloromethane	< 0.00553	mg/kg dry		1	0.000961	0.00553	05/12/25 12:55	NHL	EPA 8260B
1,2-Dibromoethane	< 5.53E-5	mg/kg dry	Mrl	1	5.53E-5	5.53E-5	05/12/25 12:55	NHL	EPA 8260B
Dibromomethane	< 0.00553	mg/kg dry		1	0.000990	0.00553	05/12/25 12:55	NHL	EPA 8260B
1,2-Dichlorobenzene	< 0.00553	mg/kg dry		1	0.000914	0.00553	05/12/25 12:55	NHL	EPA 8260B
1,3-Dichlorobenzene	< 0.00553	mg/kg dry		1	0.000820	0.00553	05/12/25 12:55	NHL	EPA 8260B
1,4-Dichlorobenzene	< 0.00553	mg/kg dry		1	0.000726	0.00553	05/12/25 12:55	NHL	EPA 8260B
Dichlorodifluoromethane	< 0.0111	mg/kg dry		1	0.00142	0.0111	05/12/25 12:55	NHL	EPA 8260B
1,1-Dichloroethane	< 0.00553	mg/kg dry		1	0.000757	0.00553	05/12/25 12:55	NHL	EPA 8260B
1,2-Dichloroethane	< 0.00553	mg/kg dry		1	0.000353	0.00553	05/12/25 12:55	NHL	EPA 8260B
1,1-Dichloroethene	< 0.00553	mg/kg dry		1	0.000693	0.00553	05/12/25 12:55	NHL	EPA 8260B
cis-1,2-Dichloroethene	< 0.00553	mg/kg dry		1	0.000673	0.00553	05/12/25 12:55	NHL	EPA 8260B
trans-1,2-Dichloroethene	< 0.00553	mg/kg dry		1	0.00176	0.00553	05/12/25 12:55	NHL	EPA 8260B
1,2-Dichloroethene- Total	< 0.0111	mg/kg dry		1	0.00203	0.0111	05/12/25 12:55	NHL	EPA 8260B
1,2-Dichloropropane	< 0.00553	mg/kg dry		1	0.000738	0.00553	05/12/25 12:55	NHL	EPA 8260B
1,3-Dichloropropane	< 0.00553	mg/kg dry		1	0.00183	0.00553	05/12/25 12:55	NHL	EPA 8260B
2,2-Dichloropropane	< 0.00553	mg/kg dry		1	0.00260	0.00553	05/12/25 12:55	NHL	EPA 8260B
1,1-Dichloropropene	< 0.00553	mg/kg dry		1	0.000687	0.00553	05/12/25 12:55	NHL	EPA 8260B
cis-1,3-Dichloropropene	< 0.00332	mg/kg dry		1	5.18E-5	0.00332	05/12/25 12:55	NHL	EPA 8260B
trans-1,3-Dichloropropene	< 0.00332	mg/kg dry		1	6.43E-5	0.00332	05/12/25 12:55	NHL	EPA 8260B
1,3-Dichloropropene - Total	< 0.00442	mg/kg dry		1	0.00169	0.00442	05/12/25 12:55	NHL	EPA 8260B
Diethyl ether	< 0.00553	mg/kg dry		1	1.11E-6	0.00553	05/12/25 12:55	NHL	EPA 8260B
Ethyl acetate	< 0.0111	mg/kg dry		1	1.11E-6	0.0111	05/12/25 12:55	NHL	EPA 8260B
Ethylbenzene	< 0.00553	mg/kg dry		1	0.00156	0.00553	05/12/25 12:55	NHL	EPA 8260B
Hexachlorobutadiene	< 0.0111	mg/kg dry		1	0.000484	0.0111	05/12/25 12:55	NHL	EPA 8260B
n-Hexane	0.00600	mg/kg dry		1	1.11E-6	0.00553	05/12/25 12:55	NHL	EPA 8260B
2-Hexanone	< 0.00553	mg/kg dry		1	0.00330	0.00553	05/12/25 12:55	NHL	EPA 8260B
Isopropylbenzene	< 0.00553	mg/kg dry		1	0.00158	0.00553	05/12/25 12:55	NHL	EPA 8260B
p-Isopropyl toluene	< 0.00553	mg/kg dry		1	0.00334	0.00553	05/12/25 12:55	NHL	EPA 8260B
MTBE	< 0.00553	mg/kg dry		1	0.000750	0.00553	05/12/25 12:55	NHL	EPA 8260B
4-Methyl-2-pentanone (MIBK)	< 0.00553	mg/kg dry		1	0.00391	0.00553	05/12/25 12:55	NHL	EPA 8260B
Methylene chloride	< 0.00553	mg/kg dry		1	0.000590	0.00553	05/12/25 12:55	NHL	EPA 8260B
Naphthalene	< 0.0133	mg/kg dry		1	0.00334	0.0133	05/12/25 12:55	NHL	EPA 8260B
n-Propylbenzene	< 0.00553	mg/kg dry		1	0.00185	0.00553	05/12/25 12:55	NHL	EPA 8260B
Styrene	< 0.00553	mg/kg dry		1	0.00131	0.00553	05/12/25 12:55	NHL	EPA 8260B
1,1,1,2-Tetrachloroethane	< 0.00553	mg/kg dry		1	0.000811	0.00553	05/12/25 12:55	NHL	EPA 8260B
1,1,2,2-Tetrachloroethane	< 0.00221	mg/kg dry		1	5.52E-5	0.00221	05/12/25 12:55	NHL	EPA 8260B
Tetrachloroethene	< 0.00553	mg/kg dry		1	0.00100	0.00553	05/12/25 12:55	NHL	EPA 8260B
Toluene	< 0.00553	mg/kg dry		1	0.00167	0.00553	05/12/25 12:55	NHL	EPA 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon)	< 0.00553	mg/kg dry		1	0.000662	0.00553	05/12/25 12:55	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-03
Name: SB-3
Matrix: Solid - Grab

Sampled: 05/07/25 11:15
Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
1,2,3-Trichlorobenzene	< 0.00553	mg/kg dry		1	0.00106	0.00553	05/12/25 12:55	NHL	EPA 8260B
1,2,4-Trichlorobenzene	< 0.00553	mg/kg dry		1	0.00106	0.00553	05/12/25 12:55	NHL	EPA 8260B
1,1,1-Trichloroethane	< 0.00553	mg/kg dry		1	0.000731	0.00553	05/12/25 12:55	NHL	EPA 8260B
1,1,2-Trichloroethane	< 0.00553	mg/kg dry		1	0.000824	0.00553	05/12/25 12:55	NHL	EPA 8260B
Trichloroethene	< 0.00553	mg/kg dry		1	0.00112	0.00553	05/12/25 12:55	NHL	EPA 8260B
Trichlorofluoromethane	< 0.0111	mg/kg dry		1	0.00172	0.0111	05/12/25 12:55	NHL	EPA 8260B
1,2,3-Trichloropropane	< 0.00553	mg/kg dry		1	0.00104	0.00553	05/12/25 12:55	NHL	EPA 8260B
1,2,4-Trimethylbenzene	< 0.00553	mg/kg dry		1	0.00433	0.00553	05/12/25 12:55	NHL	EPA 8260B
1,3,5-Trimethylbenzene	< 0.00553	mg/kg dry		1	0.000685	0.00553	05/12/25 12:55	NHL	EPA 8260B
Vinyl acetate	< 0.00553	mg/kg dry		1	0.00185	0.00553	05/12/25 12:55	NHL	EPA 8260B
Vinyl chloride	< 0.00553	mg/kg dry		1	0.00157	0.00553	05/12/25 12:55	NHL	EPA 8260B
Xylenes- Total	< 0.0166	mg/kg dry		1	0.00236	0.0166	05/12/25 12:55	NHL	EPA 8260B
Surrogate: 4-Bromofluorobenzene	95 %	53.6-133					05/12/25 12:55	NHL	EPA 8260B
Surrogate: 1,2-Dichloroethane-d4	111 %	60.2-146					05/12/25 12:55	NHL	EPA 8260B
Surrogate: Toluene-d8	97 %	64.6-128					05/12/25 12:55	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-04
 Name: SB-4
 Matrix: Solid - Grab

Sampled: 05/07/25 11:30
 Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
General Chemistry - STL									
pH	7.90	pH Units		1		0.0100	05/12/25 13:39	ALH	EPA 9045D
Solids - total solids (TS)	84	%		1		0.050	05/11/25 01:04	AAG/ALH	SM 2540G
Metals by ICP-MS - STL									
Arsenic	6.73	mg/kg dry		50	2.01	2.93	05/09/25 21:29	DAS	EPA 6020A
Polychlorinated Biphenyls (PCBs) - STL									
Aroclor 1016	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:37	KMS	EPA 8082
Aroclor 1221	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:37	KMS	EPA 8082
Aroclor 1232	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:37	KMS	EPA 8082
Aroclor 1242	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:37	KMS	EPA 8082
Aroclor 1248	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:37	KMS	EPA 8082
Aroclor 1254	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:37	KMS	EPA 8082
Aroclor 1260	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:37	KMS	EPA 8082
Aroclor 1262	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:37	KMS	EPA 8082
Aroclor 1268	< 0.02	mg/kg dry		1	0.007	0.02	05/16/25 09:37	KMS	EPA 8082
Aroclors - Total	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:37	KMS	EPA 8082
Semivolatile Organics - STL									
Acenaphthene	< 0.395	mg/kg dry		1	0.0442	0.395	05/12/25 18:27	EMR	EPA 8270C
Acenaphthylene	< 0.395	mg/kg dry		1	0.0391	0.395	05/12/25 18:27	EMR	EPA 8270C
Anthracene	< 0.395	mg/kg dry		1	0.0410	0.395	05/12/25 18:27	EMR	EPA 8270C
Benzo(a)anthracene	0.446	mg/kg dry		1	0.0389	0.395	05/12/25 18:27	EMR	EPA 8270C
Benzo(b)fluoranthene	0.732	mg/kg dry		1	0.0419	0.395	05/12/25 18:27	EMR	EPA 8270C
Benzo(k)fluoranthene	< 0.395	mg/kg dry		1	0.0491	0.395	05/12/25 18:27	EMR	EPA 8270C
Benzo(g,h,i)perylene	0.434	mg/kg dry		1	0.0404	0.395	05/12/25 18:27	EMR	EPA 8270C
Benzo(a)pyrene	0.517	mg/kg dry		1	0.0380	0.0712	05/12/25 18:27	EMR	EPA 8270C
Bis(2-chloroethoxy) methane	< 0.395	mg/kg dry		1	0.0436	0.395	05/12/25 18:27	EMR	EPA 8270C
Bis(2-chloroethyl) ether	< 0.000380	mg/kg dry	Mrl	1	0.000380	0.0392	05/12/25 16:51	EMR	EPA 8270C
Bis(2-chloroisopropyl) ether	< 0.395	mg/kg dry		1	0.0333	0.395	05/12/25 18:27	EMR	EPA 8270C
Bis(2-ethylhexyl) phthalate	< 0.395	mg/kg dry		1	0.0346	0.395	05/12/25 18:27	EMR	EPA 8270C
4-Bromophenyl phenyl ether	< 0.395	mg/kg dry		1	0.0404	0.395	05/12/25 18:27	EMR	EPA 8270C
Butyl benzyl phthalate	< 0.395	mg/kg dry		1	0.0327	0.395	05/12/25 18:27	EMR	EPA 8270C
Carbazole	< 0.395	mg/kg dry		1	0.0445	0.395	05/12/25 18:27	EMR	EPA 8270C
4-Chloro-3-methylphenol	< 0.791	mg/kg dry		1	0.0399	0.791	05/12/25 18:27	EMR	EPA 8270C
4-Chloroaniline	< 0.395	mg/kg dry		1	0.0400	0.395	05/12/25 18:27	EMR	EPA 8270C
2-Chloronaphthalene	< 0.395	mg/kg dry		1	0.0458	0.395	05/12/25 18:27	EMR	EPA 8270C
2-Chlorophenol	< 0.395	mg/kg dry		1	0.0444	0.395	05/12/25 18:27	EMR	EPA 8270C
4-Chlorophenylphenyl ether	< 0.395	mg/kg dry		1	0.0431	0.395	05/12/25 18:27	EMR	EPA 8270C
Chrysene	0.564	mg/kg dry		1	0.0374	0.395	05/12/25 18:27	EMR	EPA 8270C



ANALYTICAL RESULTS

Sample: IE01764-04
Name: SB-4
Matrix: Solid - Grab

Sampled: 05/07/25 11:30
Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
Di-n-butyl phthalate	< 0.395	mg/kg dry		1	0.0373	0.395	05/12/25 18:27	EMR	EPA 8270C
Di-n-octyl phthalate	< 0.395	mg/kg dry		1	0.0337	0.395	05/12/25 18:27	EMR	EPA 8270C
Dibenzo(a,h)anthracene	0.0939	mg/kg dry		1	0.0406	0.0712	05/12/25 18:27	EMR	EPA 8270C
Dibenzofuran	< 1.98	mg/kg dry		1	0.0448	1.98	05/12/25 18:27	EMR	EPA 8270C
1,2-Dichlorobenzene	< 0.395	mg/kg dry		1	0.0378	0.395	05/12/25 18:27	EMR	EPA 8270C
1,3-Dichlorobenzene	< 0.119	mg/kg dry		1	0.0419	0.119	05/12/25 18:27	EMR	EPA 8270C
1,4-Dichlorobenzene	< 0.395	mg/kg dry		1	0.0405	0.395	05/12/25 18:27	EMR	EPA 8270C
3,3'-Dichlorobenzidine	< 0.00665	mg/kg dry	Mrl	1	0.00665	0.0196	05/12/25 16:51	EMR	EPA 8270C
2,4-Dichlorophenol	< 0.395	mg/kg dry		1	0.0369	0.395	05/12/25 18:27	EMR	EPA 8270C
Diethyl phthalate	< 0.395	mg/kg dry		1	0.0359	0.395	05/12/25 18:27	EMR	EPA 8270C
Dimethyl phthalate	< 0.395	mg/kg dry		1	0.0415	0.395	05/12/25 18:27	EMR	EPA 8270C
2,4-Dimethylphenol	< 0.395	mg/kg dry		1	0.0445	0.395	05/12/25 18:27	EMR	EPA 8270C
4,6-Dinitro-2-methylphenol	< 0.00142	mg/kg dry	Mrl	1	0.00142	0.0392	05/12/25 16:51	EMR	EPA 8270C
2,4-Dinitrophenol	< 0.119	mg/kg dry		1	0.0652	0.119	05/12/25 18:27	EMR	EPA 8270C
2,4-Dinitrotoluene	< 0.000688	mg/kg dry	Mrl	1	0.000688	0.0392	05/12/25 16:51	EMR	EPA 8270C
2,6-Dinitrotoluene	< 0.000641	mg/kg dry	Mrl, V2	1	0.000641	0.0392	05/13/25 16:28	EMR	EPA 8270C
Fluoranthene	1.14	mg/kg dry		1	0.0422	0.395	05/12/25 18:27	EMR	EPA 8270C
Fluorene	< 0.395	mg/kg dry		1	0.0427	0.395	05/12/25 18:27	EMR	EPA 8270C
Hexachlorobenzene	< 0.0392	mg/kg dry	Mrl, X	1	0.0392	0.0392	05/13/25 16:28	EMR	EPA 8270C
Hexachlorobenzene	< 0.119	mg/kg dry		1	0.0392	0.119	05/12/25 18:27	EMR	EPA 8270C
Hexachlorobutadiene	< 0.395	mg/kg dry		1	0.0307	0.395	05/12/25 18:27	EMR	EPA 8270C
Hexachlorocyclopentadiene	< 0.791	mg/kg dry		1	0.0246	0.791	05/12/25 18:27	EMR	EPA 8270C
Hexachloroethane	< 0.395	mg/kg dry		1	0.0375	0.395	05/12/25 18:27	EMR	EPA 8270C
Indeno(1,2,3-cd)pyrene	< 0.395	mg/kg dry		1	0.0425	0.395	05/12/25 18:27	EMR	EPA 8270C
Isophorone	< 0.395	mg/kg dry		1	0.0288	0.395	05/12/25 18:27	EMR	EPA 8270C
2-Methylnaphthalene	< 0.395	mg/kg dry		1	0.0350	0.395	05/12/25 18:27	EMR	EPA 8270C
2-Methylphenol	< 0.395	mg/kg dry		1	0.0468	0.395	05/12/25 18:27	EMR	EPA 8270C
3- & 4-Methylphenol	< 0.119	mg/kg dry		1	0.0488	0.119	05/12/25 18:27	EMR	EPA 8270C
Naphthalene	< 0.395	mg/kg dry		1	0.0368	0.395	05/12/25 18:27	EMR	EPA 8270C
2-Nitroaniline	< 0.119	mg/kg dry		1	0.0315	0.119	05/12/25 18:27	EMR	EPA 8270C
3-Nitroaniline	< 5.94	mg/kg dry		1	0.0814	5.94	05/12/25 18:27	EMR	EPA 8270C
4-Nitroaniline	< 0.0712	mg/kg dry		1	0.0697	0.0712	05/12/25 18:27	EMR	EPA 8270C
Nitrobenzene	< 0.0712	mg/kg dry		1	0.0347	0.0712	05/12/25 18:27	EMR	EPA 8270C
2-Nitrophenol	< 0.395	mg/kg dry		1	0.0321	0.395	05/12/25 18:27	EMR	EPA 8270C
4-Nitrophenol	< 1.98	mg/kg dry		1	0.170	1.98	05/12/25 18:27	EMR	EPA 8270C
N-Nitrosodi-n-propylamine	< 0.000427	mg/kg dry	Mrl	1	0.000427	0.00392	05/12/25 16:51	EMR	EPA 8270C
N-Nitrosodiphenylamine	< 0.395	mg/kg dry		1	0.0322	0.395	05/12/25 18:27	EMR	EPA 8270C
Pentachlorophenol	< 0.00110	mg/kg dry	Mrl, V2	1	0.00110	0.00392	05/12/25 16:51	EMR	EPA 8270C
Phenanthrene	0.467	mg/kg dry		1	0.0463	0.395	05/12/25 18:27	EMR	EPA 8270C
Phenol	< 0.395	mg/kg dry		1	0.0486	0.395	05/12/25 18:27	EMR	EPA 8270C
Pyrene	0.888	mg/kg dry		1	0.0421	0.395	05/12/25 18:27	EMR	EPA 8270C
1,2,4-Trichlorobenzene	< 0.395	mg/kg dry		1	0.0323	0.395	05/12/25 18:27	EMR	EPA 8270C



ANALYTICAL RESULTS

Sample: IE01764-04
 Name: SB-4
 Matrix: Solid - Grab

Sampled: 05/07/25 11:30
 Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
2,4,5-Trichlorophenol	< 0.395	mg/kg dry		1	0.0385	0.395	05/12/25 18:27	EMR	EPA 8270C
2,4,6-Trichlorophenol	< 0.119	mg/kg dry		1	0.0386	0.119	05/12/25 18:27	EMR	EPA 8270C
Surrogate: 2-Fluorobiphenyl	81 %	34-120					05/12/25 18:27	EMR	EPA 8270C
Surrogate: 2-Fluorophenol	70 %	12.6-123					05/12/25 18:27	EMR	EPA 8270C
Surrogate: Nitrobenzene-d5	69 %	31.6-120					05/12/25 18:27	EMR	EPA 8270C
Surrogate: Phenol-d6	81 %	30.9-121					05/12/25 18:27	EMR	EPA 8270C
Surrogate: 4-Terphenyl-d14	90 %	33.3-120					05/12/25 18:27	EMR	EPA 8270C
Surrogate: 2,4,6-Tribromophenol	118 %	26.1-124					05/12/25 18:27	EMR	EPA 8270C
<u>TCLP Metals - STL</u>									
Chromium	< 0.00556	mg/L	BS1	1	0.000733	0.00556	05/29/25 15:35	BCH	EPA 6010B
<u>Total Metals - STL</u>									
Mercury	0.0522	mg/kg dry		1	0.0213	0.0424	05/12/25 16:03	RPB	SW 7471
Barium	102	mg/kg dry		1	0.146	0.733	05/12/25 14:47	BCH	EPA 6010B
Cadmium	< 0.366	mg/kg dry		1	0.0229	0.366	05/12/25 14:47	BCH	EPA 6010B
Chromium	25.8	mg/kg dry		1	0.113	0.366	05/12/25 14:47	BCH	EPA 6010B
Lead	22.5	mg/kg dry		1	0.461	2.93	05/12/25 14:47	BCH	EPA 6010B
Selenium	< 0.717	mg/kg dry	Mrl, V2	1	0.717	0.953	05/12/25 14:47	BCH	EPA 6010B
Silver	< 0.366	mg/kg dry	V2	1	0.108	0.366	05/12/25 14:47	BCH	EPA 6010B
<u>Volatile Organics - STL</u>									
Acetone	0.0414	mg/kg dry		1	0.00445	0.0373	05/12/25 13:21	NHL	EPA 8260B
Acrolein	< 0.0373	mg/kg dry		1	0.00547	0.0373	05/12/25 13:21	NHL	EPA 8260B
Acrylonitrile	< 0.0373	mg/kg dry		1	0.00776	0.0373	05/12/25 13:21	NHL	EPA 8260B
Benzene	< 0.00373	mg/kg dry		1	0.000270	0.00373	05/12/25 13:21	NHL	EPA 8260B
Bromobenzene	< 0.00373	mg/kg dry		1	0.000466	0.00373	05/12/25 13:21	NHL	EPA 8260B
Bromochloromethane	< 0.00373	mg/kg dry		1	0.000375	0.00373	05/12/25 13:21	NHL	EPA 8260B
Bromodichloromethane	< 0.00373	mg/kg dry		1	3.50E-5	0.00373	05/12/25 13:21	NHL	EPA 8260B
Bromoform	< 0.00373	mg/kg dry		1	7.49E-5	0.00373	05/12/25 13:21	NHL	EPA 8260B
Bromomethane	< 0.00747	mg/kg dry		1	0.00149	0.00747	05/12/25 13:21	NHL	EPA 8260B
2-Butanone	< 0.00747	mg/kg dry		1	0.00269	0.00747	05/12/25 13:21	NHL	EPA 8260B
n-Butylbenzene	< 0.00373	mg/kg dry		1	0.00239	0.00373	05/12/25 13:21	NHL	EPA 8260B
sec-Butylbenzene	< 0.00373	mg/kg dry		1	0.00163	0.00373	05/12/25 13:21	NHL	EPA 8260B
tert-Butylbenzene	< 0.00373	mg/kg dry		1	0.00148	0.00373	05/12/25 13:21	NHL	EPA 8260B
Carbon disulfide	< 0.00747	mg/kg dry		1	0.000796	0.00747	05/12/25 13:21	NHL	EPA 8260B
Carbon tetrachloride	< 0.00373	mg/kg dry		1	0.000966	0.00373	05/12/25 13:21	NHL	EPA 8260B
Chlorobenzene	< 0.00373	mg/kg dry		1	0.000453	0.00373	05/12/25 13:21	NHL	EPA 8260B
Chloroethane	< 0.00747	mg/kg dry		1	0.000304	0.00747	05/12/25 13:21	NHL	EPA 8260B
Chloroform	< 0.00373	mg/kg dry		1	4.78E-5	0.00373	05/12/25 13:21	NHL	EPA 8260B
Chloromethane	< 0.00747	mg/kg dry		1	0.000798	0.00747	05/12/25 13:21	NHL	EPA 8260B
2-Chlorotoluene	< 0.00373	mg/kg dry		1	0.00161	0.00373	05/12/25 13:21	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-04

Name: SB-4

Matrix: Solid - Grab

Sampled: 05/07/25 11:30

Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
4-Chlorotoluene	< 0.00373	mg/kg dry		1	0.00219	0.00373	05/12/25 13:21	NHL	EPA 8260B
1,2-Dibromo-3-chloropropane	< 6.92E-5	mg/kg dry	Mrl	1	6.92E-5	6.92E-5	05/12/25 13:21	NHL	EPA 8260B
Dibromochloromethane	< 0.00373	mg/kg dry		1	0.000649	0.00373	05/12/25 13:21	NHL	EPA 8260B
1,2-Dibromoethane	< 3.73E-5	mg/kg dry	Mrl	1	3.73E-5	3.73E-5	05/12/25 13:21	NHL	EPA 8260B
Dibromomethane	< 0.00373	mg/kg dry		1	0.000668	0.00373	05/12/25 13:21	NHL	EPA 8260B
1,2-Dichlorobenzene	< 0.00373	mg/kg dry		1	0.000617	0.00373	05/12/25 13:21	NHL	EPA 8260B
1,3-Dichlorobenzene	< 0.00373	mg/kg dry		1	0.000554	0.00373	05/12/25 13:21	NHL	EPA 8260B
1,4-Dichlorobenzene	< 0.00373	mg/kg dry		1	0.000490	0.00373	05/12/25 13:21	NHL	EPA 8260B
Dichlorodifluoromethane	< 0.00747	mg/kg dry		1	0.000956	0.00747	05/12/25 13:21	NHL	EPA 8260B
1,1-Dichloroethane	< 0.00373	mg/kg dry		1	0.000511	0.00373	05/12/25 13:21	NHL	EPA 8260B
1,2-Dichloroethane	< 0.00373	mg/kg dry		1	0.000238	0.00373	05/12/25 13:21	NHL	EPA 8260B
1,1-Dichloroethene	< 0.00373	mg/kg dry		1	0.000468	0.00373	05/12/25 13:21	NHL	EPA 8260B
cis-1,2-Dichloroethene	< 0.00373	mg/kg dry		1	0.000454	0.00373	05/12/25 13:21	NHL	EPA 8260B
trans-1,2-Dichloroethene	< 0.00373	mg/kg dry		1	0.00119	0.00373	05/12/25 13:21	NHL	EPA 8260B
1,2-Dichloroethene- Total	< 0.00747	mg/kg dry		1	0.00137	0.00747	05/12/25 13:21	NHL	EPA 8260B
1,2-Dichloropropane	< 0.00373	mg/kg dry		1	0.000498	0.00373	05/12/25 13:21	NHL	EPA 8260B
1,3-Dichloropropane	< 0.00373	mg/kg dry		1	0.00124	0.00373	05/12/25 13:21	NHL	EPA 8260B
2,2-Dichloropropane	< 0.00373	mg/kg dry		1	0.00176	0.00373	05/12/25 13:21	NHL	EPA 8260B
1,1-Dichloropropene	< 0.00373	mg/kg dry		1	0.000464	0.00373	05/12/25 13:21	NHL	EPA 8260B
cis-1,3-Dichloropropene	< 0.00224	mg/kg dry		1	3.50E-5	0.00224	05/12/25 13:21	NHL	EPA 8260B
trans-1,3-Dichloropropene	< 0.00224	mg/kg dry		1	4.34E-5	0.00224	05/12/25 13:21	NHL	EPA 8260B
1,3-Dichloropropene - Total	< 0.00299	mg/kg dry		1	0.00114	0.00299	05/12/25 13:21	NHL	EPA 8260B
Diethyl ether	< 0.00373	mg/kg dry		1	7.47E-7	0.00373	05/12/25 13:21	NHL	EPA 8260B
Ethyl acetate	< 0.00747	mg/kg dry		1	7.47E-7	0.00747	05/12/25 13:21	NHL	EPA 8260B
Ethylbenzene	< 0.00373	mg/kg dry		1	0.00105	0.00373	05/12/25 13:21	NHL	EPA 8260B
Hexachlorobutadiene	< 0.00747	mg/kg dry		1	0.000327	0.00747	05/12/25 13:21	NHL	EPA 8260B
n-Hexane	< 0.00373	mg/kg dry		1	7.47E-7	0.00373	05/12/25 13:21	NHL	EPA 8260B
2-Hexanone	< 0.00373	mg/kg dry		1	0.00223	0.00373	05/12/25 13:21	NHL	EPA 8260B
Isopropylbenzene	< 0.00373	mg/kg dry		1	0.00107	0.00373	05/12/25 13:21	NHL	EPA 8260B
p-Isopropyl toluene	< 0.00373	mg/kg dry		1	0.00226	0.00373	05/12/25 13:21	NHL	EPA 8260B
MTBE	< 0.00373	mg/kg dry		1	0.000506	0.00373	05/12/25 13:21	NHL	EPA 8260B
4-Methyl-2-pentanone (MIBK)	< 0.00373	mg/kg dry		1	0.00264	0.00373	05/12/25 13:21	NHL	EPA 8260B
Methylene chloride	< 0.00373	mg/kg dry		1	0.000398	0.00373	05/12/25 13:21	NHL	EPA 8260B
Naphthalene	< 0.00896	mg/kg dry		1	0.00225	0.00896	05/12/25 13:21	NHL	EPA 8260B
n-Propylbenzene	< 0.00373	mg/kg dry		1	0.00125	0.00373	05/12/25 13:21	NHL	EPA 8260B
Styrene	< 0.00373	mg/kg dry		1	0.000887	0.00373	05/12/25 13:21	NHL	EPA 8260B
1,1,1,2-Tetrachloroethane	< 0.00373	mg/kg dry		1	0.000547	0.00373	05/12/25 13:21	NHL	EPA 8260B
1,1,2,2-Tetrachloroethane	< 0.00149	mg/kg dry		1	3.73E-5	0.00149	05/12/25 13:21	NHL	EPA 8260B
Tetrachloroethene	< 0.00373	mg/kg dry		1	0.000678	0.00373	05/12/25 13:21	NHL	EPA 8260B
Toluene	< 0.00373	mg/kg dry		1	0.00113	0.00373	05/12/25 13:21	NHL	EPA 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon)	< 0.00373	mg/kg dry		1	0.000447	0.00373	05/12/25 13:21	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-04
Name: SB-4
Matrix: Solid - Grab

Sampled: 05/07/25 11:30
Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
1,2,3-Trichlorobenzene	< 0.00373	mg/kg dry		1	0.000713	0.00373	05/12/25 13:21	NHL	EPA 8260B
1,2,4-Trichlorobenzene	< 0.00373	mg/kg dry		1	0.000718	0.00373	05/12/25 13:21	NHL	EPA 8260B
1,1,1-Trichloroethane	< 0.00373	mg/kg dry		1	0.000494	0.00373	05/12/25 13:21	NHL	EPA 8260B
1,1,2-Trichloroethane	< 0.00373	mg/kg dry		1	0.000556	0.00373	05/12/25 13:21	NHL	EPA 8260B
Trichloroethene	< 0.00373	mg/kg dry		1	0.000755	0.00373	05/12/25 13:21	NHL	EPA 8260B
Trichlorofluoromethane	< 0.00747	mg/kg dry		1	0.00116	0.00747	05/12/25 13:21	NHL	EPA 8260B
1,2,3-Trichloropropane	< 0.00373	mg/kg dry		1	0.000699	0.00373	05/12/25 13:21	NHL	EPA 8260B
1,2,4-Trimethylbenzene	< 0.00373	mg/kg dry		1	0.00292	0.00373	05/12/25 13:21	NHL	EPA 8260B
1,3,5-Trimethylbenzene	< 0.00373	mg/kg dry		1	0.000463	0.00373	05/12/25 13:21	NHL	EPA 8260B
Vinyl acetate	< 0.00373	mg/kg dry		1	0.00125	0.00373	05/12/25 13:21	NHL	EPA 8260B
Vinyl chloride	< 0.00373	mg/kg dry		1	0.00106	0.00373	05/12/25 13:21	NHL	EPA 8260B
Xylenes- Total	< 0.0112	mg/kg dry		1	0.00159	0.0112	05/12/25 13:21	NHL	EPA 8260B
Surrogate: 4-Bromofluorobenzene	93 %	53.6-133					05/12/25 13:21	NHL	EPA 8260B
Surrogate: 1,2-Dichloroethane-d4	106 %	60.2-146					05/12/25 13:21	NHL	EPA 8260B
Surrogate: Toluene-d8	96 %	64.6-128					05/12/25 13:21	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-05
 Name: SB-5
 Matrix: Solid - Grab

Sampled: 05/07/25 11:45
 Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
<u>General Chemistry - STL</u>									
pH	7.97	pH Units		1		0.0100	05/12/25 13:39	ALH	EPA 9045D
Solids - total solids (TS)	82	%		1		0.050	05/11/25 01:04	AAG/ALH	SM 2540G
<u>Metals by ICP-MS - STL</u>									
Arsenic	7.60	mg/kg dry		50	2.46	3.60	05/09/25 21:36	DAS	EPA 6020A
<u>Polychlorinated Biphenyls (PCBs) - STL</u>									
Aroclor 1016	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:54	KMS	EPA 8082
Aroclor 1221	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:54	KMS	EPA 8082
Aroclor 1232	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:54	KMS	EPA 8082
Aroclor 1242	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:54	KMS	EPA 8082
Aroclor 1248	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:54	KMS	EPA 8082
Aroclor 1254	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:54	KMS	EPA 8082
Aroclor 1260	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:54	KMS	EPA 8082
Aroclor 1262	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:54	KMS	EPA 8082
Aroclor 1268	< 0.02	mg/kg dry		1	0.007	0.02	05/16/25 09:54	KMS	EPA 8082
Aroclors - Total	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 09:54	KMS	EPA 8082
<u>Semivolatile Organics - STL</u>									
Acenaphthene	< 0.407	mg/kg dry		1	0.0455	0.407	05/12/25 18:56	EMR	EPA 8270C
Acenaphthylene	< 0.407	mg/kg dry		1	0.0403	0.407	05/12/25 18:56	EMR	EPA 8270C
Anthracene	< 0.407	mg/kg dry		1	0.0422	0.407	05/12/25 18:56	EMR	EPA 8270C
Benzo(a)anthracene	0.665	mg/kg dry		1	0.0401	0.407	05/12/25 18:56	EMR	EPA 8270C
Benzo(b)fluoranthene	1.31	mg/kg dry		1	0.0432	0.407	05/12/25 18:56	EMR	EPA 8270C
Benzo(k)fluoranthene	0.474	mg/kg dry		1	0.0506	0.407	05/12/25 18:56	EMR	EPA 8270C
Benzo(g,h,i)perylene	0.678	mg/kg dry		1	0.0416	0.407	05/12/25 18:56	EMR	EPA 8270C
Benzo(a)pyrene	0.847	mg/kg dry		1	0.0391	0.0734	05/12/25 18:56	EMR	EPA 8270C
Bis(2-chloroethoxy) methane	< 0.407	mg/kg dry		1	0.0449	0.407	05/12/25 18:56	EMR	EPA 8270C
Bis(2-chloroethyl) ether	< 0.000391	mg/kg dry	Mrl	1	0.000391	0.0404	05/12/25 17:19	EMR	EPA 8270C
Bis(2-chloroisopropyl) ether	< 0.407	mg/kg dry		1	0.0343	0.407	05/12/25 18:56	EMR	EPA 8270C
Bis(2-ethylhexyl) phthalate	8.74	mg/kg dry		1	0.0356	0.407	05/12/25 18:56	EMR	EPA 8270C
4-Bromophenyl phenyl ether	< 0.407	mg/kg dry		1	0.0416	0.407	05/12/25 18:56	EMR	EPA 8270C
Butyl benzyl phthalate	< 0.407	mg/kg dry		1	0.0336	0.407	05/12/25 18:56	EMR	EPA 8270C
Carbazole	< 0.407	mg/kg dry		1	0.0459	0.407	05/12/25 18:56	EMR	EPA 8270C
4-Chloro-3-methylphenol	< 0.814	mg/kg dry		1	0.0411	0.814	05/12/25 18:56	EMR	EPA 8270C
4-Chloroaniline	< 0.407	mg/kg dry		1	0.0412	0.407	05/12/25 18:56	EMR	EPA 8270C
2-Chloronaphthalene	< 0.407	mg/kg dry		1	0.0472	0.407	05/12/25 18:56	EMR	EPA 8270C
2-Chlorophenol	< 0.407	mg/kg dry		1	0.0457	0.407	05/12/25 18:56	EMR	EPA 8270C
4-Chlorophenylphenyl ether	< 0.407	mg/kg dry		1	0.0444	0.407	05/12/25 18:56	EMR	EPA 8270C
Chrysene	0.920	mg/kg dry		1	0.0385	0.407	05/12/25 18:56	EMR	EPA 8270C



ANALYTICAL RESULTS

Sample: IE01764-05
Name: SB-5
Matrix: Solid - Grab

Sampled: 05/07/25 11:45
Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
Di-n-butyl phthalate	< 0.407	mg/kg dry		1	0.0384	0.407	05/12/25 18:56	EMR	EPA 8270C
Di-n-octyl phthalate	< 0.407	mg/kg dry		1	0.0347	0.407	05/12/25 18:56	EMR	EPA 8270C
Dibenzo(a,h)anthracene	0.160	mg/kg dry		1	0.0419	0.0734	05/12/25 18:56	EMR	EPA 8270C
Dibenzofuran	< 2.04	mg/kg dry		1	0.0461	2.04	05/12/25 18:56	EMR	EPA 8270C
1,2-Dichlorobenzene	< 0.407	mg/kg dry		1	0.0389	0.407	05/12/25 18:56	EMR	EPA 8270C
1,3-Dichlorobenzene	< 0.122	mg/kg dry		1	0.0432	0.122	05/12/25 18:56	EMR	EPA 8270C
1,4-Dichlorobenzene	< 0.407	mg/kg dry		1	0.0417	0.407	05/12/25 18:56	EMR	EPA 8270C
3,3'-Dichlorobenzidine	< 0.00685	mg/kg dry	Mrl	1	0.00685	0.0202	05/12/25 17:19	EMR	EPA 8270C
2,4-Dichlorophenol	< 0.407	mg/kg dry		1	0.0381	0.407	05/12/25 18:56	EMR	EPA 8270C
Diethyl phthalate	< 0.407	mg/kg dry		1	0.0370	0.407	05/12/25 18:56	EMR	EPA 8270C
Dimethyl phthalate	< 0.407	mg/kg dry		1	0.0428	0.407	05/12/25 18:56	EMR	EPA 8270C
2,4-Dimethylphenol	< 0.407	mg/kg dry		1	0.0458	0.407	05/12/25 18:56	EMR	EPA 8270C
4,6-Dinitro-2-methylphenol	< 0.00147	mg/kg dry	Mrl	1	0.00147	0.0404	05/12/25 17:19	EMR	EPA 8270C
2,4-Dinitrophenol	< 0.122	mg/kg dry		1	0.0672	0.122	05/12/25 18:56	EMR	EPA 8270C
2,4-Dinitrotoluene	< 0.000709	mg/kg dry	Mrl	1	0.000709	0.0404	05/12/25 17:19	EMR	EPA 8270C
2,6-Dinitrotoluene	< 0.000660	mg/kg dry	Mrl, V2	1	0.000660	0.0404	05/13/25 16:56	EMR	EPA 8270C
Fluoranthene	1.72	mg/kg dry		1	0.0435	0.407	05/12/25 18:56	EMR	EPA 8270C
Fluorene	< 0.407	mg/kg dry		1	0.0439	0.407	05/12/25 18:56	EMR	EPA 8270C
Hexachlorobenzene	< 0.122	mg/kg dry		1	0.0404	0.122	05/12/25 18:56	EMR	EPA 8270C
Hexachlorobenzene	< 0.0404	mg/kg dry	Mrl, X	1	0.0404	0.0404	05/13/25 16:56	EMR	EPA 8270C
Hexachlorobutadiene	< 0.407	mg/kg dry		1	0.0317	0.407	05/12/25 18:56	EMR	EPA 8270C
Hexachlorocyclopentadiene	< 0.814	mg/kg dry		1	0.0254	0.814	05/12/25 18:56	EMR	EPA 8270C
Hexachloroethane	< 0.407	mg/kg dry		1	0.0386	0.407	05/12/25 18:56	EMR	EPA 8270C
Indeno(1,2,3-cd)pyrene	0.652	mg/kg dry		1	0.0438	0.407	05/12/25 18:56	EMR	EPA 8270C
Isophorone	< 0.407	mg/kg dry		1	0.0296	0.407	05/12/25 18:56	EMR	EPA 8270C
2-Methylnaphthalene	< 0.407	mg/kg dry		1	0.0360	0.407	05/12/25 18:56	EMR	EPA 8270C
2-Methylphenol	< 0.407	mg/kg dry		1	0.0483	0.407	05/12/25 18:56	EMR	EPA 8270C
3- & 4-Methylphenol	< 0.122	mg/kg dry		1	0.0503	0.122	05/12/25 18:56	EMR	EPA 8270C
Naphthalene	< 0.407	mg/kg dry		1	0.0379	0.407	05/12/25 18:56	EMR	EPA 8270C
2-Nitroaniline	< 0.122	mg/kg dry		1	0.0324	0.122	05/12/25 18:56	EMR	EPA 8270C
3-Nitroaniline	< 6.11	mg/kg dry		1	0.0839	6.11	05/12/25 18:56	EMR	EPA 8270C
4-Nitroaniline	< 0.0734	mg/kg dry		1	0.0718	0.0734	05/12/25 18:56	EMR	EPA 8270C
Nitrobenzene	< 0.0734	mg/kg dry		1	0.0357	0.0734	05/12/25 18:56	EMR	EPA 8270C
2-Nitrophenol	< 0.407	mg/kg dry		1	0.0331	0.407	05/12/25 18:56	EMR	EPA 8270C
4-Nitrophenol	< 2.04	mg/kg dry		1	0.175	2.04	05/12/25 18:56	EMR	EPA 8270C
N-Nitrosodi-n-propylamine	< 0.000440	mg/kg dry	Mrl	1	0.000440	0.00404	05/12/25 17:19	EMR	EPA 8270C
N-Nitrosodiphenylamine	< 0.407	mg/kg dry		1	0.0331	0.407	05/12/25 18:56	EMR	EPA 8270C
Pentachlorophenol	< 0.00114	mg/kg dry	Mrl, V2	1	0.00114	0.00404	05/12/25 17:19	EMR	EPA 8270C
Phenanthrene	0.559	mg/kg dry		1	0.0477	0.407	05/12/25 18:56	EMR	EPA 8270C
Phenol	< 0.407	mg/kg dry		1	0.0501	0.407	05/12/25 18:56	EMR	EPA 8270C
Pyrene	1.32	mg/kg dry		1	0.0434	0.407	05/12/25 18:56	EMR	EPA 8270C
1,2,4-Trichlorobenzene	< 0.407	mg/kg dry		1	0.0333	0.407	05/12/25 18:56	EMR	EPA 8270C



ANALYTICAL RESULTS

Sample: IE01764-05
 Name: SB-5
 Matrix: Solid - Grab

Sampled: 05/07/25 11:45
 Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
2,4,5-Trichlorophenol	< 0.407	mg/kg dry		1	0.0397	0.407	05/12/25 18:56	EMR	EPA 8270C
2,4,6-Trichlorophenol	< 0.122	mg/kg dry		1	0.0397	0.122	05/12/25 18:56	EMR	EPA 8270C
Surrogate: 2-Fluorobiphenyl	83 %	34-120					05/12/25 18:56	EMR	EPA 8270C
Surrogate: 2-Fluorophenol	74 %	12.6-123					05/12/25 18:56	EMR	EPA 8270C
Surrogate: Nitrobenzene-d5	90 %	31.6-120					05/12/25 18:56	EMR	EPA 8270C
Surrogate: Phenol-d6	82 %	30.9-121					05/12/25 18:56	EMR	EPA 8270C
Surrogate: 4-Terphenyl-d14	107 %	33.3-120					05/12/25 18:56	EMR	EPA 8270C
Surrogate: 2,4,6-Tribromophenol	141 %	26.1-124					05/12/25 18:56	EMR	EPA 8270C
<u>TCLP Metals - STL</u>									
Chromium	< 0.00556	mg/L	BS1	1	0.000733	0.00556	05/29/25 15:37	BCH	EPA 6010B
<u>Total Metals - STL</u>									
Mercury	< 0.0422	mg/kg dry		1	0.0212	0.0422	05/12/25 16:03	RPB	SW 7471
Barium	83.2	mg/kg dry		1	0.179	0.899	05/12/25 14:50	BCH	EPA 6010B
Cadmium	< 0.450	mg/kg dry		1	0.0281	0.450	05/12/25 14:50	BCH	EPA 6010B
Chromium	24.9	mg/kg dry		1	0.138	0.450	05/12/25 14:50	BCH	EPA 6010B
Lead	23.5	mg/kg dry		1	0.566	3.60	05/12/25 14:50	BCH	EPA 6010B
Selenium	< 0.880	mg/kg dry	Mrl, V2	1	0.880	1.17	05/12/25 14:50	BCH	EPA 6010B
Silver	< 0.450	mg/kg dry	V2	1	0.132	0.450	05/12/25 14:50	BCH	EPA 6010B
<u>Volatile Organics - STL</u>									
Acetone	0.0501	mg/kg dry		1	0.00481	0.0403	05/12/25 13:48	NHL	EPA 8260B
Acrolein	< 0.0403	mg/kg dry		1	0.00591	0.0403	05/12/25 13:48	NHL	EPA 8260B
Acrylonitrile	< 0.0403	mg/kg dry		1	0.00838	0.0403	05/12/25 13:48	NHL	EPA 8260B
Benzene	< 0.00403	mg/kg dry		1	0.000292	0.00403	05/12/25 13:48	NHL	EPA 8260B
Bromobenzene	< 0.00403	mg/kg dry		1	0.000503	0.00403	05/12/25 13:48	NHL	EPA 8260B
Bromochloromethane	< 0.00403	mg/kg dry		1	0.000405	0.00403	05/12/25 13:48	NHL	EPA 8260B
Bromodichloromethane	< 0.00403	mg/kg dry		1	3.78E-5	0.00403	05/12/25 13:48	NHL	EPA 8260B
Bromoform	< 0.00403	mg/kg dry		1	8.09E-5	0.00403	05/12/25 13:48	NHL	EPA 8260B
Bromomethane	< 0.00807	mg/kg dry		1	0.00160	0.00807	05/12/25 13:48	NHL	EPA 8260B
2-Butanone	< 0.00807	mg/kg dry		1	0.00290	0.00807	05/12/25 13:48	NHL	EPA 8260B
n-Butylbenzene	< 0.00403	mg/kg dry		1	0.00258	0.00403	05/12/25 13:48	NHL	EPA 8260B
sec-Butylbenzene	< 0.00403	mg/kg dry		1	0.00176	0.00403	05/12/25 13:48	NHL	EPA 8260B
tert-Butylbenzene	< 0.00403	mg/kg dry		1	0.00160	0.00403	05/12/25 13:48	NHL	EPA 8260B
Carbon disulfide	< 0.00807	mg/kg dry		1	0.000860	0.00807	05/12/25 13:48	NHL	EPA 8260B
Carbon tetrachloride	< 0.00403	mg/kg dry		1	0.00104	0.00403	05/12/25 13:48	NHL	EPA 8260B
Chlorobenzene	< 0.00403	mg/kg dry		1	0.000489	0.00403	05/12/25 13:48	NHL	EPA 8260B
Chloroethane	< 0.00807	mg/kg dry		1	0.000328	0.00807	05/12/25 13:48	NHL	EPA 8260B
Chloroform	< 0.00403	mg/kg dry		1	5.17E-5	0.00403	05/12/25 13:48	NHL	EPA 8260B
Chloromethane	< 0.00807	mg/kg dry		1	0.000862	0.00807	05/12/25 13:48	NHL	EPA 8260B
2-Chlorotoluene	< 0.00403	mg/kg dry		1	0.00174	0.00403	05/12/25 13:48	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-05

Name: SB-5

Matrix: Solid - Grab

Sampled: 05/07/25 11:45

Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
4-Chlorotoluene	< 0.00403	mg/kg dry		1	0.00237	0.00403	05/12/25 13:48	NHL	EPA 8260B
1,2-Dibromo-3-chloropropane	< 7.47E-5	mg/kg dry	Mrl	1	7.47E-5	7.47E-5	05/12/25 13:48	NHL	EPA 8260B
Dibromochloromethane	< 0.00403	mg/kg dry		1	0.000701	0.00403	05/12/25 13:48	NHL	EPA 8260B
1,2-Dibromoethane	< 4.03E-5	mg/kg dry	Mrl	1	4.03E-5	4.03E-5	05/12/25 13:48	NHL	EPA 8260B
Dibromomethane	< 0.00403	mg/kg dry		1	0.000722	0.00403	05/12/25 13:48	NHL	EPA 8260B
1,2-Dichlorobenzene	< 0.00403	mg/kg dry		1	0.000667	0.00403	05/12/25 13:48	NHL	EPA 8260B
1,3-Dichlorobenzene	< 0.00403	mg/kg dry		1	0.000598	0.00403	05/12/25 13:48	NHL	EPA 8260B
1,4-Dichlorobenzene	< 0.00403	mg/kg dry		1	0.000530	0.00403	05/12/25 13:48	NHL	EPA 8260B
Dichlorodifluoromethane	< 0.00807	mg/kg dry		1	0.00103	0.00807	05/12/25 13:48	NHL	EPA 8260B
1,1-Dichloroethane	< 0.00403	mg/kg dry		1	0.000553	0.00403	05/12/25 13:48	NHL	EPA 8260B
1,2-Dichloroethane	< 0.00403	mg/kg dry		1	0.000257	0.00403	05/12/25 13:48	NHL	EPA 8260B
1,1-Dichloroethene	< 0.00403	mg/kg dry		1	0.000506	0.00403	05/12/25 13:48	NHL	EPA 8260B
cis-1,2-Dichloroethene	< 0.00403	mg/kg dry		1	0.000491	0.00403	05/12/25 13:48	NHL	EPA 8260B
trans-1,2-Dichloroethene	< 0.00403	mg/kg dry		1	0.00128	0.00403	05/12/25 13:48	NHL	EPA 8260B
1,2-Dichloroethene- Total	< 0.00807	mg/kg dry		1	0.00148	0.00807	05/12/25 13:48	NHL	EPA 8260B
1,2-Dichloropropane	< 0.00403	mg/kg dry		1	0.000539	0.00403	05/12/25 13:48	NHL	EPA 8260B
1,3-Dichloropropane	< 0.00403	mg/kg dry		1	0.00134	0.00403	05/12/25 13:48	NHL	EPA 8260B
2,2-Dichloropropane	< 0.00403	mg/kg dry		1	0.00190	0.00403	05/12/25 13:48	NHL	EPA 8260B
1,1-Dichloropropene	< 0.00403	mg/kg dry		1	0.000501	0.00403	05/12/25 13:48	NHL	EPA 8260B
cis-1,3-Dichloropropene	< 0.00242	mg/kg dry		1	3.78E-5	0.00242	05/12/25 13:48	NHL	EPA 8260B
trans-1,3-Dichloropropene	< 0.00242	mg/kg dry		1	4.69E-5	0.00242	05/12/25 13:48	NHL	EPA 8260B
1,3-Dichloropropene - Total	< 0.00323	mg/kg dry		1	0.00123	0.00323	05/12/25 13:48	NHL	EPA 8260B
Diethyl ether	< 0.00403	mg/kg dry		1	8.07E-7	0.00403	05/12/25 13:48	NHL	EPA 8260B
Ethyl acetate	< 0.00807	mg/kg dry		1	8.07E-7	0.00807	05/12/25 13:48	NHL	EPA 8260B
Ethylbenzene	< 0.00403	mg/kg dry		1	0.00114	0.00403	05/12/25 13:48	NHL	EPA 8260B
Hexachlorobutadiene	< 0.00807	mg/kg dry		1	0.000353	0.00807	05/12/25 13:48	NHL	EPA 8260B
n-Hexane	< 0.00403	mg/kg dry		1	8.07E-7	0.00403	05/12/25 13:48	NHL	EPA 8260B
2-Hexanone	< 0.00403	mg/kg dry		1	0.00241	0.00403	05/12/25 13:48	NHL	EPA 8260B
Isopropylbenzene	< 0.00403	mg/kg dry		1	0.00115	0.00403	05/12/25 13:48	NHL	EPA 8260B
p-Isopropyl toluene	< 0.00403	mg/kg dry		1	0.00244	0.00403	05/12/25 13:48	NHL	EPA 8260B
MTBE	< 0.00403	mg/kg dry		1	0.000547	0.00403	05/12/25 13:48	NHL	EPA 8260B
4-Methyl-2-pentanone (MIBK)	< 0.00403	mg/kg dry		1	0.00286	0.00403	05/12/25 13:48	NHL	EPA 8260B
Methylene chloride	< 0.00403	mg/kg dry		1	0.000430	0.00403	05/12/25 13:48	NHL	EPA 8260B
Naphthalene	< 0.00968	mg/kg dry		1	0.00244	0.00968	05/12/25 13:48	NHL	EPA 8260B
n-Propylbenzene	< 0.00403	mg/kg dry		1	0.00135	0.00403	05/12/25 13:48	NHL	EPA 8260B
Styrene	< 0.00403	mg/kg dry		1	0.000958	0.00403	05/12/25 13:48	NHL	EPA 8260B
1,1,1,2-Tetrachloroethane	< 0.00403	mg/kg dry		1	0.000592	0.00403	05/12/25 13:48	NHL	EPA 8260B
1,1,2,2-Tetrachloroethane	< 0.00161	mg/kg dry		1	4.03E-5	0.00161	05/12/25 13:48	NHL	EPA 8260B
Tetrachloroethene	< 0.00403	mg/kg dry		1	0.000732	0.00403	05/12/25 13:48	NHL	EPA 8260B
Toluene	< 0.00403	mg/kg dry		1	0.00122	0.00403	05/12/25 13:48	NHL	EPA 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon)	< 0.00403	mg/kg dry		1	0.000483	0.00403	05/12/25 13:48	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-05
Name: SB-5
Matrix: Solid - Grab

Sampled: 05/07/25 11:45
Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
1,2,3-Trichlorobenzene	< 0.00403	mg/kg dry		1	0.000771	0.00403	05/12/25 13:48	NHL	EPA 8260B
1,2,4-Trichlorobenzene	< 0.00403	mg/kg dry		1	0.000776	0.00403	05/12/25 13:48	NHL	EPA 8260B
1,1,1-Trichloroethane	< 0.00403	mg/kg dry		1	0.000533	0.00403	05/12/25 13:48	NHL	EPA 8260B
1,1,2-Trichloroethane	< 0.00403	mg/kg dry		1	0.000601	0.00403	05/12/25 13:48	NHL	EPA 8260B
Trichloroethene	< 0.00403	mg/kg dry		1	0.000815	0.00403	05/12/25 13:48	NHL	EPA 8260B
Trichlorofluoromethane	< 0.00807	mg/kg dry		1	0.00125	0.00807	05/12/25 13:48	NHL	EPA 8260B
1,2,3-Trichloropropane	< 0.00403	mg/kg dry		1	0.000755	0.00403	05/12/25 13:48	NHL	EPA 8260B
1,2,4-Trimethylbenzene	< 0.00403	mg/kg dry		1	0.00316	0.00403	05/12/25 13:48	NHL	EPA 8260B
1,3,5-Trimethylbenzene	< 0.00403	mg/kg dry		1	0.000500	0.00403	05/12/25 13:48	NHL	EPA 8260B
Vinyl acetate	< 0.00403	mg/kg dry		1	0.00135	0.00403	05/12/25 13:48	NHL	EPA 8260B
Vinyl chloride	< 0.00403	mg/kg dry		1	0.00114	0.00403	05/12/25 13:48	NHL	EPA 8260B
Xylenes- Total	< 0.0121	mg/kg dry		1	0.00172	0.0121	05/12/25 13:48	NHL	EPA 8260B
Surrogate: 4-Bromofluorobenzene	92 %	53.6-133					05/12/25 13:48	NHL	EPA 8260B
Surrogate: 1,2-Dichloroethane-d4	108 %	60.2-146					05/12/25 13:48	NHL	EPA 8260B
Surrogate: Toluene-d8	96 %	64.6-128					05/12/25 13:48	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-06
 Name: SB-6
 Matrix: Solid - Grab

Sampled: 05/07/25 12:05
 Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
<u>General Chemistry - STL</u>									
pH	8.06	pH Units		1		0.0100	05/12/25 13:39	ALH	EPA 9045D
Solids - total solids (TS)	85	%		1		0.050	05/11/25 01:04	AAG/ALH	SM 2540G
<u>Metals by ICP-MS - STL</u>									
Arsenic	< 3.56	mg/kg dry		50	2.44	3.56	05/09/25 21:42	DAS	EPA 6020A
<u>Polychlorinated Biphenyls (PCBs) - STL</u>									
Aroclor 1016	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:12	KMS	EPA 8082
Aroclor 1221	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:12	KMS	EPA 8082
Aroclor 1232	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:12	KMS	EPA 8082
Aroclor 1242	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:12	KMS	EPA 8082
Aroclor 1248	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:12	KMS	EPA 8082
Aroclor 1254	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:12	KMS	EPA 8082
Aroclor 1260	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:12	KMS	EPA 8082
Aroclor 1262	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:12	KMS	EPA 8082
Aroclor 1268	< 0.02	mg/kg dry		1	0.007	0.02	05/16/25 10:12	KMS	EPA 8082
Aroclors - Total	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:12	KMS	EPA 8082
<u>Semivolatile Organics - STL</u>									
Acenaphthene	< 0.391	mg/kg dry		1	0.0437	0.391	05/12/25 19:24	EMR	EPA 8270C
Acenaphthylene	< 0.391	mg/kg dry		1	0.0387	0.391	05/12/25 19:24	EMR	EPA 8270C
Anthracene	< 0.391	mg/kg dry		1	0.0405	0.391	05/12/25 19:24	EMR	EPA 8270C
Benzo(a)anthracene	0.494	mg/kg dry		1	0.0384	0.391	05/12/25 19:24	EMR	EPA 8270C
Benzo(b)fluoranthene	0.888	mg/kg dry		1	0.0415	0.391	05/12/25 19:24	EMR	EPA 8270C
Benzo(k)fluoranthene	< 0.391	mg/kg dry		1	0.0486	0.391	05/12/25 19:24	EMR	EPA 8270C
Benzo(g,h,i)perylene	0.547	mg/kg dry		1	0.0399	0.391	05/12/25 19:24	EMR	EPA 8270C
Benzo(a)pyrene	0.607	mg/kg dry		1	0.0376	0.0704	05/12/25 19:24	EMR	EPA 8270C
Bis(2-chloroethoxy) methane	< 0.391	mg/kg dry		1	0.0431	0.391	05/12/25 19:24	EMR	EPA 8270C
Bis(2-chloroethyl) ether	< 0.000375	mg/kg dry	Mrl	1	0.000375	0.0387	05/12/25 17:48	EMR	EPA 8270C
Bis(2-chloroisopropyl) ether	< 0.391	mg/kg dry		1	0.0329	0.391	05/12/25 19:24	EMR	EPA 8270C
Bis(2-ethylhexyl) phthalate	< 0.391	mg/kg dry		1	0.0342	0.391	05/12/25 19:24	EMR	EPA 8270C
4-Bromophenyl phenyl ether	< 0.391	mg/kg dry		1	0.0399	0.391	05/12/25 19:24	EMR	EPA 8270C
Butyl benzyl phthalate	< 0.391	mg/kg dry		1	0.0323	0.391	05/12/25 19:24	EMR	EPA 8270C
Carbazole	< 0.391	mg/kg dry		1	0.0440	0.391	05/12/25 19:24	EMR	EPA 8270C
4-Chloro-3-methylphenol	< 0.781	mg/kg dry		1	0.0394	0.781	05/12/25 19:24	EMR	EPA 8270C
4-Chloroaniline	< 0.391	mg/kg dry		1	0.0395	0.391	05/12/25 19:24	EMR	EPA 8270C
2-Chloronaphthalene	< 0.391	mg/kg dry		1	0.0453	0.391	05/12/25 19:24	EMR	EPA 8270C
2-Chlorophenol	< 0.391	mg/kg dry		1	0.0439	0.391	05/12/25 19:24	EMR	EPA 8270C
4-Chlorophenylphenyl ether	< 0.391	mg/kg dry		1	0.0427	0.391	05/12/25 19:24	EMR	EPA 8270C
Chrysene	0.646	mg/kg dry		1	0.0370	0.391	05/12/25 19:24	EMR	EPA 8270C



ANALYTICAL RESULTS

Sample: IE01764-06

Name: SB-6

Matrix: Solid - Grab

Sampled: 05/07/25 12:05

Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
Di-n-butyl phthalate	< 0.391	mg/kg dry		1	0.0369	0.391	05/12/25 19:24	EMR	EPA 8270C
Di-n-octyl phthalate	< 0.391	mg/kg dry		1	0.0333	0.391	05/12/25 19:24	EMR	EPA 8270C
Dibenzo(a,h)anthracene	0.112	mg/kg dry		1	0.0402	0.0704	05/12/25 19:24	EMR	EPA 8270C
Dibenzofuran	< 1.95	mg/kg dry		1	0.0442	1.95	05/12/25 19:24	EMR	EPA 8270C
1,2-Dichlorobenzene	< 0.391	mg/kg dry		1	0.0374	0.391	05/12/25 19:24	EMR	EPA 8270C
1,3-Dichlorobenzene	< 0.117	mg/kg dry		1	0.0414	0.117	05/12/25 19:24	EMR	EPA 8270C
1,4-Dichlorobenzene	< 0.391	mg/kg dry		1	0.0400	0.391	05/12/25 19:24	EMR	EPA 8270C
3,3'-Dichlorobenzidine	< 0.00657	mg/kg dry	Mrl	1	0.00657	0.0194	05/12/25 17:48	EMR	EPA 8270C
2,4-Dichlorophenol	< 0.391	mg/kg dry		1	0.0365	0.391	05/12/25 19:24	EMR	EPA 8270C
Diethyl phthalate	< 0.391	mg/kg dry		1	0.0355	0.391	05/12/25 19:24	EMR	EPA 8270C
Dimethyl phthalate	< 0.391	mg/kg dry		1	0.0411	0.391	05/12/25 19:24	EMR	EPA 8270C
2,4-Dimethylphenol	< 0.391	mg/kg dry		1	0.0440	0.391	05/12/25 19:24	EMR	EPA 8270C
4,6-Dinitro-2-methylphenol	< 0.00141	mg/kg dry	Mrl	1	0.00141	0.0387	05/12/25 17:48	EMR	EPA 8270C
2,4-Dinitrophenol	< 0.117	mg/kg dry		1	0.0645	0.117	05/12/25 19:24	EMR	EPA 8270C
2,4-Dinitrotoluene	< 0.000681	mg/kg dry	Mrl	1	0.000681	0.0387	05/12/25 17:48	EMR	EPA 8270C
2,6-Dinitrotoluene	< 0.000634	mg/kg dry	Mrl, V2	1	0.000634	0.0387	05/13/25 17:25	EMR	EPA 8270C
Fluoranthene	1.20	mg/kg dry		1	0.0417	0.391	05/12/25 19:24	EMR	EPA 8270C
Fluorene	< 0.391	mg/kg dry		1	0.0422	0.391	05/12/25 19:24	EMR	EPA 8270C
Hexachlorobenzene	< 0.117	mg/kg dry		1	0.0388	0.117	05/12/25 19:24	EMR	EPA 8270C
Hexachlorobenzene	< 0.0387	mg/kg dry	Mrl, X	1	0.0387	0.0387	05/13/25 17:25	EMR	EPA 8270C
Hexachlorobutadiene	< 0.391	mg/kg dry		1	0.0304	0.391	05/12/25 19:24	EMR	EPA 8270C
Hexachlorocyclopentadiene	< 0.781	mg/kg dry		1	0.0244	0.781	05/12/25 19:24	EMR	EPA 8270C
Hexachloroethane	< 0.391	mg/kg dry		1	0.0370	0.391	05/12/25 19:24	EMR	EPA 8270C
Indeno(1,2,3-cd)pyrene	0.463	mg/kg dry		1	0.0420	0.391	05/12/25 19:24	EMR	EPA 8270C
Isophorone	< 0.391	mg/kg dry		1	0.0284	0.391	05/12/25 19:24	EMR	EPA 8270C
2-Methylnaphthalene	< 0.391	mg/kg dry		1	0.0346	0.391	05/12/25 19:24	EMR	EPA 8270C
2-Methylphenol	< 0.391	mg/kg dry		1	0.0463	0.391	05/12/25 19:24	EMR	EPA 8270C
3- & 4-Methylphenol	< 0.117	mg/kg dry		1	0.0482	0.117	05/12/25 19:24	EMR	EPA 8270C
Naphthalene	< 0.391	mg/kg dry		1	0.0364	0.391	05/12/25 19:24	EMR	EPA 8270C
2-Nitroaniline	< 0.117	mg/kg dry		1	0.0311	0.117	05/12/25 19:24	EMR	EPA 8270C
3-Nitroaniline	< 5.87	mg/kg dry		1	0.0805	5.87	05/12/25 19:24	EMR	EPA 8270C
4-Nitroaniline	< 0.0704	mg/kg dry		1	0.0689	0.0704	05/12/25 19:24	EMR	EPA 8270C
Nitrobenzene	< 0.0704	mg/kg dry		1	0.0343	0.0704	05/12/25 19:24	EMR	EPA 8270C
2-Nitrophenol	< 0.391	mg/kg dry		1	0.0317	0.391	05/12/25 19:24	EMR	EPA 8270C
4-Nitrophenol	< 1.95	mg/kg dry		1	0.168	1.95	05/12/25 19:24	EMR	EPA 8270C
N-Nitrosodi-n-propylamine	< 0.000422	mg/kg dry	Mrl	1	0.000422	0.00387	05/12/25 17:48	EMR	EPA 8270C
N-Nitrosodiphenylamine	< 0.391	mg/kg dry		1	0.0318	0.391	05/12/25 19:24	EMR	EPA 8270C
Pentachlorophenol	< 0.00109	mg/kg dry	Mrl	1	0.00109	0.00387	05/14/25 19:02	EMR	EPA 8270C
Phenanthrene	0.406	mg/kg dry		1	0.0458	0.391	05/12/25 19:24	EMR	EPA 8270C
Phenol	< 0.391	mg/kg dry		1	0.0481	0.391	05/12/25 19:24	EMR	EPA 8270C
Pyrene	0.925	mg/kg dry		1	0.0416	0.391	05/12/25 19:24	EMR	EPA 8270C
1,2,4-Trichlorobenzene	< 0.391	mg/kg dry		1	0.0320	0.391	05/12/25 19:24	EMR	EPA 8270C



ANALYTICAL RESULTS

Sample: IE01764-06
 Name: SB-6
 Matrix: Solid - Grab

Sampled: 05/07/25 12:05
 Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
2,4,5-Trichlorophenol	< 0.391	mg/kg dry		1	0.0381	0.391	05/12/25 19:24	EMR	EPA 8270C
2,4,6-Trichlorophenol	< 0.117	mg/kg dry		1	0.0381	0.117	05/12/25 19:24	EMR	EPA 8270C
Surrogate: 2-Fluorobiphenyl	75 %	34-120					05/12/25 19:24	EMR	EPA 8270C
Surrogate: 2-Fluorophenol	56 %	12.6-123					05/12/25 19:24	EMR	EPA 8270C
Surrogate: Nitrobenzene-d5	62 %	31.6-120					05/12/25 19:24	EMR	EPA 8270C
Surrogate: Phenol-d6	67 %	30.9-121					05/12/25 19:24	EMR	EPA 8270C
Surrogate: 4-Terphenyl-d14	80 %	33.3-120					05/12/25 19:24	EMR	EPA 8270C
Surrogate: 2,4,6-Tribromophenol	99 %	26.1-124					05/12/25 19:24	EMR	EPA 8270C
<u>Total Metals - STL</u>									
Mercury	< 0.0469	mg/kg dry		1	0.0236	0.0469	05/12/25 16:03	RPB	SW 7471
Barium	55.3	mg/kg dry		1	0.177	0.889	05/12/25 16:08	BCH	EPA 6010B
Cadmium	< 0.444	mg/kg dry		1	0.0277	0.444	05/12/25 16:08	BCH	EPA 6010B
Chromium	7.68	mg/kg dry		1	0.137	0.444	05/12/25 16:08	BCH	EPA 6010B
Lead	25.0	mg/kg dry		1	0.559	3.56	05/12/25 16:08	BCH	EPA 6010B
Selenium	< 0.870	mg/kg dry	Mrl	1	0.870	1.16	05/12/25 16:08	BCH	EPA 6010B
Silver	< 0.444	mg/kg dry		1	0.131	0.444	05/12/25 16:08	BCH	EPA 6010B
<u>Volatile Organics - STL</u>									
Acetone	0.0412	mg/kg dry		1	0.00380	0.0319	05/12/25 14:14	NHL	EPA 8260B
Acrolein	< 0.0319	mg/kg dry		1	0.00467	0.0319	05/12/25 14:14	NHL	EPA 8260B
Acrylonitrile	< 0.0319	mg/kg dry		1	0.00662	0.0319	05/12/25 14:14	NHL	EPA 8260B
Benzene	< 0.00319	mg/kg dry		1	0.000230	0.00319	05/12/25 14:14	NHL	EPA 8260B
Bromobenzene	< 0.00319	mg/kg dry		1	0.000398	0.00319	05/12/25 14:14	NHL	EPA 8260B
Bromochloromethane	< 0.00319	mg/kg dry		1	0.000320	0.00319	05/12/25 14:14	NHL	EPA 8260B
Bromodichloromethane	< 0.00319	mg/kg dry		1	2.99E-5	0.00319	05/12/25 14:14	NHL	EPA 8260B
Bromoform	< 0.00319	mg/kg dry		1	6.39E-5	0.00319	05/12/25 14:14	NHL	EPA 8260B
Bromomethane	< 0.00637	mg/kg dry		1	0.00127	0.00637	05/12/25 14:14	NHL	EPA 8260B
2-Butanone	< 0.00637	mg/kg dry		1	0.00229	0.00637	05/12/25 14:14	NHL	EPA 8260B
n-Butylbenzene	< 0.00319	mg/kg dry		1	0.00204	0.00319	05/12/25 14:14	NHL	EPA 8260B
sec-Butylbenzene	< 0.00319	mg/kg dry		1	0.00139	0.00319	05/12/25 14:14	NHL	EPA 8260B
tert-Butylbenzene	< 0.00319	mg/kg dry		1	0.00126	0.00319	05/12/25 14:14	NHL	EPA 8260B
Carbon disulfide	< 0.00637	mg/kg dry		1	0.000679	0.00637	05/12/25 14:14	NHL	EPA 8260B
Carbon tetrachloride	< 0.00319	mg/kg dry		1	0.000825	0.00319	05/12/25 14:14	NHL	EPA 8260B
Chlorobenzene	< 0.00319	mg/kg dry		1	0.000386	0.00319	05/12/25 14:14	NHL	EPA 8260B
Chloroethane	< 0.00637	mg/kg dry		1	0.000259	0.00637	05/12/25 14:14	NHL	EPA 8260B
Chloroform	< 0.00319	mg/kg dry		1	4.08E-5	0.00319	05/12/25 14:14	NHL	EPA 8260B
Chloromethane	< 0.00637	mg/kg dry		1	0.000681	0.00637	05/12/25 14:14	NHL	EPA 8260B
2-Chlorotoluene	< 0.00319	mg/kg dry		1	0.00137	0.00319	05/12/25 14:14	NHL	EPA 8260B
4-Chlorotoluene	< 0.00319	mg/kg dry		1	0.00187	0.00319	05/12/25 14:14	NHL	EPA 8260B
1,2-Dibromo-3-chloropropane	< 5.90E-5	mg/kg dry	Mrl	1	5.90E-5	5.90E-5	05/12/25 14:14	NHL	EPA 8260B
Dibromochloromethane	< 0.00319	mg/kg dry		1	0.000554	0.00319	05/12/25 14:14	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-06

Name: SB-6

Matrix: Solid - Grab

Sampled: 05/07/25 12:05

Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
1,2-Dibromoethane	< 3.19E-5	mg/kg dry	Mrl	1	3.19E-5	3.19E-5	05/12/25 14:14	NHL	EPA 8260B
Dibromomethane	< 0.00319	mg/kg dry		1	0.000570	0.00319	05/12/25 14:14	NHL	EPA 8260B
1,2-Dichlorobenzene	< 0.00319	mg/kg dry		1	0.000527	0.00319	05/12/25 14:14	NHL	EPA 8260B
1,3-Dichlorobenzene	< 0.00319	mg/kg dry		1	0.000473	0.00319	05/12/25 14:14	NHL	EPA 8260B
1,4-Dichlorobenzene	< 0.00319	mg/kg dry		1	0.000418	0.00319	05/12/25 14:14	NHL	EPA 8260B
Dichlorodifluoromethane	< 0.00637	mg/kg dry		1	0.000816	0.00637	05/12/25 14:14	NHL	EPA 8260B
1,1-Dichloroethane	< 0.00319	mg/kg dry		1	0.000436	0.00319	05/12/25 14:14	NHL	EPA 8260B
1,2-Dichloroethane	< 0.00319	mg/kg dry		1	0.000203	0.00319	05/12/25 14:14	NHL	EPA 8260B
1,1-Dichloroethene	< 0.00319	mg/kg dry		1	0.000399	0.00319	05/12/25 14:14	NHL	EPA 8260B
cis-1,2-Dichloroethene	< 0.00319	mg/kg dry		1	0.000388	0.00319	05/12/25 14:14	NHL	EPA 8260B
trans-1,2-Dichloroethene	< 0.00319	mg/kg dry		1	0.00101	0.00319	05/12/25 14:14	NHL	EPA 8260B
1,2-Dichloroethene- Total	< 0.00637	mg/kg dry		1	0.00117	0.00637	05/12/25 14:14	NHL	EPA 8260B
1,2-Dichloropropane	< 0.00319	mg/kg dry		1	0.000425	0.00319	05/12/25 14:14	NHL	EPA 8260B
1,3-Dichloropropane	< 0.00319	mg/kg dry		1	0.00106	0.00319	05/12/25 14:14	NHL	EPA 8260B
2,2-Dichloropropane	< 0.00319	mg/kg dry		1	0.00150	0.00319	05/12/25 14:14	NHL	EPA 8260B
1,1-Dichloropropene	< 0.00319	mg/kg dry		1	0.000396	0.00319	05/12/25 14:14	NHL	EPA 8260B
cis-1,3-Dichloropropene	< 0.00191	mg/kg dry		1	2.99E-5	0.00191	05/12/25 14:14	NHL	EPA 8260B
trans-1,3-Dichloropropene	< 0.00191	mg/kg dry		1	3.71E-5	0.00191	05/12/25 14:14	NHL	EPA 8260B
1,3-Dichloropropene - Total	< 0.00255	mg/kg dry		1	0.000972	0.00255	05/12/25 14:14	NHL	EPA 8260B
Diethyl ether	< 0.00319	mg/kg dry		1	6.37E-7	0.00319	05/12/25 14:14	NHL	EPA 8260B
Ethyl acetate	< 0.00637	mg/kg dry		1	6.37E-7	0.00637	05/12/25 14:14	NHL	EPA 8260B
Ethylbenzene	< 0.00319	mg/kg dry		1	0.000897	0.00319	05/12/25 14:14	NHL	EPA 8260B
Hexachlorobutadiene	< 0.00637	mg/kg dry		1	0.000279	0.00637	05/12/25 14:14	NHL	EPA 8260B
n-Hexane	< 0.00319	mg/kg dry		1	6.37E-7	0.00319	05/12/25 14:14	NHL	EPA 8260B
2-Hexanone	< 0.00319	mg/kg dry		1	0.00190	0.00319	05/12/25 14:14	NHL	EPA 8260B
Isopropylbenzene	< 0.00319	mg/kg dry		1	0.000912	0.00319	05/12/25 14:14	NHL	EPA 8260B
p-Isopropyl toluene	< 0.00319	mg/kg dry		1	0.00192	0.00319	05/12/25 14:14	NHL	EPA 8260B
MTBE	< 0.00319	mg/kg dry		1	0.000432	0.00319	05/12/25 14:14	NHL	EPA 8260B
4-Methyl-2-pentanone (MIBK)	< 0.00319	mg/kg dry		1	0.00226	0.00319	05/12/25 14:14	NHL	EPA 8260B
Methylene chloride	< 0.00319	mg/kg dry		1	0.000340	0.00319	05/12/25 14:14	NHL	EPA 8260B
Naphthalene	< 0.00764	mg/kg dry		1	0.00192	0.00764	05/12/25 14:14	NHL	EPA 8260B
n-Propylbenzene	< 0.00319	mg/kg dry		1	0.00107	0.00319	05/12/25 14:14	NHL	EPA 8260B
Styrene	< 0.00319	mg/kg dry		1	0.000756	0.00319	05/12/25 14:14	NHL	EPA 8260B
1,1,1,2-Tetrachloroethane	< 0.00319	mg/kg dry		1	0.000467	0.00319	05/12/25 14:14	NHL	EPA 8260B
1,1,1,2,2-Tetrachloroethane	< 0.00127	mg/kg dry		1	3.18E-5	0.00127	05/12/25 14:14	NHL	EPA 8260B
Tetrachloroethene	< 0.00319	mg/kg dry		1	0.000578	0.00319	05/12/25 14:14	NHL	EPA 8260B
Toluene	< 0.00319	mg/kg dry		1	0.000964	0.00319	05/12/25 14:14	NHL	EPA 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon)	< 0.00319	mg/kg dry		1	0.000381	0.00319	05/12/25 14:14	NHL	EPA 8260B
1,2,3-Trichlorobenzene	< 0.00319	mg/kg dry		1	0.000609	0.00319	05/12/25 14:14	NHL	EPA 8260B
1,2,4-Trichlorobenzene	< 0.00319	mg/kg dry		1	0.000613	0.00319	05/12/25 14:14	NHL	EPA 8260B
1,1,1-Trichloroethane	< 0.00319	mg/kg dry		1	0.000421	0.00319	05/12/25 14:14	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-06
Name: SB-6
Matrix: Solid - Grab

Sampled: 05/07/25 12:05
Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
1,1,2-Trichloroethane	< 0.00319	mg/kg dry		1	0.000475	0.00319	05/12/25 14:14	NHL	EPA 8260B
Trichloroethene	< 0.00319	mg/kg dry		1	0.000644	0.00319	05/12/25 14:14	NHL	EPA 8260B
Trichlorofluoromethane	< 0.00637	mg/kg dry		1	0.000990	0.00637	05/12/25 14:14	NHL	EPA 8260B
1,2,3-Trichloropropane	< 0.00319	mg/kg dry		1	0.000597	0.00319	05/12/25 14:14	NHL	EPA 8260B
1,2,4-Trimethylbenzene	< 0.00319	mg/kg dry		1	0.00249	0.00319	05/12/25 14:14	NHL	EPA 8260B
1,3,5-Trimethylbenzene	< 0.00319	mg/kg dry		1	0.000395	0.00319	05/12/25 14:14	NHL	EPA 8260B
Vinyl acetate	< 0.00319	mg/kg dry		1	0.00107	0.00319	05/12/25 14:14	NHL	EPA 8260B
Vinyl chloride	< 0.00319	mg/kg dry		1	0.000902	0.00319	05/12/25 14:14	NHL	EPA 8260B
Xylenes- Total	< 0.00956	mg/kg dry		1	0.00136	0.00956	05/12/25 14:14	NHL	EPA 8260B
Surrogate: 4-Bromofluorobenzene	95 %	53.6-133					05/12/25 14:14	NHL	EPA 8260B
Surrogate: 1,2-Dichloroethane-d4	110 %	60.2-146					05/12/25 14:14	NHL	EPA 8260B
Surrogate: Toluene-d8	98 %	64.6-128					05/12/25 14:14	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-07
 Name: SB-7
 Matrix: Solid - Grab

Sampled: 05/07/25 12:30
 Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
<u>General Chemistry - STL</u>									
pH	7.79	pH Units		1		0.0100	05/12/25 13:39	ALH	EPA 9045D
Solids - total solids (TS)	84	%		1		0.050	05/11/25 01:04	AAG/ALH	SM 2540G
<u>Metals by ICP-MS - STL</u>									
Arsenic	8.23	mg/kg dry		50	2.55	3.72	05/09/25 21:49	DAS	EPA 6020A
<u>Polychlorinated Biphenyls (PCBs) - STL</u>									
Aroclor 1016	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:29	KMS	EPA 8082
Aroclor 1221	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:29	KMS	EPA 8082
Aroclor 1232	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:29	KMS	EPA 8082
Aroclor 1242	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:29	KMS	EPA 8082
Aroclor 1248	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:29	KMS	EPA 8082
Aroclor 1254	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:29	KMS	EPA 8082
Aroclor 1260	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:29	KMS	EPA 8082
Aroclor 1262	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:29	KMS	EPA 8082
Aroclor 1268	< 0.02	mg/kg dry		1	0.007	0.02	05/16/25 10:29	KMS	EPA 8082
Aroclors - Total	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:29	KMS	EPA 8082
<u>Semivolatile Organics - STL</u>									
Acenaphthene	< 0.396	mg/kg dry		1	0.0443	0.396	05/12/25 19:53	EMR	EPA 8270C
Acenaphthylene	< 0.396	mg/kg dry		1	0.0392	0.396	05/12/25 19:53	EMR	EPA 8270C
Anthracene	< 0.396	mg/kg dry		1	0.0411	0.396	05/12/25 19:53	EMR	EPA 8270C
Benzo(a)anthracene	< 0.396	mg/kg dry		1	0.0390	0.396	05/12/25 19:53	EMR	EPA 8270C
Benzo(b)fluoranthene	0.420	mg/kg dry		1	0.0420	0.396	05/12/25 19:53	EMR	EPA 8270C
Benzo(k)fluoranthene	< 0.396	mg/kg dry		1	0.0492	0.396	05/12/25 19:53	EMR	EPA 8270C
Benzo(g,h,i)perylene	< 0.396	mg/kg dry		1	0.0405	0.396	05/12/25 19:53	EMR	EPA 8270C
Benzo(a)pyrene	0.270	mg/kg dry		1	0.0381	0.0714	05/12/25 19:53	EMR	EPA 8270C
Bis(2-chloroethoxy) methane	< 0.396	mg/kg dry		1	0.0437	0.396	05/12/25 19:53	EMR	EPA 8270C
Bis(2-chloroethyl) ether	< 0.000381	mg/kg dry	Mrl	1	0.000381	0.0393	05/12/25 18:16	EMR	EPA 8270C
Bis(2-chloroisopropyl) ether	< 0.396	mg/kg dry		1	0.0334	0.396	05/12/25 19:53	EMR	EPA 8270C
Bis(2-ethylhexyl) phthalate	< 0.396	mg/kg dry		1	0.0346	0.396	05/12/25 19:53	EMR	EPA 8270C
4-Bromophenyl phenyl ether	< 0.396	mg/kg dry		1	0.0404	0.396	05/12/25 19:53	EMR	EPA 8270C
Butyl benzyl phthalate	< 0.396	mg/kg dry		1	0.0327	0.396	05/12/25 19:53	EMR	EPA 8270C
Carbazole	< 0.396	mg/kg dry		1	0.0446	0.396	05/12/25 19:53	EMR	EPA 8270C
4-Chloro-3-methylphenol	< 0.792	mg/kg dry		1	0.0400	0.792	05/12/25 19:53	EMR	EPA 8270C
4-Chloroaniline	< 0.396	mg/kg dry		1	0.0400	0.396	05/12/25 19:53	EMR	EPA 8270C
2-Chloronaphthalene	< 0.396	mg/kg dry		1	0.0459	0.396	05/12/25 19:53	EMR	EPA 8270C
2-Chlorophenol	< 0.396	mg/kg dry		1	0.0445	0.396	05/12/25 19:53	EMR	EPA 8270C
4-Chlorophenylphenyl ether	< 0.396	mg/kg dry		1	0.0432	0.396	05/12/25 19:53	EMR	EPA 8270C
Chrysene	< 0.396	mg/kg dry		1	0.0375	0.396	05/12/25 19:53	EMR	EPA 8270C



ANALYTICAL RESULTS

Sample: IE01764-07

Name: SB-7

Matrix: Solid - Grab

Sampled: 05/07/25 12:30

Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
Di-n-butyl phthalate	< 0.396	mg/kg dry		1	0.0374	0.396	05/12/25 19:53	EMR	EPA 8270C
Di-n-octyl phthalate	< 0.396	mg/kg dry		1	0.0337	0.396	05/12/25 19:53	EMR	EPA 8270C
Dibenzo(a,h)anthracene	< 0.0714	mg/kg dry		1	0.0407	0.0714	05/12/25 19:53	EMR	EPA 8270C
Dibenzofuran	< 1.98	mg/kg dry		1	0.0448	1.98	05/12/25 19:53	EMR	EPA 8270C
1,2-Dichlorobenzene	< 0.396	mg/kg dry		1	0.0379	0.396	05/12/25 19:53	EMR	EPA 8270C
1,3-Dichlorobenzene	< 0.119	mg/kg dry		1	0.0420	0.119	05/12/25 19:53	EMR	EPA 8270C
1,4-Dichlorobenzene	< 0.396	mg/kg dry		1	0.0406	0.396	05/12/25 19:53	EMR	EPA 8270C
3,3'-Dichlorobenzidine	< 0.00666	mg/kg dry	Mrl	1	0.00666	0.0196	05/12/25 18:16	EMR	EPA 8270C
2,4-Dichlorophenol	< 0.396	mg/kg dry		1	0.0370	0.396	05/12/25 19:53	EMR	EPA 8270C
Diethyl phthalate	< 0.396	mg/kg dry		1	0.0360	0.396	05/12/25 19:53	EMR	EPA 8270C
Dimethyl phthalate	< 0.396	mg/kg dry		1	0.0416	0.396	05/12/25 19:53	EMR	EPA 8270C
2,4-Dimethylphenol	< 0.396	mg/kg dry		1	0.0446	0.396	05/12/25 19:53	EMR	EPA 8270C
4,6-Dinitro-2-methylphenol	< 0.00143	mg/kg dry	Mrl	1	0.00143	0.0393	05/12/25 18:16	EMR	EPA 8270C
2,4-Dinitrophenol	< 0.119	mg/kg dry		1	0.0654	0.119	05/12/25 19:53	EMR	EPA 8270C
2,4-Dinitrotoluene	< 0.000690	mg/kg dry	Mrl	1	0.000690	0.0393	05/12/25 18:16	EMR	EPA 8270C
2,6-Dinitrotoluene	< 0.000642	mg/kg dry	Mrl, V2	1	0.000642	0.0393	05/13/25 17:53	EMR	EPA 8270C
Fluoranthene	0.462	mg/kg dry		1	0.0423	0.396	05/12/25 19:53	EMR	EPA 8270C
Fluorene	< 0.396	mg/kg dry		1	0.0427	0.396	05/12/25 19:53	EMR	EPA 8270C
Hexachlorobenzene	< 0.119	mg/kg dry		1	0.0393	0.119	05/12/25 19:53	EMR	EPA 8270C
Hexachlorobenzene	< 0.0393	mg/kg dry	Mrl, X	1	0.0393	0.0393	05/13/25 17:53	EMR	EPA 8270C
Hexachlorobutadiene	< 0.396	mg/kg dry		1	0.0308	0.396	05/12/25 19:53	EMR	EPA 8270C
Hexachlorocyclopentadiene	< 0.792	mg/kg dry		1	0.0247	0.792	05/12/25 19:53	EMR	EPA 8270C
Hexachloroethane	< 0.396	mg/kg dry		1	0.0375	0.396	05/12/25 19:53	EMR	EPA 8270C
Indeno(1,2,3-cd)pyrene	< 0.396	mg/kg dry		1	0.0426	0.396	05/12/25 19:53	EMR	EPA 8270C
Isophorone	< 0.396	mg/kg dry		1	0.0288	0.396	05/12/25 19:53	EMR	EPA 8270C
2-Methylnaphthalene	< 0.396	mg/kg dry		1	0.0350	0.396	05/12/25 19:53	EMR	EPA 8270C
2-Methylphenol	< 0.396	mg/kg dry		1	0.0469	0.396	05/12/25 19:53	EMR	EPA 8270C
3- & 4-Methylphenol	< 0.119	mg/kg dry		1	0.0489	0.119	05/12/25 19:53	EMR	EPA 8270C
Naphthalene	< 0.396	mg/kg dry		1	0.0369	0.396	05/12/25 19:53	EMR	EPA 8270C
2-Nitroaniline	< 0.119	mg/kg dry		1	0.0315	0.119	05/12/25 19:53	EMR	EPA 8270C
3-Nitroaniline	< 5.95	mg/kg dry		1	0.0816	5.95	05/12/25 19:53	EMR	EPA 8270C
4-Nitroaniline	< 0.0714	mg/kg dry		1	0.0699	0.0714	05/12/25 19:53	EMR	EPA 8270C
Nitrobenzene	< 0.0714	mg/kg dry		1	0.0348	0.0714	05/12/25 19:53	EMR	EPA 8270C
2-Nitrophenol	< 0.396	mg/kg dry		1	0.0322	0.396	05/12/25 19:53	EMR	EPA 8270C
4-Nitrophenol	< 1.98	mg/kg dry		1	0.170	1.98	05/12/25 19:53	EMR	EPA 8270C
N-Nitrosodi-n-propylamine	< 0.000428	mg/kg dry	Mrl	1	0.000428	0.00393	05/12/25 18:16	EMR	EPA 8270C
N-Nitrosodiphenylamine	< 0.396	mg/kg dry		1	0.0322	0.396	05/12/25 19:53	EMR	EPA 8270C
Pentachlorophenol	< 0.00111	mg/kg dry	Mrl, V2	1	0.00111	0.00393	05/12/25 18:16	EMR	EPA 8270C
Phenanthrene	< 0.396	mg/kg dry		1	0.0464	0.396	05/12/25 19:53	EMR	EPA 8270C
Phenol	< 0.396	mg/kg dry		1	0.0487	0.396	05/12/25 19:53	EMR	EPA 8270C
Pyrene	< 0.396	mg/kg dry		1	0.0422	0.396	05/12/25 19:53	EMR	EPA 8270C
1,2,4-Trichlorobenzene	< 0.396	mg/kg dry		1	0.0324	0.396	05/12/25 19:53	EMR	EPA 8270C



ANALYTICAL RESULTS

Sample: IE01764-07
 Name: SB-7
 Matrix: Solid - Grab

Sampled: 05/07/25 12:30
 Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
2,4,5-Trichlorophenol	< 0.396	mg/kg dry		1	0.0386	0.396	05/12/25 19:53	EMR	EPA 8270C
2,4,6-Trichlorophenol	< 0.119	mg/kg dry		1	0.0386	0.119	05/12/25 19:53	EMR	EPA 8270C
Surrogate: 2-Fluorobiphenyl	85 %	34-120					05/12/25 19:53	EMR	EPA 8270C
Surrogate: 2-Fluorophenol	71 %	12.6-123					05/12/25 19:53	EMR	EPA 8270C
Surrogate: Nitrobenzene-d5	74 %	31.6-120					05/12/25 19:53	EMR	EPA 8270C
Surrogate: Phenol-d6	79 %	30.9-121					05/12/25 19:53	EMR	EPA 8270C
Surrogate: 4-Terphenyl-d14	93 %	33.3-120					05/12/25 19:53	EMR	EPA 8270C
Surrogate: 2,4,6-Tribromophenol	113 %	26.1-124					05/12/25 19:53	EMR	EPA 8270C
<u>TCLP Metals - STL</u>									
Chromium	< 0.00556	mg/L	BS1	1	0.000733	0.00556	05/29/25 15:47	BCH	EPA 6010B
<u>Total Metals - STL</u>									
Mercury	< 0.0410	mg/kg dry		1	0.0206	0.0410	05/12/25 16:03	RPB	SW 7471
Barium	94.3	mg/kg dry		1	0.185	0.929	05/12/25 16:10	BCH	EPA 6010B
Cadmium	< 0.465	mg/kg dry		1	0.0290	0.465	05/12/25 16:10	BCH	EPA 6010B
Chromium	28.9	mg/kg dry		1	0.143	0.465	05/12/25 16:10	BCH	EPA 6010B
Lead	22.0	mg/kg dry		1	0.585	3.72	05/12/25 16:10	BCH	EPA 6010B
Selenium	< 0.910	mg/kg dry	Mrl	1	0.910	1.21	05/12/25 16:10	BCH	EPA 6010B
Silver	< 0.465	mg/kg dry		1	0.137	0.465	05/12/25 16:10	BCH	EPA 6010B
<u>Volatile Organics - STL</u>									
Acetone	0.0628	mg/kg dry		1	0.00462	0.0387	05/12/25 14:41	NHL	EPA 8260B
Acrolein	< 0.0387	mg/kg dry		1	0.00567	0.0387	05/12/25 14:41	NHL	EPA 8260B
Acrylonitrile	< 0.0387	mg/kg dry		1	0.00805	0.0387	05/12/25 14:41	NHL	EPA 8260B
Benzene	< 0.00387	mg/kg dry		1	0.000280	0.00387	05/12/25 14:41	NHL	EPA 8260B
Bromobenzene	< 0.00387	mg/kg dry		1	0.000483	0.00387	05/12/25 14:41	NHL	EPA 8260B
Bromochloromethane	< 0.00387	mg/kg dry		1	0.000389	0.00387	05/12/25 14:41	NHL	EPA 8260B
Bromodichloromethane	< 0.00387	mg/kg dry		1	3.63E-5	0.00387	05/12/25 14:41	NHL	EPA 8260B
Bromoform	< 0.00387	mg/kg dry		1	7.77E-5	0.00387	05/12/25 14:41	NHL	EPA 8260B
Bromomethane	< 0.00774	mg/kg dry		1	0.00154	0.00774	05/12/25 14:41	NHL	EPA 8260B
2-Butanone	< 0.00774	mg/kg dry		1	0.00279	0.00774	05/12/25 14:41	NHL	EPA 8260B
n-Butylbenzene	< 0.00387	mg/kg dry		1	0.00248	0.00387	05/12/25 14:41	NHL	EPA 8260B
sec-Butylbenzene	< 0.00387	mg/kg dry		1	0.00169	0.00387	05/12/25 14:41	NHL	EPA 8260B
tert-Butylbenzene	< 0.00387	mg/kg dry		1	0.00154	0.00387	05/12/25 14:41	NHL	EPA 8260B
Carbon disulfide	< 0.00774	mg/kg dry		1	0.000826	0.00774	05/12/25 14:41	NHL	EPA 8260B
Carbon tetrachloride	< 0.00387	mg/kg dry		1	0.00100	0.00387	05/12/25 14:41	NHL	EPA 8260B
Chlorobenzene	< 0.00387	mg/kg dry		1	0.000470	0.00387	05/12/25 14:41	NHL	EPA 8260B
Chloroethane	< 0.00774	mg/kg dry		1	0.000315	0.00774	05/12/25 14:41	NHL	EPA 8260B
Chloroform	< 0.00387	mg/kg dry		1	4.96E-5	0.00387	05/12/25 14:41	NHL	EPA 8260B
Chloromethane	< 0.00774	mg/kg dry		1	0.000828	0.00774	05/12/25 14:41	NHL	EPA 8260B
2-Chlorotoluene	< 0.00387	mg/kg dry		1	0.00167	0.00387	05/12/25 14:41	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-07
Name: SB-7
Matrix: Solid - Grab

Sampled: 05/07/25 12:30
Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
4-Chlorotoluene	< 0.00387	mg/kg dry		1	0.00227	0.00387	05/12/25 14:41	NHL	EPA 8260B
1,2-Dibromo-3-chloropropane	< 7.18E-5	mg/kg dry	Mrl	1	7.18E-5	7.18E-5	05/12/25 14:41	NHL	EPA 8260B
Dibromochloromethane	< 0.00387	mg/kg dry		1	0.000673	0.00387	05/12/25 14:41	NHL	EPA 8260B
1,2-Dibromoethane	< 3.87E-5	mg/kg dry	Mrl	1	3.87E-5	3.87E-5	05/12/25 14:41	NHL	EPA 8260B
Dibromomethane	< 0.00387	mg/kg dry		1	0.000693	0.00387	05/12/25 14:41	NHL	EPA 8260B
1,2-Dichlorobenzene	< 0.00387	mg/kg dry		1	0.000640	0.00387	05/12/25 14:41	NHL	EPA 8260B
1,3-Dichlorobenzene	< 0.00387	mg/kg dry		1	0.000575	0.00387	05/12/25 14:41	NHL	EPA 8260B
1,4-Dichlorobenzene	< 0.00387	mg/kg dry		1	0.000509	0.00387	05/12/25 14:41	NHL	EPA 8260B
Dichlorodifluoromethane	< 0.00774	mg/kg dry		1	0.000992	0.00774	05/12/25 14:41	NHL	EPA 8260B
1,1-Dichloroethane	< 0.00387	mg/kg dry		1	0.000530	0.00387	05/12/25 14:41	NHL	EPA 8260B
1,2-Dichloroethane	< 0.00387	mg/kg dry		1	0.000247	0.00387	05/12/25 14:41	NHL	EPA 8260B
1,1-Dichloroethene	< 0.00387	mg/kg dry		1	0.000486	0.00387	05/12/25 14:41	NHL	EPA 8260B
cis-1,2-Dichloroethene	< 0.00387	mg/kg dry		1	0.000471	0.00387	05/12/25 14:41	NHL	EPA 8260B
trans-1,2-Dichloroethene	< 0.00387	mg/kg dry		1	0.00123	0.00387	05/12/25 14:41	NHL	EPA 8260B
1,2-Dichloroethene- Total	< 0.00774	mg/kg dry		1	0.00142	0.00774	05/12/25 14:41	NHL	EPA 8260B
1,2-Dichloropropane	< 0.00387	mg/kg dry		1	0.000517	0.00387	05/12/25 14:41	NHL	EPA 8260B
1,3-Dichloropropane	< 0.00387	mg/kg dry		1	0.00128	0.00387	05/12/25 14:41	NHL	EPA 8260B
2,2-Dichloropropane	< 0.00387	mg/kg dry		1	0.00182	0.00387	05/12/25 14:41	NHL	EPA 8260B
1,1-Dichloropropene	< 0.00387	mg/kg dry		1	0.000481	0.00387	05/12/25 14:41	NHL	EPA 8260B
cis-1,3-Dichloropropene	< 0.00232	mg/kg dry		1	3.63E-5	0.00232	05/12/25 14:41	NHL	EPA 8260B
trans-1,3-Dichloropropene	< 0.00232	mg/kg dry		1	4.50E-5	0.00232	05/12/25 14:41	NHL	EPA 8260B
1,3-Dichloropropene - Total	< 0.00310	mg/kg dry		1	0.00118	0.00310	05/12/25 14:41	NHL	EPA 8260B
Diethyl ether	< 0.00387	mg/kg dry		1	7.74E-7	0.00387	05/12/25 14:41	NHL	EPA 8260B
Ethyl acetate	< 0.00774	mg/kg dry		1	7.74E-7	0.00774	05/12/25 14:41	NHL	EPA 8260B
Ethylbenzene	< 0.00387	mg/kg dry		1	0.00109	0.00387	05/12/25 14:41	NHL	EPA 8260B
Hexachlorobutadiene	< 0.00774	mg/kg dry		1	0.000339	0.00774	05/12/25 14:41	NHL	EPA 8260B
n-Hexane	0.00482	mg/kg dry		1	7.74E-7	0.00387	05/12/25 14:41	NHL	EPA 8260B
2-Hexanone	< 0.00387	mg/kg dry		1	0.00231	0.00387	05/12/25 14:41	NHL	EPA 8260B
Isopropylbenzene	< 0.00387	mg/kg dry		1	0.00111	0.00387	05/12/25 14:41	NHL	EPA 8260B
p-Isopropyl toluene	< 0.00387	mg/kg dry		1	0.00234	0.00387	05/12/25 14:41	NHL	EPA 8260B
MTBE	< 0.00387	mg/kg dry		1	0.000525	0.00387	05/12/25 14:41	NHL	EPA 8260B
4-Methyl-2-pentanone (MIBK)	< 0.00387	mg/kg dry		1	0.00274	0.00387	05/12/25 14:41	NHL	EPA 8260B
Methylene chloride	< 0.00387	mg/kg dry		1	0.000413	0.00387	05/12/25 14:41	NHL	EPA 8260B
Naphthalene	< 0.00929	mg/kg dry		1	0.00234	0.00929	05/12/25 14:41	NHL	EPA 8260B
n-Propylbenzene	< 0.00387	mg/kg dry		1	0.00129	0.00387	05/12/25 14:41	NHL	EPA 8260B
Styrene	< 0.00387	mg/kg dry		1	0.000920	0.00387	05/12/25 14:41	NHL	EPA 8260B
1,1,1,2-Tetrachloroethane	< 0.00387	mg/kg dry		1	0.000568	0.00387	05/12/25 14:41	NHL	EPA 8260B
1,1,2,2-Tetrachloroethane	< 0.00155	mg/kg dry		1	3.87E-5	0.00155	05/12/25 14:41	NHL	EPA 8260B
Tetrachloroethene	< 0.00387	mg/kg dry		1	0.000703	0.00387	05/12/25 14:41	NHL	EPA 8260B
Toluene	< 0.00387	mg/kg dry		1	0.00117	0.00387	05/12/25 14:41	NHL	EPA 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon)	< 0.00387	mg/kg dry		1	0.000464	0.00387	05/12/25 14:41	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-07
 Name: SB-7
 Matrix: Solid - Grab

Sampled: 05/07/25 12:30
 Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
1,2,3-Trichlorobenzene	< 0.00387	mg/kg dry		1	0.000740	0.00387	05/12/25 14:41	NHL	EPA 8260B
1,2,4-Trichlorobenzene	< 0.00387	mg/kg dry		1	0.000745	0.00387	05/12/25 14:41	NHL	EPA 8260B
1,1,1-Trichloroethane	< 0.00387	mg/kg dry		1	0.000512	0.00387	05/12/25 14:41	NHL	EPA 8260B
1,1,2-Trichloroethane	< 0.00387	mg/kg dry		1	0.000577	0.00387	05/12/25 14:41	NHL	EPA 8260B
Trichloroethene	< 0.00387	mg/kg dry		1	0.000783	0.00387	05/12/25 14:41	NHL	EPA 8260B
Trichlorofluoromethane	< 0.00774	mg/kg dry		1	0.00120	0.00774	05/12/25 14:41	NHL	EPA 8260B
1,2,3-Trichloropropane	< 0.00387	mg/kg dry		1	0.000725	0.00387	05/12/25 14:41	NHL	EPA 8260B
1,2,4-Trimethylbenzene	< 0.00387	mg/kg dry		1	0.00303	0.00387	05/12/25 14:41	NHL	EPA 8260B
1,3,5-Trimethylbenzene	< 0.00387	mg/kg dry		1	0.000480	0.00387	05/12/25 14:41	NHL	EPA 8260B
Vinyl acetate	< 0.00387	mg/kg dry		1	0.00130	0.00387	05/12/25 14:41	NHL	EPA 8260B
Vinyl chloride	< 0.00387	mg/kg dry		1	0.00110	0.00387	05/12/25 14:41	NHL	EPA 8260B
Xylenes- Total	< 0.0116	mg/kg dry		1	0.00165	0.0116	05/12/25 14:41	NHL	EPA 8260B
Surrogate: 4-Bromofluorobenzene	97 %	53.6-133					05/12/25 14:41	NHL	EPA 8260B
Surrogate: 1,2-Dichloroethane-d4	110 %	60.2-146					05/12/25 14:41	NHL	EPA 8260B
Surrogate: Toluene-d8	98 %	64.6-128					05/12/25 14:41	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-08
 Name: SB-8
 Matrix: Solid - Grab

Sampled: 05/07/25 12:50
 Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
<u>General Chemistry - STL</u>									
pH	7.91	pH Units		1		0.0100	05/12/25 13:39	ALH	EPA 9045D
Solids - total solids (TS)	87	%		1		0.050	05/11/25 01:04	AAG/ALH	SM 2540G
<u>Metals by ICP-MS - STL</u>									
Arsenic	< 2.40	mg/kg dry		50	1.64	2.40	05/09/25 21:55	DAS	EPA 6020A
<u>Polychlorinated Biphenyls (PCBs) - STL</u>									
Aroclor 1016	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:46	KMS	EPA 8082
Aroclor 1221	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:46	KMS	EPA 8082
Aroclor 1232	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:46	KMS	EPA 8082
Aroclor 1242	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:46	KMS	EPA 8082
Aroclor 1248	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:46	KMS	EPA 8082
Aroclor 1254	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:46	KMS	EPA 8082
Aroclor 1260	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:46	KMS	EPA 8082
Aroclor 1262	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:46	KMS	EPA 8082
Aroclor 1268	< 0.02	mg/kg dry		1	0.007	0.02	05/16/25 10:46	KMS	EPA 8082
Aroclors - Total	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 10:46	KMS	EPA 8082
<u>Semivolatile Organics - STL</u>									
Acenaphthene	< 0.383	mg/kg dry		1	0.0429	0.383	05/12/25 20:22	EMR	EPA 8270C
Acenaphthylene	< 0.383	mg/kg dry		1	0.0379	0.383	05/12/25 20:22	EMR	EPA 8270C
Anthracene	< 0.383	mg/kg dry		1	0.0397	0.383	05/12/25 20:22	EMR	EPA 8270C
Benzo(a)anthracene	< 0.383	mg/kg dry		1	0.0377	0.383	05/12/25 20:22	EMR	EPA 8270C
Benzo(b)fluoranthene	< 0.383	mg/kg dry		1	0.0407	0.383	05/12/25 20:22	EMR	EPA 8270C
Benzo(k)fluoranthene	< 0.383	mg/kg dry		1	0.0476	0.383	05/12/25 20:22	EMR	EPA 8270C
Benzo(g,h,i)perylene	< 0.383	mg/kg dry		1	0.0391	0.383	05/12/25 20:22	EMR	EPA 8270C
Benzo(a)pyrene	< 0.0690	mg/kg dry		1	0.0368	0.0690	05/12/25 20:22	EMR	EPA 8270C
Bis(2-chloroethoxy) methane	< 0.383	mg/kg dry		1	0.0422	0.383	05/12/25 20:22	EMR	EPA 8270C
Bis(2-chloroethyl) ether	< 0.000368	mg/kg dry	Mrl	1	0.000368	0.0380	05/12/25 18:44	EMR	EPA 8270C
Bis(2-chloroisopropyl) ether	< 0.383	mg/kg dry		1	0.0323	0.383	05/12/25 20:22	EMR	EPA 8270C
Bis(2-ethylhexyl) phthalate	< 0.383	mg/kg dry		1	0.0335	0.383	05/12/25 20:22	EMR	EPA 8270C
4-Bromophenyl phenyl ether	< 0.383	mg/kg dry		1	0.0391	0.383	05/12/25 20:22	EMR	EPA 8270C
Butyl benzyl phthalate	< 0.383	mg/kg dry		1	0.0316	0.383	05/12/25 20:22	EMR	EPA 8270C
Carbazole	< 0.383	mg/kg dry		1	0.0432	0.383	05/12/25 20:22	EMR	EPA 8270C
4-Chloro-3-methylphenol	< 0.766	mg/kg dry		1	0.0387	0.766	05/12/25 20:22	EMR	EPA 8270C
4-Chloroaniline	< 0.383	mg/kg dry		1	0.0387	0.383	05/12/25 20:22	EMR	EPA 8270C
2-Chloronaphthalene	< 0.383	mg/kg dry		1	0.0444	0.383	05/12/25 20:22	EMR	EPA 8270C
2-Chlorophenol	< 0.383	mg/kg dry		1	0.0430	0.383	05/12/25 20:22	EMR	EPA 8270C
4-Chlorophenylphenyl ether	< 0.383	mg/kg dry		1	0.0418	0.383	05/12/25 20:22	EMR	EPA 8270C
Chrysene	< 0.383	mg/kg dry		1	0.0363	0.383	05/12/25 20:22	EMR	EPA 8270C



ANALYTICAL RESULTS

Sample: IE01764-08

Name: SB-8

Matrix: Solid - Grab

Sampled: 05/07/25 12:50

Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
Di-n-butyl phthalate	< 0.383	mg/kg dry		1	0.0362	0.383	05/12/25 20:22	EMR	EPA 8270C
Di-n-octyl phthalate	< 0.383	mg/kg dry		1	0.0326	0.383	05/12/25 20:22	EMR	EPA 8270C
Dibenzo(a,h)anthracene	< 0.0690	mg/kg dry		1	0.0394	0.0690	05/12/25 20:22	EMR	EPA 8270C
Dibenzofuran	< 1.92	mg/kg dry		1	0.0434	1.92	05/12/25 20:22	EMR	EPA 8270C
1,2-Dichlorobenzene	< 0.383	mg/kg dry		1	0.0366	0.383	05/12/25 20:22	EMR	EPA 8270C
1,3-Dichlorobenzene	< 0.115	mg/kg dry		1	0.0406	0.115	05/12/25 20:22	EMR	EPA 8270C
1,4-Dichlorobenzene	< 0.383	mg/kg dry		1	0.0393	0.383	05/12/25 20:22	EMR	EPA 8270C
3,3'-Dichlorobenzidine	< 0.00644	mg/kg dry	Mrl	1	0.00644	0.0190	05/12/25 18:44	EMR	EPA 8270C
2,4-Dichlorophenol	< 0.383	mg/kg dry		1	0.0358	0.383	05/12/25 20:22	EMR	EPA 8270C
Diethyl phthalate	< 0.383	mg/kg dry		1	0.0348	0.383	05/12/25 20:22	EMR	EPA 8270C
Dimethyl phthalate	< 0.383	mg/kg dry		1	0.0403	0.383	05/12/25 20:22	EMR	EPA 8270C
2,4-Dimethylphenol	< 0.383	mg/kg dry		1	0.0431	0.383	05/12/25 20:22	EMR	EPA 8270C
4,6-Dinitro-2-methylphenol	< 0.00138	mg/kg dry	Mrl	1	0.00138	0.0380	05/12/25 18:44	EMR	EPA 8270C
2,4-Dinitrophenol	< 0.115	mg/kg dry		1	0.0632	0.115	05/12/25 20:22	EMR	EPA 8270C
2,4-Dinitrotoluene	< 0.000667	mg/kg dry	Mrl	1	0.000667	0.0380	05/12/25 18:44	EMR	EPA 8270C
2,6-Dinitrotoluene	< 0.000621	mg/kg dry	Mrl, V2	1	0.000621	0.0380	05/13/25 18:22	EMR	EPA 8270C
Fluoranthene	< 0.383	mg/kg dry		1	0.0409	0.383	05/12/25 20:22	EMR	EPA 8270C
Fluorene	< 0.383	mg/kg dry		1	0.0413	0.383	05/12/25 20:22	EMR	EPA 8270C
Hexachlorobenzene	< 0.0380	mg/kg dry	Mrl, X	1	0.0380	0.0380	05/13/25 18:22	EMR	EPA 8270C
Hexachlorobenzene	< 0.115	mg/kg dry		1	0.0380	0.115	05/12/25 20:22	EMR	EPA 8270C
Hexachlorobutadiene	< 0.383	mg/kg dry		1	0.0298	0.383	05/12/25 20:22	EMR	EPA 8270C
Hexachlorocyclopentadiene	< 0.766	mg/kg dry		1	0.0239	0.766	05/12/25 20:22	EMR	EPA 8270C
Hexachloroethane	< 0.383	mg/kg dry		1	0.0363	0.383	05/12/25 20:22	EMR	EPA 8270C
Indeno(1,2,3-cd)pyrene	< 0.383	mg/kg dry		1	0.0412	0.383	05/12/25 20:22	EMR	EPA 8270C
Isophorone	< 0.383	mg/kg dry		1	0.0279	0.383	05/12/25 20:22	EMR	EPA 8270C
2-Methylnaphthalene	< 0.383	mg/kg dry		1	0.0339	0.383	05/12/25 20:22	EMR	EPA 8270C
2-Methylphenol	< 0.383	mg/kg dry		1	0.0454	0.383	05/12/25 20:22	EMR	EPA 8270C
3- & 4-Methylphenol	< 0.115	mg/kg dry		1	0.0473	0.115	05/12/25 20:22	EMR	EPA 8270C
Naphthalene	< 0.383	mg/kg dry		1	0.0357	0.383	05/12/25 20:22	EMR	EPA 8270C
2-Nitroaniline	< 0.115	mg/kg dry		1	0.0305	0.115	05/12/25 20:22	EMR	EPA 8270C
3-Nitroaniline	< 5.75	mg/kg dry		1	0.0789	5.75	05/12/25 20:22	EMR	EPA 8270C
4-Nitroaniline	< 0.0690	mg/kg dry		1	0.0676	0.0690	05/12/25 20:22	EMR	EPA 8270C
Nitrobenzene	< 0.0690	mg/kg dry		1	0.0336	0.0690	05/12/25 20:22	EMR	EPA 8270C
2-Nitrophenol	< 0.383	mg/kg dry		1	0.0311	0.383	05/12/25 20:22	EMR	EPA 8270C
4-Nitrophenol	< 1.92	mg/kg dry		1	0.165	1.92	05/12/25 20:22	EMR	EPA 8270C
N-Nitrosodi-n-propylamine	< 0.000414	mg/kg dry	Mrl	1	0.000414	0.00380	05/12/25 18:44	EMR	EPA 8270C
N-Nitrosodiphenylamine	< 0.383	mg/kg dry		1	0.0312	0.383	05/12/25 20:22	EMR	EPA 8270C
Pentachlorophenol	< 0.00107	mg/kg dry	Mrl, V2, X	1	0.00107	0.00380	05/13/25 18:22	EMR	EPA 8270C
Phenanthrene	< 0.383	mg/kg dry		1	0.0449	0.383	05/12/25 20:22	EMR	EPA 8270C
Phenol	< 0.383	mg/kg dry		1	0.0471	0.383	05/12/25 20:22	EMR	EPA 8270C
Pyrene	< 0.383	mg/kg dry		1	0.0408	0.383	05/12/25 20:22	EMR	EPA 8270C
1,2,4-Trichlorobenzene	< 0.383	mg/kg dry		1	0.0314	0.383	05/12/25 20:22	EMR	EPA 8270C



ANALYTICAL RESULTS

Sample: IE01764-08
 Name: SB-8
 Matrix: Solid - Grab

Sampled: 05/07/25 12:50
 Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
2,4,5-Trichlorophenol	< 0.383	mg/kg dry		1	0.0373	0.383	05/12/25 20:22	EMR	EPA 8270C
2,4,6-Trichlorophenol	< 0.115	mg/kg dry		1	0.0374	0.115	05/12/25 20:22	EMR	EPA 8270C
Surrogate: 2-Fluorobiphenyl	76 %	34-120					05/12/25 20:22	EMR	EPA 8270C
Surrogate: 2-Fluorophenol	77 %	12.6-123					05/12/25 20:22	EMR	EPA 8270C
Surrogate: Nitrobenzene-d5	70 %	31.6-120					05/12/25 20:22	EMR	EPA 8270C
Surrogate: Phenol-d6	79 %	30.9-121					05/12/25 20:22	EMR	EPA 8270C
Surrogate: 4-Terphenyl-d14	66 %	33.3-120					05/12/25 20:22	EMR	EPA 8270C
Surrogate: 2,4,6-Tribromophenol	109 %	26.1-124					05/12/25 20:22	EMR	EPA 8270C
<u>Total Metals - STL</u>									
Mercury	0.0413	mg/kg dry		1	0.0193	0.0383	05/12/25 16:03	RPB	SW 7471
Barium	20.4	mg/kg dry		1	0.119	0.599	05/12/25 16:18	BCH	EPA 6010B
Cadmium	< 0.300	mg/kg dry		1	0.0187	0.300	05/12/25 16:18	BCH	EPA 6010B
Chromium	4.75	mg/kg dry		1	0.0923	0.300	05/12/25 16:18	BCH	EPA 6010B
Lead	4.71	mg/kg dry		1	0.377	2.40	05/12/25 16:18	BCH	EPA 6010B
Selenium	< 0.587	mg/kg dry	Mrl, V2	1	0.587	0.779	05/12/25 16:18	BCH	EPA 6010B
Silver	< 0.300	mg/kg dry		1	0.0881	0.300	05/12/25 16:18	BCH	EPA 6010B
<u>Volatile Organics - STL</u>									
Acetone	< 0.0297	mg/kg dry		1	0.00354	0.0297	05/12/25 15:07	NHL	EPA 8260B
Acrolein	< 0.0297	mg/kg dry		1	0.00435	0.0297	05/12/25 15:07	NHL	EPA 8260B
Acrylonitrile	< 0.0297	mg/kg dry		1	0.00617	0.0297	05/12/25 15:07	NHL	EPA 8260B
Benzene	< 0.00297	mg/kg dry		1	0.000215	0.00297	05/12/25 15:07	NHL	EPA 8260B
Bromobenzene	< 0.00297	mg/kg dry		1	0.000370	0.00297	05/12/25 15:07	NHL	EPA 8260B
Bromochloromethane	< 0.00297	mg/kg dry		1	0.000298	0.00297	05/12/25 15:07	NHL	EPA 8260B
Bromodichloromethane	< 0.00297	mg/kg dry		1	2.78E-5	0.00297	05/12/25 15:07	NHL	EPA 8260B
Bromoform	< 0.00297	mg/kg dry		1	5.96E-5	0.00297	05/12/25 15:07	NHL	EPA 8260B
Bromomethane	< 0.00594	mg/kg dry		1	0.00118	0.00594	05/12/25 15:07	NHL	EPA 8260B
2-Butanone	< 0.00594	mg/kg dry		1	0.00214	0.00594	05/12/25 15:07	NHL	EPA 8260B
n-Butylbenzene	< 0.00297	mg/kg dry		1	0.00190	0.00297	05/12/25 15:07	NHL	EPA 8260B
sec-Butylbenzene	< 0.00297	mg/kg dry		1	0.00129	0.00297	05/12/25 15:07	NHL	EPA 8260B
tert-Butylbenzene	< 0.00297	mg/kg dry		1	0.00118	0.00297	05/12/25 15:07	NHL	EPA 8260B
Carbon disulfide	< 0.00594	mg/kg dry		1	0.000633	0.00594	05/12/25 15:07	NHL	EPA 8260B
Carbon tetrachloride	< 0.00297	mg/kg dry		1	0.000768	0.00297	05/12/25 15:07	NHL	EPA 8260B
Chlorobenzene	< 0.00297	mg/kg dry		1	0.000360	0.00297	05/12/25 15:07	NHL	EPA 8260B
Chloroethane	< 0.00594	mg/kg dry		1	0.000242	0.00594	05/12/25 15:07	NHL	EPA 8260B
Chloroform	< 0.00297	mg/kg dry		1	3.80E-5	0.00297	05/12/25 15:07	NHL	EPA 8260B
Chloromethane	< 0.00594	mg/kg dry		1	0.000635	0.00594	05/12/25 15:07	NHL	EPA 8260B
2-Chlorotoluene	< 0.00297	mg/kg dry		1	0.00128	0.00297	05/12/25 15:07	NHL	EPA 8260B
4-Chlorotoluene	< 0.00297	mg/kg dry		1	0.00174	0.00297	05/12/25 15:07	NHL	EPA 8260B
1,2-Dibromo-3-chloropropane	< 5.50E-5	mg/kg dry	Mrl	1	5.50E-5	5.50E-5	05/12/25 15:07	NHL	EPA 8260B
Dibromochloromethane	< 0.00297	mg/kg dry		1	0.000516	0.00297	05/12/25 15:07	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-08

Name: SB-8

Matrix: Solid - Grab

Sampled: 05/07/25 12:50

Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
1,2-Dibromoethane	< 2.97E-5	mg/kg dry	Mrl	1	2.97E-5	2.97E-5	05/12/25 15:07	NHL	EPA 8260B
Dibromomethane	< 0.00297	mg/kg dry		1	0.000531	0.00297	05/12/25 15:07	NHL	EPA 8260B
1,2-Dichlorobenzene	< 0.00297	mg/kg dry		1	0.000491	0.00297	05/12/25 15:07	NHL	EPA 8260B
1,3-Dichlorobenzene	< 0.00297	mg/kg dry		1	0.000440	0.00297	05/12/25 15:07	NHL	EPA 8260B
1,4-Dichlorobenzene	< 0.00297	mg/kg dry		1	0.000390	0.00297	05/12/25 15:07	NHL	EPA 8260B
Dichlorodifluoromethane	< 0.00594	mg/kg dry		1	0.000760	0.00594	05/12/25 15:07	NHL	EPA 8260B
1,1-Dichloroethane	< 0.00297	mg/kg dry		1	0.000407	0.00297	05/12/25 15:07	NHL	EPA 8260B
1,2-Dichloroethane	< 0.00297	mg/kg dry		1	0.000189	0.00297	05/12/25 15:07	NHL	EPA 8260B
1,1-Dichloroethene	< 0.00297	mg/kg dry		1	0.000372	0.00297	05/12/25 15:07	NHL	EPA 8260B
cis-1,2-Dichloroethene	< 0.00297	mg/kg dry		1	0.000361	0.00297	05/12/25 15:07	NHL	EPA 8260B
trans-1,2-Dichloroethene	< 0.00297	mg/kg dry		1	0.000944	0.00297	05/12/25 15:07	NHL	EPA 8260B
1,2-Dichloroethene- Total	< 0.00594	mg/kg dry		1	0.00109	0.00594	05/12/25 15:07	NHL	EPA 8260B
1,2-Dichloropropane	< 0.00297	mg/kg dry		1	0.000396	0.00297	05/12/25 15:07	NHL	EPA 8260B
1,3-Dichloropropane	< 0.00297	mg/kg dry		1	0.000984	0.00297	05/12/25 15:07	NHL	EPA 8260B
2,2-Dichloropropane	< 0.00297	mg/kg dry		1	0.00140	0.00297	05/12/25 15:07	NHL	EPA 8260B
1,1-Dichloropropene	< 0.00297	mg/kg dry		1	0.000369	0.00297	05/12/25 15:07	NHL	EPA 8260B
cis-1,3-Dichloropropene	< 0.00178	mg/kg dry		1	2.78E-5	0.00178	05/12/25 15:07	NHL	EPA 8260B
trans-1,3-Dichloropropene	< 0.00178	mg/kg dry		1	3.45E-5	0.00178	05/12/25 15:07	NHL	EPA 8260B
1,3-Dichloropropene - Total	< 0.00237	mg/kg dry		1	0.000906	0.00237	05/12/25 15:07	NHL	EPA 8260B
Diethyl ether	< 0.00297	mg/kg dry		1	5.94E-7	0.00297	05/12/25 15:07	NHL	EPA 8260B
Ethyl acetate	< 0.00594	mg/kg dry		1	5.94E-7	0.00594	05/12/25 15:07	NHL	EPA 8260B
Ethylbenzene	< 0.00297	mg/kg dry		1	0.000836	0.00297	05/12/25 15:07	NHL	EPA 8260B
Hexachlorobutadiene	< 0.00594	mg/kg dry		1	0.000260	0.00594	05/12/25 15:07	NHL	EPA 8260B
n-Hexane	< 0.00297	mg/kg dry		1	5.94E-7	0.00297	05/12/25 15:07	NHL	EPA 8260B
2-Hexanone	< 0.00297	mg/kg dry		1	0.00177	0.00297	05/12/25 15:07	NHL	EPA 8260B
Isopropylbenzene	< 0.00297	mg/kg dry		1	0.000849	0.00297	05/12/25 15:07	NHL	EPA 8260B
p-Isopropyl toluene	< 0.00297	mg/kg dry		1	0.00179	0.00297	05/12/25 15:07	NHL	EPA 8260B
MTBE	< 0.00297	mg/kg dry		1	0.000402	0.00297	05/12/25 15:07	NHL	EPA 8260B
4-Methyl-2-pentanone (MIBK)	< 0.00297	mg/kg dry		1	0.00210	0.00297	05/12/25 15:07	NHL	EPA 8260B
Methylene chloride	< 0.00297	mg/kg dry		1	0.000317	0.00297	05/12/25 15:07	NHL	EPA 8260B
Naphthalene	< 0.00712	mg/kg dry		1	0.00179	0.00712	05/12/25 15:07	NHL	EPA 8260B
n-Propylbenzene	< 0.00297	mg/kg dry		1	0.000993	0.00297	05/12/25 15:07	NHL	EPA 8260B
Styrene	< 0.00297	mg/kg dry		1	0.000705	0.00297	05/12/25 15:07	NHL	EPA 8260B
1,1,1,2-Tetrachloroethane	< 0.00297	mg/kg dry		1	0.000435	0.00297	05/12/25 15:07	NHL	EPA 8260B
1,1,1,2,2-Tetrachloroethane	< 0.00119	mg/kg dry		1	2.97E-5	0.00119	05/12/25 15:07	NHL	EPA 8260B
Tetrachloroethene	< 0.00297	mg/kg dry		1	0.000539	0.00297	05/12/25 15:07	NHL	EPA 8260B
Toluene	< 0.00297	mg/kg dry		1	0.000898	0.00297	05/12/25 15:07	NHL	EPA 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon)	< 0.00297	mg/kg dry		1	0.000355	0.00297	05/12/25 15:07	NHL	EPA 8260B
1,2,3-Trichlorobenzene	< 0.00297	mg/kg dry		1	0.000567	0.00297	05/12/25 15:07	NHL	EPA 8260B
1,2,4-Trichlorobenzene	< 0.00297	mg/kg dry		1	0.000571	0.00297	05/12/25 15:07	NHL	EPA 8260B
1,1,1-Trichloroethane	< 0.00297	mg/kg dry		1	0.000393	0.00297	05/12/25 15:07	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-08
Name: SB-8
Matrix: Solid - Grab

Sampled: 05/07/25 12:50
Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
1,1,2-Trichloroethane	< 0.00297	mg/kg dry		1	0.000442	0.00297	05/12/25 15:07	NHL	EPA 8260B
Trichloroethene	< 0.00297	mg/kg dry		1	0.000600	0.00297	05/12/25 15:07	NHL	EPA 8260B
Trichlorofluoromethane	< 0.00594	mg/kg dry		1	0.000922	0.00594	05/12/25 15:07	NHL	EPA 8260B
1,2,3-Trichloropropane	< 0.00297	mg/kg dry		1	0.000556	0.00297	05/12/25 15:07	NHL	EPA 8260B
1,2,4-Trimethylbenzene	< 0.00297	mg/kg dry		1	0.00232	0.00297	05/12/25 15:07	NHL	EPA 8260B
1,3,5-Trimethylbenzene	< 0.00297	mg/kg dry		1	0.000368	0.00297	05/12/25 15:07	NHL	EPA 8260B
Vinyl acetate	< 0.00297	mg/kg dry		1	0.000996	0.00297	05/12/25 15:07	NHL	EPA 8260B
Vinyl chloride	< 0.00297	mg/kg dry		1	0.000840	0.00297	05/12/25 15:07	NHL	EPA 8260B
Xylenes- Total	< 0.00890	mg/kg dry		1	0.00127	0.00890	05/12/25 15:07	NHL	EPA 8260B
Surrogate: 4-Bromofluorobenzene	98 %	53.6-133					05/12/25 15:07	NHL	EPA 8260B
Surrogate: 1,2-Dichloroethane-d4	109 %	60.2-146					05/12/25 15:07	NHL	EPA 8260B
Surrogate: Toluene-d8	99 %	64.6-128					05/12/25 15:07	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-09
 Name: SB-9
 Matrix: Solid - Grab

Sampled: 05/07/25 13:30
 Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
<u>General Chemistry - STL</u>									
pH	7.70	pH Units		1		0.0100	05/12/25 13:39	ALH	EPA 9045D
Solids - total solids (TS)	83	%		1		0.050	05/11/25 01:04	AAG/ALH	SM 2540G
<u>Metals by ICP-MS - STL</u>									
Arsenic	7.68	mg/kg dry		50	2.54	3.70	05/09/25 22:01	DAS	EPA 6020A
<u>Polychlorinated Biphenyls (PCBs) - STL</u>									
Aroclor 1016	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 11:03	KMS	EPA 8082
Aroclor 1221	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 11:03	KMS	EPA 8082
Aroclor 1232	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 11:03	KMS	EPA 8082
Aroclor 1242	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 11:03	KMS	EPA 8082
Aroclor 1248	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 11:03	KMS	EPA 8082
Aroclor 1254	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 11:03	KMS	EPA 8082
Aroclor 1260	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 11:03	KMS	EPA 8082
Aroclor 1262	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 11:03	KMS	EPA 8082
Aroclor 1268	< 0.02	mg/kg dry		1	0.007	0.02	05/16/25 11:03	KMS	EPA 8082
Aroclors - Total	< 0.02	mg/kg dry		1	0.004	0.02	05/16/25 11:03	KMS	EPA 8082
<u>Semivolatile Organics - STL</u>									
Acenaphthene	< 0.401	mg/kg dry		1	0.0448	0.401	05/12/25 20:51	EMR	EPA 8270C
Acenaphthylene	< 0.401	mg/kg dry		1	0.0397	0.401	05/12/25 20:51	EMR	EPA 8270C
Anthracene	< 0.401	mg/kg dry		1	0.0416	0.401	05/12/25 20:51	EMR	EPA 8270C
Benzo(a)anthracene	< 0.401	mg/kg dry		1	0.0394	0.401	05/12/25 20:51	EMR	EPA 8270C
Benzo(b)fluoranthene	< 0.401	mg/kg dry		1	0.0425	0.401	05/12/25 20:51	EMR	EPA 8270C
Benzo(k)fluoranthene	< 0.401	mg/kg dry		1	0.0498	0.401	05/12/25 20:51	EMR	EPA 8270C
Benzo(g,h,i)perylene	< 0.401	mg/kg dry		1	0.0409	0.401	05/12/25 20:51	EMR	EPA 8270C
Benzo(a)pyrene	< 0.0722	mg/kg dry		1	0.0385	0.0722	05/12/25 20:51	EMR	EPA 8270C
Bis(2-chloroethoxy) methane	< 0.401	mg/kg dry		1	0.0442	0.401	05/12/25 20:51	EMR	EPA 8270C
Bis(2-chloroethyl) ether	< 0.000385	mg/kg dry	Mrl	1	0.000385	0.0397	05/12/25 19:13	EMR	EPA 8270C
Bis(2-chloroisopropyl) ether	< 0.401	mg/kg dry		1	0.0337	0.401	05/12/25 20:51	EMR	EPA 8270C
Bis(2-ethylhexyl) phthalate	< 0.401	mg/kg dry		1	0.0350	0.401	05/12/25 20:51	EMR	EPA 8270C
4-Bromophenyl phenyl ether	< 0.401	mg/kg dry		1	0.0409	0.401	05/12/25 20:51	EMR	EPA 8270C
Butyl benzyl phthalate	< 0.401	mg/kg dry		1	0.0331	0.401	05/12/25 20:51	EMR	EPA 8270C
Carbazole	< 0.401	mg/kg dry		1	0.0452	0.401	05/12/25 20:51	EMR	EPA 8270C
4-Chloro-3-methylphenol	< 0.801	mg/kg dry		1	0.0404	0.801	05/12/25 20:51	EMR	EPA 8270C
4-Chloroaniline	< 0.401	mg/kg dry		1	0.0405	0.401	05/12/25 20:51	EMR	EPA 8270C
2-Chloronaphthalene	< 0.401	mg/kg dry		1	0.0464	0.401	05/12/25 20:51	EMR	EPA 8270C
2-Chlorophenol	< 0.401	mg/kg dry		1	0.0450	0.401	05/12/25 20:51	EMR	EPA 8270C
4-Chlorophenylphenyl ether	< 0.401	mg/kg dry		1	0.0437	0.401	05/12/25 20:51	EMR	EPA 8270C
Chrysene	< 0.401	mg/kg dry		1	0.0379	0.401	05/12/25 20:51	EMR	EPA 8270C



ANALYTICAL RESULTS

Sample: IE01764-09

Name: SB-9

Matrix: Solid - Grab

Sampled: 05/07/25 13:30

Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
Di-n-butyl phthalate	< 0.401	mg/kg dry		1	0.0378	0.401	05/12/25 20:51	EMR	EPA 8270C
Di-n-octyl phthalate	< 0.401	mg/kg dry		1	0.0341	0.401	05/12/25 20:51	EMR	EPA 8270C
Dibenzo(a,h)anthracene	< 0.0722	mg/kg dry		1	0.0412	0.0722	05/12/25 20:51	EMR	EPA 8270C
Dibenzofuran	< 2.00	mg/kg dry		1	0.0454	2.00	05/12/25 20:51	EMR	EPA 8270C
1,2-Dichlorobenzene	< 0.401	mg/kg dry		1	0.0383	0.401	05/12/25 20:51	EMR	EPA 8270C
1,3-Dichlorobenzene	< 0.120	mg/kg dry		1	0.0425	0.120	05/12/25 20:51	EMR	EPA 8270C
1,4-Dichlorobenzene	< 0.401	mg/kg dry		1	0.0411	0.401	05/12/25 20:51	EMR	EPA 8270C
3,3'-Dichlorobenzidine	< 0.00674	mg/kg dry	Mrl	1	0.00674	0.0199	05/12/25 19:13	EMR	EPA 8270C
2,4-Dichlorophenol	< 0.401	mg/kg dry		1	0.0375	0.401	05/12/25 20:51	EMR	EPA 8270C
Diethyl phthalate	< 0.401	mg/kg dry		1	0.0364	0.401	05/12/25 20:51	EMR	EPA 8270C
Dimethyl phthalate	< 0.401	mg/kg dry		1	0.0421	0.401	05/12/25 20:51	EMR	EPA 8270C
2,4-Dimethylphenol	< 0.401	mg/kg dry		1	0.0451	0.401	05/12/25 20:51	EMR	EPA 8270C
4,6-Dinitro-2-methylphenol	< 0.00144	mg/kg dry	Mrl	1	0.00144	0.0397	05/12/25 19:13	EMR	EPA 8270C
2,4-Dinitrophenol	< 0.120	mg/kg dry		1	0.0661	0.120	05/12/25 20:51	EMR	EPA 8270C
2,4-Dinitrotoluene	< 0.000698	mg/kg dry	Mrl	1	0.000698	0.0397	05/12/25 19:13	EMR	EPA 8270C
2,6-Dinitrotoluene	< 0.000650	mg/kg dry	Mrl, V2	1	0.000650	0.0397	05/13/25 18:50	EMR	EPA 8270C
Fluoranthene	< 0.401	mg/kg dry		1	0.0428	0.401	05/12/25 20:51	EMR	EPA 8270C
Fluorene	< 0.401	mg/kg dry		1	0.0432	0.401	05/12/25 20:51	EMR	EPA 8270C
Hexachlorobenzene	< 0.120	mg/kg dry		1	0.0397	0.120	05/12/25 20:51	EMR	EPA 8270C
Hexachlorobenzene	< 0.0397	mg/kg dry	Mrl, X	1	0.0397	0.0397	05/13/25 18:50	EMR	EPA 8270C
Hexachlorobutadiene	< 0.401	mg/kg dry		1	0.0312	0.401	05/12/25 20:51	EMR	EPA 8270C
Hexachlorocyclopentadiene	< 0.801	mg/kg dry		1	0.0250	0.801	05/12/25 20:51	EMR	EPA 8270C
Hexachloroethane	< 0.401	mg/kg dry		1	0.0380	0.401	05/12/25 20:51	EMR	EPA 8270C
Indeno(1,2,3-cd)pyrene	< 0.401	mg/kg dry		1	0.0431	0.401	05/12/25 20:51	EMR	EPA 8270C
Isophorone	< 0.401	mg/kg dry		1	0.0292	0.401	05/12/25 20:51	EMR	EPA 8270C
2-Methylnaphthalene	< 0.401	mg/kg dry		1	0.0355	0.401	05/12/25 20:51	EMR	EPA 8270C
2-Methylphenol	< 0.401	mg/kg dry		1	0.0475	0.401	05/12/25 20:51	EMR	EPA 8270C
3- & 4-Methylphenol	< 0.120	mg/kg dry		1	0.0495	0.120	05/12/25 20:51	EMR	EPA 8270C
Naphthalene	< 0.401	mg/kg dry		1	0.0373	0.401	05/12/25 20:51	EMR	EPA 8270C
2-Nitroaniline	< 0.120	mg/kg dry		1	0.0319	0.120	05/12/25 20:51	EMR	EPA 8270C
3-Nitroaniline	< 6.02	mg/kg dry		1	0.0825	6.02	05/12/25 20:51	EMR	EPA 8270C
4-Nitroaniline	< 0.0722	mg/kg dry		1	0.0707	0.0722	05/12/25 20:51	EMR	EPA 8270C
Nitrobenzene	< 0.0722	mg/kg dry		1	0.0352	0.0722	05/12/25 20:51	EMR	EPA 8270C
2-Nitrophenol	< 0.401	mg/kg dry		1	0.0325	0.401	05/12/25 20:51	EMR	EPA 8270C
4-Nitrophenol	< 2.00	mg/kg dry		1	0.172	2.00	05/12/25 20:51	EMR	EPA 8270C
N-Nitrosodi-n-propylamine	< 0.000433	mg/kg dry	Mrl	1	0.000433	0.00397	05/12/25 19:13	EMR	EPA 8270C
N-Nitrosodiphenylamine	< 0.401	mg/kg dry		1	0.0326	0.401	05/12/25 20:51	EMR	EPA 8270C
Pentachlorophenol	0.00360	mg/kg dry	Mrl, J, V2	1	0.00112	0.00397	05/12/25 19:13	EMR	EPA 8270C
Phenanthrene	< 0.401	mg/kg dry		1	0.0470	0.401	05/12/25 20:51	EMR	EPA 8270C
Phenol	< 0.401	mg/kg dry		1	0.0493	0.401	05/12/25 20:51	EMR	EPA 8270C
Pyrene	< 0.401	mg/kg dry		1	0.0427	0.401	05/12/25 20:51	EMR	EPA 8270C
1,2,4-Trichlorobenzene	< 0.401	mg/kg dry		1	0.0328	0.401	05/12/25 20:51	EMR	EPA 8270C



ANALYTICAL RESULTS

Sample: IE01764-09
 Name: SB-9
 Matrix: Solid - Grab

Sampled: 05/07/25 13:30
 Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
2,4,5-Trichlorophenol	< 0.401	mg/kg dry		1	0.0390	0.401	05/12/25 20:51	EMR	EPA 8270C
2,4,6-Trichlorophenol	< 0.120	mg/kg dry		1	0.0391	0.120	05/12/25 20:51	EMR	EPA 8270C
Surrogate: 2-Fluorobiphenyl	82 %	34-120					05/12/25 20:51	EMR	EPA 8270C
Surrogate: 2-Fluorophenol	78 %	12.6-123					05/12/25 20:51	EMR	EPA 8270C
Surrogate: Nitrobenzene-d5	75 %	31.6-120					05/12/25 20:51	EMR	EPA 8270C
Surrogate: Phenol-d6	82 %	30.9-121					05/12/25 20:51	EMR	EPA 8270C
Surrogate: 4-Terphenyl-d14	86 %	33.3-120					05/12/25 20:51	EMR	EPA 8270C
Surrogate: 2,4,6-Tribromophenol	110 %	26.1-124					05/12/25 20:51	EMR	EPA 8270C
<u>TCLP Metals - STL</u>									
Chromium	< 0.00556	mg/L		1	0.000733	0.00556	06/02/25 14:53	DAS	EPA 6010B
<u>Total Metals - STL</u>									
Mercury	< 0.0401	mg/kg dry		1	0.0202	0.0401	05/13/25 14:34	RPB	SW 7471
Barium	93.5	mg/kg dry		1	0.184	0.926	05/12/25 16:20	BCH	EPA 6010B
Cadmium	< 0.463	mg/kg dry		1	0.0289	0.463	05/12/25 16:20	BCH	EPA 6010B
Chromium	23.5	mg/kg dry		1	0.143	0.463	05/12/25 16:20	BCH	EPA 6010B
Lead	20.0	mg/kg dry		1	0.582	3.70	05/12/25 16:20	BCH	EPA 6010B
Selenium	< 0.906	mg/kg dry	Mrl, V2	1	0.906	1.20	05/12/25 16:20	BCH	EPA 6010B
Silver	< 0.463	mg/kg dry		1	0.136	0.463	05/12/25 16:20	BCH	EPA 6010B
<u>Volatile Organics - STL</u>									
Acetone	< 0.117	mg/kg dry	Xa, Q2	1	0.00464	0.117	05/12/25 15:34	NHL	EPA 8260B
Acrolein	< 0.0389	mg/kg dry	Xa, R	1	0.00569	0.0389	05/12/25 15:34	NHL	EPA 8260B
Acrylonitrile	< 0.0389	mg/kg dry	Xa, R	1	0.00808	0.0389	05/12/25 15:34	NHL	EPA 8260B
Benzene	< 0.00389	mg/kg dry	Xa, R	1	0.000281	0.00389	05/12/25 15:34	NHL	EPA 8260B
Bromobenzene	< 0.00389	mg/kg dry	Xa, R	1	0.000485	0.00389	05/12/25 15:34	NHL	EPA 8260B
Bromochloromethane	< 0.00389	mg/kg dry	Xa, R	1	0.000391	0.00389	05/12/25 15:34	NHL	EPA 8260B
Bromodichloromethane	< 0.00389	mg/kg dry	Xa, R	1	3.65E-5	0.00389	05/12/25 15:34	NHL	EPA 8260B
Bromoform	< 0.00389	mg/kg dry	Xa, R	1	7.80E-5	0.00389	05/12/25 15:34	NHL	EPA 8260B
Bromomethane	< 0.00777	mg/kg dry	Xa	1	0.00155	0.00777	05/12/25 15:34	NHL	EPA 8260B
2-Butanone	< 0.00777	mg/kg dry	Xa, R	1	0.00280	0.00777	05/12/25 15:34	NHL	EPA 8260B
n-Butylbenzene	< 0.00389	mg/kg dry	Xa, R	1	0.00249	0.00389	05/12/25 15:34	NHL	EPA 8260B
sec-Butylbenzene	< 0.00389	mg/kg dry	Xa, R	1	0.00169	0.00389	05/12/25 15:34	NHL	EPA 8260B
tert-Butylbenzene	< 0.00389	mg/kg dry	Xa, R	1	0.00154	0.00389	05/12/25 15:34	NHL	EPA 8260B
Carbon disulfide	< 0.00777	mg/kg dry	Xa	1	0.000829	0.00777	05/12/25 15:34	NHL	EPA 8260B
Carbon tetrachloride	< 0.00389	mg/kg dry	Xa	1	0.00101	0.00389	05/12/25 15:34	NHL	EPA 8260B
Chlorobenzene	< 0.00389	mg/kg dry	Xa, R	1	0.000472	0.00389	05/12/25 15:34	NHL	EPA 8260B
Chloroethane	< 0.00777	mg/kg dry	Xa	1	0.000316	0.00777	05/12/25 15:34	NHL	EPA 8260B
Chloroform	< 0.00389	mg/kg dry	Xa, Q2, R	1	4.98E-5	0.00389	05/12/25 15:34	NHL	EPA 8260B
Chloromethane	< 0.00777	mg/kg dry	Xa	1	0.000831	0.00777	05/12/25 15:34	NHL	EPA 8260B
2-Chlorotoluene	< 0.00389	mg/kg dry	Xa, R	1	0.00168	0.00389	05/12/25 15:34	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-09
Name: SB-9
Matrix: Solid - Grab

Sampled: 05/07/25 13:30
Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
4-Chlorotoluene	< 0.00389	mg/kg dry	Xa, R	1	0.00228	0.00389	05/12/25 15:34	NHL	EPA 8260B
1,2-Dibromo-3-chloropropane	< 7.20E-5	mg/kg dry	Xa, Mrl, R	1	7.20E-5	7.20E-5	05/12/25 15:34	NHL	EPA 8260B
Dibromochloromethane	< 0.00389	mg/kg dry	Xa, R	1	0.000675	0.00389	05/12/25 15:34	NHL	EPA 8260B
1,2-Dibromoethane	< 3.89E-5	mg/kg dry	Xa, Mrl, R	1	3.89E-5	3.89E-5	05/12/25 15:34	NHL	EPA 8260B
Dibromomethane	< 0.00389	mg/kg dry	Xa, R	1	0.000696	0.00389	05/12/25 15:34	NHL	EPA 8260B
1,2-Dichlorobenzene	< 0.00389	mg/kg dry	Xa, R, Q2	1	0.000643	0.00389	05/12/25 15:34	NHL	EPA 8260B
1,3-Dichlorobenzene	< 0.00389	mg/kg dry	Xa, Q2, R	1	0.000577	0.00389	05/12/25 15:34	NHL	EPA 8260B
1,4-Dichlorobenzene	< 0.00389	mg/kg dry	Xa, Q2, R	1	0.000511	0.00389	05/12/25 15:34	NHL	EPA 8260B
Dichlorodifluoromethane	< 0.00777	mg/kg dry	Xa	1	0.000996	0.00777	05/12/25 15:34	NHL	EPA 8260B
1,1-Dichloroethane	< 0.00389	mg/kg dry	Xa, R	1	0.000533	0.00389	05/12/25 15:34	NHL	EPA 8260B
1,2-Dichloroethane	< 0.00389	mg/kg dry	Xa, Q2, R	1	0.000248	0.00389	05/12/25 15:34	NHL	EPA 8260B
1,1-Dichloroethene	< 0.00389	mg/kg dry	Xa	1	0.000487	0.00389	05/12/25 15:34	NHL	EPA 8260B
cis-1,2-Dichloroethene	< 0.00389	mg/kg dry	Xa, R	1	0.000473	0.00389	05/12/25 15:34	NHL	EPA 8260B
trans-1,2-Dichloroethene	< 0.00389	mg/kg dry	Xa, R	1	0.00124	0.00389	05/12/25 15:34	NHL	EPA 8260B
1,2-Dichloroethene- Total	< 0.00777	mg/kg dry	Xa	1	0.00143	0.00777	05/12/25 15:34	NHL	EPA 8260B
1,2-Dichloropropane	< 0.00389	mg/kg dry	Xa, Q2, R	1	0.000519	0.00389	05/12/25 15:34	NHL	EPA 8260B
1,3-Dichloropropane	< 0.00389	mg/kg dry	Xa, R	1	0.00129	0.00389	05/12/25 15:34	NHL	EPA 8260B
2,2-Dichloropropane	< 0.00389	mg/kg dry	Xa, Q2	1	0.00183	0.00389	05/12/25 15:34	NHL	EPA 8260B
1,1-Dichloropropene	< 0.00389	mg/kg dry	Xa, Q2	1	0.000483	0.00389	05/12/25 15:34	NHL	EPA 8260B
cis-1,3-Dichloropropene	< 0.00233	mg/kg dry	Xa, R	1	3.65E-5	0.00233	05/12/25 15:34	NHL	EPA 8260B
trans-1,3-Dichloropropene	< 0.00233	mg/kg dry	Xa, R	1	4.52E-5	0.00233	05/12/25 15:34	NHL	EPA 8260B
1,3-Dichloropropene - Total	< 0.00311	mg/kg dry	Xa	1	0.00119	0.00311	05/12/25 15:34	NHL	EPA 8260B
Diethyl ether	< 0.00389	mg/kg dry	Xa, R	1	7.77E-7	0.00389	05/12/25 15:34	NHL	EPA 8260B
Ethyl acetate	< 0.00777	mg/kg dry	Xa, R	1	7.77E-7	0.00777	05/12/25 15:34	NHL	EPA 8260B
Ethylbenzene	< 0.00389	mg/kg dry	Xa, Q3, R	1	0.00109	0.00389	05/12/25 15:34	NHL	EPA 8260B
Hexachlorobutadiene	< 0.00777	mg/kg dry	Xa, R	1	0.000340	0.00777	05/12/25 15:34	NHL	EPA 8260B
n-Hexane	< 0.00389	mg/kg dry	Xa	1	7.77E-7	0.00389	05/12/25 15:34	NHL	EPA 8260B
2-Hexanone	< 0.00389	mg/kg dry	Xa, R	1	0.00232	0.00389	05/12/25 15:34	NHL	EPA 8260B
Isopropylbenzene	< 0.00389	mg/kg dry	Xa, R	1	0.00111	0.00389	05/12/25 15:34	NHL	EPA 8260B
p-Isopropyl toluene	< 0.00389	mg/kg dry	Xa, R	1	0.00235	0.00389	05/12/25 15:34	NHL	EPA 8260B
MTBE	< 0.00389	mg/kg dry	Xa, Q2, R	1	0.000527	0.00389	05/12/25 15:34	NHL	EPA 8260B
4-Methyl-2-pentanone (MIBK)	< 0.00389	mg/kg dry	Xa, R	1	0.00275	0.00389	05/12/25 15:34	NHL	EPA 8260B
Methylene chloride	< 0.00389	mg/kg dry	Xa, R	1	0.000415	0.00389	05/12/25 15:34	NHL	EPA 8260B
Naphthalene	< 0.00933	mg/kg dry	Xa, Q3	1	0.00235	0.00933	05/12/25 15:34	NHL	EPA 8260B
n-Propylbenzene	< 0.00389	mg/kg dry	Xa, R	1	0.00130	0.00389	05/12/25 15:34	NHL	EPA 8260B
Styrene	< 0.00389	mg/kg dry	Xa, R	1	0.000923	0.00389	05/12/25 15:34	NHL	EPA 8260B
1,1,1,2-Tetrachloroethane	< 0.00389	mg/kg dry	Xa, R	1	0.000570	0.00389	05/12/25 15:34	NHL	EPA 8260B
1,1,1,2,2-Tetrachloroethane	< 0.00155	mg/kg dry	Xa, R	1	3.88E-5	0.00155	05/12/25 15:34	NHL	EPA 8260B
Tetrachloroethene	< 0.00389	mg/kg dry	Xa, Q3, R	1	0.000706	0.00389	05/12/25 15:34	NHL	EPA 8260B
Toluene	< 0.00389	mg/kg dry	Xa, Q2, R	1	0.00118	0.00389	05/12/25 15:34	NHL	EPA 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon)	< 0.00389	mg/kg dry	Xa	1	0.000466	0.00389	05/12/25 15:34	NHL	EPA 8260B



ANALYTICAL RESULTS

Sample: IE01764-09
Name: SB-9
Matrix: Solid - Grab

Sampled: 05/07/25 13:30
Received: 05/08/25 12:30

Parameter	Result	Unit	Qualifier	Dilution	MDL	MRL	Analyzed	Analyst	Method
1,2,3-Trichlorobenzene	< 0.00389	mg/kg dry	Xa, Q3, R	1	0.000743	0.00389	05/12/25 15:34	NHL	EPA 8260B
1,2,4-Trichlorobenzene	< 0.00389	mg/kg dry	Xa, Q3, R	1	0.000748	0.00389	05/12/25 15:34	NHL	EPA 8260B
1,1,1-Trichloroethane	< 0.00389	mg/kg dry	Xa, Q2	1	0.000514	0.00389	05/12/25 15:34	NHL	EPA 8260B
1,1,2-Trichloroethane	< 0.00389	mg/kg dry	Xa, Q2, R	1	0.000579	0.00389	05/12/25 15:34	NHL	EPA 8260B
Trichloroethene	< 0.00389	mg/kg dry	Xa, Q2, R	1	0.000786	0.00389	05/12/25 15:34	NHL	EPA 8260B
Trichlorofluoromethane	< 0.00777	mg/kg dry	Xa	1	0.00121	0.00777	05/12/25 15:34	NHL	EPA 8260B
1,2,3-Trichloropropane	< 0.00389	mg/kg dry	Xa, R	1	0.000728	0.00389	05/12/25 15:34	NHL	EPA 8260B
1,2,4-Trimethylbenzene	< 0.00389	mg/kg dry	Xa, R	1	0.00304	0.00389	05/12/25 15:34	NHL	EPA 8260B
1,3,5-Trimethylbenzene	< 0.00389	mg/kg dry	Xa, R	1	0.000482	0.00389	05/12/25 15:34	NHL	EPA 8260B
Vinyl acetate	< 0.00389	mg/kg dry	Xa, R	1	0.00130	0.00389	05/12/25 15:34	NHL	EPA 8260B
Vinyl chloride	< 0.00389	mg/kg dry	Xa	1	0.00110	0.00389	05/12/25 15:34	NHL	EPA 8260B
Xylenes- Total	< 0.0117	mg/kg dry	Xa	1	0.00166	0.0117	05/12/25 15:34	NHL	EPA 8260B
Surrogate: 4-Bromofluorobenzene	97 %	53.6-133	Xa				05/12/25 15:34	NHL	EPA 8260B
Surrogate: 1,2-Dichloroethane-d4	113 %	60.2-146	Xa				05/12/25 15:34	NHL	EPA 8260B
Surrogate: Toluene-d8	100 %	64.6-128	Xa				05/12/25 15:34	NHL	EPA 8260B



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B532357 - 04-SW 7471A - SW 7471									
Blank (B532357-BLK1)				Prepared: 05/09/25 Analyzed: 05/12/25					
Mercury	< 0.0400	mg/kg wet							
LCS (B532357-BS1)				Prepared: 05/09/25 Analyzed: 05/12/25					
Mercury	0.938	mg/kg wet		0.9615		98	80-120		
Matrix Spike (B532357-MS1)				Prepared: 05/09/25 Analyzed: 05/12/25					
Mercury	3.41	mg/kg dry		4.130	0.437	72	75-125		
Matrix Spike Dup (B532357-MSD1)				Prepared: 05/09/25 Analyzed: 05/12/25					
Mercury	3.83	mg/kg dry		4.448	0.437	76	75-125	12	20
Batch B532364 - 04 SW 3050B - EPA 6010B									
Blank (B532364-BLK1)				Prepared: 05/09/25 Analyzed: 05/12/25					
Barium	< 0.735	mg/kg wet							
Cadmium	< 0.368	mg/kg wet							
Chromium	< 0.368	mg/kg wet							
Lead	< 2.94	mg/kg wet							
Selenium	< 0.720	mg/kg wet							
Silver	< 0.368	mg/kg wet							
LCS (B532364-BS1)				Prepared: 05/09/25 Analyzed: 05/12/25					
Barium	13.5	mg/kg wet		14.08		96	80-120		
Cadmium	13.9	mg/kg wet		14.08		99	80-120		
Chromium	14.4	mg/kg wet		14.08		102	80-120		
Lead	14.0	mg/kg wet		14.08		99	80-120		
Selenium	12.2	mg/kg wet		14.08		87	80-120		
Silver	3.47	mg/kg wet		3.521		98	80-120		
Matrix Spike (B532364-MS1)				Prepared: 05/09/25 Analyzed: 05/12/25					
Barium	110	mg/kg dry		16.81	98.5	71	75-125		
Cadmium	16.0	mg/kg dry		16.81	0.931	89	75-125		
Chromium	46.7	mg/kg dry		16.81	33.5	78	75-125		
Lead	47.7	mg/kg dry		16.81	42.6	31	75-125		
Selenium	15.4	mg/kg dry		16.81	ND	92	75-125		
Silver	4.19	mg/kg dry		4.203	0.127	97	75-125		
Matrix Spike Dup (B532364-MSD1)				Prepared: 05/09/25 Analyzed: 05/12/25					
Barium	159	mg/kg dry		16.59	98.5	362	75-125	36	20
Cadmium	15.4	mg/kg dry		16.59	0.931	87	75-125	4	20
Chromium	72.3	mg/kg dry		16.59	33.5	234	75-125	43	20
Lead	102	mg/kg dry		16.59	42.6	358	75-125	72	20
Selenium	14.7	mg/kg dry		16.59	ND	88	75-125	5	20
Silver	4.07	mg/kg dry		4.147	0.127	95	75-125	3	20
Post Spike (B532364-PS1)				Prepared: 05/09/25 Analyzed: 05/13/25					
Chromium	0.471	mg/L		0.2000	0.339	66	80-120		
Dilution Check (B532364-SRL1)				Prepared: 05/09/25 Analyzed: 05/12/25					
Barium	93.7	mg/kg dry			98.5			5	200
Cadmium	0.883	mg/kg dry			0.931			5	200
Chromium	30.1	mg/kg dry			33.5			11	200
Lead	41.0	mg/kg dry			42.6			4	200



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Dilution Check (B532364-SRL1)				Sample: IE01764-02		Prepared: 05/09/25 Analyzed: 05/12/25			
Selenium	< 4.83	mg/kg dry			ND				200
Silver	< 2.47	mg/kg dry			ND				200
<u>Batch B532366 - 04 SW 3050B - EPA 6020A</u>									
Blank (B532366-BLK1)				Prepared & Analyzed: 05/09/25					
Arsenic	< 0.294	mg/kg wet							
LCS (B532366-BS1)				Prepared & Analyzed: 05/09/25					
Arsenic	13.9	mg/kg wet		14.08		99	80-120		
Matrix Spike (B532366-MS1)				Sample: IE01764-02		Prepared: 05/09/25 Analyzed: 05/12/25			
Arsenic	19.5	mg/kg dry		16.81	7.16	73	75-125		
Matrix Spike Dup (B532366-MSD1)				Sample: IE01764-02		Prepared & Analyzed: 05/09/25			
Arsenic	21.2	mg/kg dry		16.59	7.16	85	75-125	9	20
Post Spike (B532366-PS1)				Sample: IE01764-02		Prepared: 05/09/25 Analyzed: 05/12/25			
Arsenic	239	ug/L		200.0	72.5	83	80-120		
Dilution Check (B532366-SRL1)				Sample: IE01764-02		Prepared & Analyzed: 05/09/25			
Arsenic	< 19.7	mg/kg dry			ND				10
<u>Batch B532438 - 04-No Prep WC Solid - SM 2540G</u>									
Blank (B532438-BLK1)				Prepared: 05/10/25 Analyzed: 05/11/25					
Solids - total solids (TS)	< 0.050	%							
Duplicate (B532438-DUP1)				Sample: IE01762-01		Prepared: 05/10/25 Analyzed: 05/11/25			
Solids - total solids (TS)	79.7	%			78.4			2	5
Duplicate (B532438-DUP2)				Sample: IE01764-01		Prepared: 05/10/25 Analyzed: 05/11/25			
Solids - total solids (TS)	85.5	%			87.3			2	5
<u>Batch B532507 - 04 SW 3550 (625/8270) - EPA 8270C</u>									
Blank (B532507-BLK1)				Prepared & Analyzed: 05/12/25					
Acenaphthene	< 0.333	mg/kg wet							
Acenaphthylene	< 0.333	mg/kg wet							
Anthracene	< 0.333	mg/kg wet							
Benzo(a)anthracene	< 0.333	mg/kg wet							
Benzo(b)fluoranthene	< 0.333	mg/kg wet							
Benzo(k)fluoranthene	< 0.333	mg/kg wet							
Benzo(g,h,i)perylene	< 0.333	mg/kg wet							
Benzo(a)pyrene	< 0.0600	mg/kg wet							
Bis(2-chloroethoxy) methane	< 0.333	mg/kg wet							
Bis(2-chloroethyl) ether	< 0.000320	mg/kg wet							
Bis(2-chloroisopropyl) ether	< 0.333	mg/kg wet							
Bis(2-ethylhexyl) phthalate	< 0.333	mg/kg wet							
4-Bromophenyl phenyl ether	< 0.333	mg/kg wet							
Butyl benzyl phthalate	< 0.333	mg/kg wet							
Carbazole	< 0.333	mg/kg wet							
4-Chloro-3-methylphenol	< 0.666	mg/kg wet							
4-Chloroaniline	< 0.333	mg/kg wet							
2-Chloronaphthalene	< 0.333	mg/kg wet							
2-Chlorophenol	< 0.333	mg/kg wet							
4-Chlorophenylphenyl ether	< 0.333	mg/kg wet							



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Blank (B532507-BLK1)				Prepared & Analyzed: 05/12/25					
Chrysene	< 0.333	mg/kg wet							
Di-n-butyl phthalate	< 0.333	mg/kg wet							
Di-n-octyl phthalate	< 0.333	mg/kg wet							
Dibenzo(a,h)anthracene	< 0.0600	mg/kg wet							
Dibenzofuran	< 1.66	mg/kg wet							
1,2-Dichlorobenzene	< 0.333	mg/kg wet							
1,3-Dichlorobenzene	< 0.100	mg/kg wet							
1,4-Dichlorobenzene	< 0.333	mg/kg wet							
3,3'-Dichlorobenzidine	< 0.00560	mg/kg wet							
2,4-Dichlorophenol	< 0.333	mg/kg wet							
Diethyl phthalate	< 0.333	mg/kg wet							
Dimethyl phthalate	< 0.333	mg/kg wet							
2,4-Dimethylphenol	< 0.333	mg/kg wet							
4,6-Dinitro-2-methylphenol	< 0.00120	mg/kg wet							
2,4-Dinitrophenol	< 0.100	mg/kg wet							
2,4-Dinitrotoluene	< 0.000580	mg/kg wet							
2,6-Dinitrotoluene	< 0.000540	mg/kg wet							
Fluoranthene	< 0.333	mg/kg wet							
Fluorene	< 0.333	mg/kg wet							
Hexachlorobenzene	< 0.0330	mg/kg wet							
Hexachlorobenzene	< 0.100	mg/kg wet							
Hexachlorobutadiene	< 0.333	mg/kg wet							
Hexachlorocyclopentadiene	< 0.666	mg/kg wet							
Hexachloroethane	< 0.333	mg/kg wet							
Indeno(1,2,3-cd)pyrene	< 0.333	mg/kg wet							
Isophorone	< 0.333	mg/kg wet							
2-Methylnaphthalene	< 0.333	mg/kg wet							
2-Methylphenol	< 0.333	mg/kg wet							
3- & 4-Methylphenol	< 0.100	mg/kg wet							
Naphthalene	< 0.333	mg/kg wet							
2-Nitroaniline	< 0.100	mg/kg wet							
3-Nitroaniline	< 5.00	mg/kg wet							
4-Nitroaniline	< 0.0600	mg/kg wet							
Nitrobenzene	< 0.0600	mg/kg wet							
2-Nitrophenol	< 0.333	mg/kg wet							
4-Nitrophenol	< 1.66	mg/kg wet							
N-Nitrosodi-n-propylamine	< 0.000360	mg/kg wet							
N-Nitrosodiphenylamine	< 0.333	mg/kg wet							
Pentachlorophenol	< 0.000930	mg/kg wet	V2						
Phenanthrene	< 0.333	mg/kg wet							
Phenol	< 0.333	mg/kg wet							
Pyrene	< 0.333	mg/kg wet							
1,2,4-Trichlorobenzene	< 0.333	mg/kg wet							
2,4,5-Trichlorophenol	< 0.333	mg/kg wet							
2,4,6-Trichlorophenol	< 0.100	mg/kg wet							
Surrogate: 2-Fluorobiphenyl	0.535	mg/kg wet		0.6585		81	34-120		
Surrogate: 2-Fluorophenol	0.489	mg/kg wet		0.6585		74	12.6-123		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Blank (B532507-BLK1)				Prepared & Analyzed: 05/12/25					
Surrogate: Nitrobenzene-d5	0.479	mg/kg wet		0.6585		73	31.6-120		
Surrogate: Phenol-d6	0.509	mg/kg wet		0.6585		77	30.9-121		
Surrogate: 4-Terphenyl-d14	0.468	mg/kg wet		0.6585		71	33.3-120		
Surrogate: 2,4,6-Tribromophenol	0.667	mg/kg wet		0.6585		101	26.1-124		
LCS (B532507-BS1)				Prepared & Analyzed: 05/12/25					
Acenaphthene	1.05	mg/kg wet		1.315		80	39.7-120		
Acenaphthylene	1.04	mg/kg wet		1.315		79	38.2-120		
Anthracene	1.06	mg/kg wet		1.315		81	38.1-120		
Benzo(a)anthracene	1.05	mg/kg wet		1.315		80	37.3-120		
Benzo(b)fluoranthene	1.06	mg/kg wet		1.315		81	39.4-120		
Benzo(k)fluoranthene	1.08	mg/kg wet		1.315		82	41.3-120		
Benzo(g,h,i)perylene	1.07	mg/kg wet		1.315		82	40.5-120		
Benzo(a)pyrene	0.994	mg/kg wet		1.315		76	39.1-120		
Bis(2-chloroethoxy) methane	1.01	mg/kg wet		1.315		76	37.4-120		
Bis(2-chloroisopropyl) ether	0.714	mg/kg wet		1.315		54	10-127		
Bis(2-ethylhexyl) phthalate	1.02	mg/kg wet		1.315		78	33-120		
4-Bromophenyl phenyl ether	1.13	mg/kg wet		1.315		86	40.1-120		
Butyl benzyl phthalate	1.05	mg/kg wet		1.315		80	33.9-120		
Carbazole	1.19	mg/kg wet		1.315		91	35.8-120		
4-Chloro-3-methylphenol	1.08	mg/kg wet		1.315		82	43.7-120		
4-Chloroaniline	0.733	mg/kg wet		1.315		56	22.2-120		
2-Chloronaphthalene	1.05	mg/kg wet		1.315		80	37.4-120		
2-Chlorophenol	1.01	mg/kg wet		1.315		77	42.3-120		
4-Chlorophenylphenyl ether	1.08	mg/kg wet		1.315		82	40.5-120		
Chrysene	1.08	mg/kg wet		1.315		82	39.5-120		
Di-n-butyl phthalate	1.17	mg/kg wet		1.315		89	37.8-121		
Di-n-octyl phthalate	1.07	mg/kg wet		1.315		82	33.5-120		
Dibenzo(a,h)anthracene	1.07	mg/kg wet		1.315		81	38-120		
Dibenzofuran	1.09	mg/kg wet		1.315		83	36.8-120		
1,2-Dichlorobenzene	1.04	mg/kg wet		1.315		79	38.1-120		
1,3-Dichlorobenzene	1.03	mg/kg wet		1.315		78	37.5-120		
1,4-Dichlorobenzene	1.03	mg/kg wet		1.315		79	38.5-120		
3,3'-Dichlorobenzidine	0.712	mg/kg wet		1.315		54	30.3-120		
2,4-Dichlorophenol	1.14	mg/kg wet		1.315		87	41.8-120		
Diethyl phthalate	1.04	mg/kg wet		1.315		79	38.9-120		
Dimethyl phthalate	1.06	mg/kg wet		1.315		81	39.4-120		
2,4-Dimethylphenol	1.04	mg/kg wet		1.315		79	49.4-133		
2,4-Dinitrophenol	1.07	mg/kg wet		1.315		81	10-135		
Fluoranthene	1.16	mg/kg wet		1.315		88	41.2-120		
Fluorene	1.06	mg/kg wet		1.315		80	41-120		
Hexachlorobenzene	1.17	mg/kg wet		1.315		89	39.3-120		
Hexachlorobutadiene	1.14	mg/kg wet		1.315		87	40.3-120		
Hexachlorocyclopentadiene	0.864	mg/kg wet		1.315		66	24-136		
Hexachloroethane	0.988	mg/kg wet		1.315		75	35.6-120		
Indeno(1,2,3-cd)pyrene	1.12	mg/kg wet		1.315		85	34.5-120		
Isophorone	0.893	mg/kg wet		1.315		68	33.3-120		
2-Methylnaphthalene	1.20	mg/kg wet		1.315		92	35.1-120		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
LCS (B532507-BS1)				Prepared & Analyzed: 05/12/25					
2-Methylphenol	1.01	mg/kg wet		1.315		77	43.4-120		
3- & 4-Methylphenol	1.11	mg/kg wet		1.315		84	48.1-122		
Naphthalene	1.13	mg/kg wet		1.315		86	42.3-120		
2-Nitroaniline	1.04	mg/kg wet		1.315		79	28.7-120		
3-Nitroaniline	1.10	mg/kg wet		1.315		84	33.6-120		
4-Nitroaniline	1.29	mg/kg wet		1.315		98	33.5-120		
Nitrobenzene	1.00	mg/kg wet		1.315		76	33.8-120		
2-Nitrophenol	1.20	mg/kg wet		1.315		91	40.3-120		
4-Nitrophenol	1.00	mg/kg wet		1.315		76	25.6-122		
N-Nitrosodi-n-propylamine	0.916	mg/kg wet		1.315		70	32.6-120		
N-Nitrosodiphenylamine	0.972	mg/kg wet		1.315		74	36.2-120		
Pentachlorophenol	0.932	mg/kg wet		1.315		71	34.5-120		
Phenanthrene	1.15	mg/kg wet		1.315		88	41-120		
Phenol	0.900	mg/kg wet		1.315		68	40.8-120		
Pyrene	1.09	mg/kg wet		1.315		83	37.4-120		
1,2,4-Trichlorobenzene	1.13	mg/kg wet		1.315		86	40.8-120		
2,4,5-Trichlorophenol	1.12	mg/kg wet		1.315		85	41.6-120		
2,4,6-Trichlorophenol	1.12	mg/kg wet		1.315		85	42.1-120		
Surrogate: 2-Fluorobiphenyl	0.521	mg/kg wet		0.6577		79	34-120		
Surrogate: 2-Fluorophenol	0.511	mg/kg wet		0.6577		78	12.6-123		
Surrogate: Nitrobenzene-d5	0.499	mg/kg wet		0.6577		76	31.6-120		
Surrogate: Phenol-d6	0.524	mg/kg wet		0.6577		80	30.9-121		
Surrogate: 4-Terphenyl-d14	0.549	mg/kg wet		0.6577		84	33.3-120		
Surrogate: 2,4,6-Tribromophenol	0.710	mg/kg wet		0.6577		108	26.1-124		
Matrix Spike (B532507-MS1)				Sample: IE01764-01		Prepared & Analyzed: 05/12/25			
Acenaphthene	1.21	mg/kg dry		1.524	ND	79	48.7-120		
Acenaphthylene	1.21	mg/kg dry		1.524	ND	79	46.9-120		
Anthracene	1.27	mg/kg dry		1.524	ND	84	42.6-120		
Benzo(a)anthracene	1.39	mg/kg dry		1.524	0.106	84	43.6-120		
Benzo(b)fluoranthene	1.63	mg/kg dry		1.524	0.255	90	43.3-125		
Benzo(k)fluoranthene	1.36	mg/kg dry		1.524	0.0833	84	48.4-120		
Benzo(g,h,i)perylene	1.56	mg/kg dry		1.524	0.240	87	40.6-120		
Benzo(a)pyrene	1.49	mg/kg dry		1.524	0.194	85	42.8-120		
Bis(2-chloroethoxy) methane	1.09	mg/kg dry		1.524	ND	72	53.6-120		
Bis(2-chloroisopropyl) ether	0.771	mg/kg dry		1.524	ND	51	10.5-127		
Bis(2-ethylhexyl) phthalate	1.55	mg/kg dry		1.524	ND	102	45.4-120		
4-Bromophenyl phenyl ether	1.31	mg/kg dry		1.524	ND	86	49.8-120		
Butyl benzyl phthalate	1.27	mg/kg dry		1.524	ND	83	48.9-121		
Carbazole	1.10	mg/kg dry		1.524	ND	72	46.1-122		
4-Chloro-3-methylphenol	1.23	mg/kg dry		1.524	ND	81	57.4-120		
4-Chloroaniline	0.945	mg/kg dry		1.524	ND	62	42.8-120		
2-Chloronaphthalene	1.14	mg/kg dry		1.524	ND	75	49.8-120		
2-Chlorophenol	1.09	mg/kg dry		1.524	ND	72	53-120		
4-Chlorophenylphenyl ether	1.17	mg/kg dry		1.524	ND	77	52.2-120		
Chrysene	1.52	mg/kg dry		1.524	0.158	89	44.6-120		
Di-n-butyl phthalate	1.32	mg/kg dry		1.524	ND	87	52.3-121		
Di-n-octyl phthalate	1.30	mg/kg dry		1.524	ND	85	48.1-120		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike (B532507-MS1)	Sample: IE01764-01			Prepared & Analyzed: 05/12/25					
Dibenzo(a,h)anthracene	1.30	mg/kg dry		1.524	0.0457	82	42.2-120		
Dibenzofuran	1.26	mg/kg dry		1.524	ND	83	49.1-120		
1,2-Dichlorobenzene	1.06	mg/kg dry		1.524	ND	69	54.1-120		
1,3-Dichlorobenzene	1.05	mg/kg dry		1.524	ND	69	53.4-120		
1,4-Dichlorobenzene	1.06	mg/kg dry		1.524	ND	69	55.4-120		
3,3'-Dichlorobenzidine	0.569	mg/kg dry		1.524	ND	37	26.1-120		
2,4-Dichlorophenol	1.28	mg/kg dry		1.524	ND	84	55.5-120		
Diethyl phthalate	1.13	mg/kg dry		1.524	ND	74	52.2-120		
Dimethyl phthalate	1.20	mg/kg dry		1.524	ND	79	50.6-120		
2,4-Dimethylphenol	1.27	mg/kg dry		1.524	ND	84	66.9-134		
2,4-Dinitrophenol	0.248	mg/kg dry		1.524	ND	16	10-127		
Fluoranthene	1.86	mg/kg dry		1.524	0.265	105	30.9-137		
Fluorene	1.16	mg/kg dry		1.524	ND	76	50.4-120		
Hexachlorobenzene	1.36	mg/kg dry		1.524	ND	89	47.8-120		
Hexachlorobutadiene	1.23	mg/kg dry		1.524	ND	80	53.4-120		
Hexachlorocyclopentadiene	0.485	mg/kg dry		1.524	ND	32	10-137		
Hexachloroethane	0.700	mg/kg dry		1.524	ND	46	44.7-120		
Indeno(1,2,3-cd)pyrene	1.55	mg/kg dry		1.524	0.175	90	35.1-120		
Isophorone	1.04	mg/kg dry		1.524	ND	68	48-120		
2-Methylnaphthalene	1.39	mg/kg dry		1.524	ND	91	44.3-121		
2-Methylphenol	1.10	mg/kg dry		1.524	ND	72	55.7-120		
3- & 4-Methylphenol	1.22	mg/kg dry		1.524	ND	80	60.2-124		
Naphthalene	1.21	mg/kg dry		1.524	ND	80	47.3-120		
2-Nitroaniline	1.02	mg/kg dry		1.524	ND	67	42.2-121		
3-Nitroaniline	1.18	mg/kg dry		1.524	ND	77	45.1-120		
4-Nitroaniline	0.365	mg/kg dry	Q1	1.524	ND	24	48-120		
Nitrobenzene	1.13	mg/kg dry		1.524	ND	74	41.7-128		
2-Nitrophenol	1.01	mg/kg dry		1.524	ND	66	47.9-120		
4-Nitrophenol	0.983	mg/kg dry		1.524	ND	64	23.6-131		
N-Nitrosodi-n-propylamine	0.937	mg/kg dry		1.524	ND	62	50.7-120		
N-Nitrosodiphenylamine	1.06	mg/kg dry		1.524	ND	69	41.9-120		
Pentachlorophenol	1.00	mg/kg dry		1.524	ND	66	26-120		
Phenanthrene	1.40	mg/kg dry		1.524	0.0929	86	33.3-135		
Phenol	0.990	mg/kg dry		1.524	ND	65	50.3-120		
Pyrene	1.61	mg/kg dry		1.524	0.216	92	35.1-129		
1,2,4-Trichlorobenzene	1.22	mg/kg dry		1.524	ND	80	55-120		
2,4,5-Trichlorophenol	1.26	mg/kg dry		1.524	ND	83	49.6-120		
2,4,6-Trichlorophenol	1.22	mg/kg dry		1.524	ND	80	51.4-120		
Surrogate: 2-Fluorobiphenyl	0.572	mg/kg dry		0.7621		75	34-120		
Surrogate: 2-Fluorophenol	0.525	mg/kg dry		0.7621		69	12.6-123		
Surrogate: Nitrobenzene-d5	0.566	mg/kg dry		0.7621		74	31.6-120		
Surrogate: Phenol-d6	0.571	mg/kg dry		0.7621		75	30.9-121		
Surrogate: 4-Terphenyl-d14	0.644	mg/kg dry		0.7621		84	33.3-120		
Surrogate: 2,4,6-Tribromophenol	0.802	mg/kg dry		0.7621		105	26.1-124		
Matrix Spike Dup (B532507-MSD1)	Sample: IE01764-01			Prepared & Analyzed: 05/12/25					
Acenaphthene	1.10	mg/kg dry		1.520	ND	73	48.7-120	9	40
Acenaphthylene	1.10	mg/kg dry		1.520	ND	72	46.9-120	9	40



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike Dup (B532507-MSD1)	Sample: IE01764-01			Prepared & Analyzed: 05/12/25					
Anthracene	1.18	mg/kg dry		1.520	ND	77	42.6-120	8	40
Benzo(a)anthracene	1.28	mg/kg dry		1.520	0.106	77	43.6-120	9	40
Benzo(b)fluoranthene	1.51	mg/kg dry		1.520	0.255	82	43.3-125	8	40
Benzo(k)fluoranthene	1.21	mg/kg dry		1.520	0.0833	74	48.4-120	11	40
Benzo(g,h,i)perylene	1.47	mg/kg dry		1.520	0.240	81	40.6-120	6	40
Benzo(a)pyrene	1.37	mg/kg dry		1.520	0.194	78	42.8-120	8	40
Bis(2-chloroethoxy) methane	1.01	mg/kg dry		1.520	ND	66	53.6-120	8	40
Bis(2-chloroisopropyl) ether	0.685	mg/kg dry		1.520	ND	45	10.5-127	12	40
Bis(2-ethylhexyl) phthalate	1.14	mg/kg dry		1.520	ND	75	45.4-120	30	40
4-Bromophenyl phenyl ether	1.19	mg/kg dry		1.520	ND	78	49.8-120	10	40
Butyl benzyl phthalate	1.14	mg/kg dry		1.520	ND	75	48.9-121	11	40
Carbazole	1.06	mg/kg dry		1.520	ND	70	46.1-122	4	40
4-Chloro-3-methylphenol	1.17	mg/kg dry		1.520	ND	77	57.4-120	5	40
4-Chloroaniline	0.834	mg/kg dry		1.520	ND	55	42.8-120	12	40
2-Chloronaphthalene	1.07	mg/kg dry		1.520	ND	71	49.8-120	6	40
2-Chlorophenol	1.01	mg/kg dry		1.520	ND	66	53-120	8	40
4-Chlorophenylphenyl ether	1.12	mg/kg dry		1.520	ND	74	52.2-120	5	40
Chrysene	1.41	mg/kg dry		1.520	0.158	83	44.6-120	7	40
Di-n-butyl phthalate	1.25	mg/kg dry		1.520	ND	82	52.3-121	6	40
Di-n-octyl phthalate	1.18	mg/kg dry		1.520	ND	77	48.1-120	10	40
Dibenzo(a,h)anthracene	1.18	mg/kg dry		1.520	0.0457	75	42.2-120	9	40
Dibenzofuran	1.13	mg/kg dry		1.520	ND	75	49.1-120	11	40
1,2-Dichlorobenzene	0.937	mg/kg dry		1.520	ND	62	54.1-120	12	40
1,3-Dichlorobenzene	0.908	mg/kg dry		1.520	ND	60	53.4-120	14	40
1,4-Dichlorobenzene	0.917	mg/kg dry		1.520	ND	60	55.4-120	14	40
3,3'-Dichlorobenzidine	0.504	mg/kg dry		1.520	ND	33	26.1-120	12	40
2,4-Dichlorophenol	1.17	mg/kg dry		1.520	ND	77	55.5-120	9	40
Diethyl phthalate	1.10	mg/kg dry		1.520	ND	72	52.2-120	3	40
Dimethyl phthalate	1.09	mg/kg dry		1.520	ND	72	50.6-120	9	40
2,4-Dimethylphenol	1.17	mg/kg dry		1.520	ND	77	66.9-134	9	40
2,4-Dinitrophenol	0.237	mg/kg dry		1.520	ND	16	10-127	5	40
Fluoranthene	1.59	mg/kg dry		1.520	0.265	87	30.9-137	16	40
Fluorene	1.11	mg/kg dry		1.520	ND	73	50.4-120	5	40
Hexachlorobenzene	1.20	mg/kg dry		1.520	ND	79	47.8-120	12	40
Hexachlorobutadiene	1.08	mg/kg dry		1.520	ND	71	53.4-120	12	40
Hexachlorocyclopentadiene	0.212	mg/kg dry	R	1.520	ND	14	10-137	78	40
Hexachloroethane	1.11	mg/kg dry	R	1.520	ND	73	44.7-120	45	40
Indeno(1,2,3-cd)pyrene	1.45	mg/kg dry		1.520	0.175	84	35.1-120	7	40
Isophorone	0.917	mg/kg dry		1.520	ND	60	48-120	13	40
2-Methylnaphthalene	1.24	mg/kg dry		1.520	ND	82	44.3-121	12	40
2-Methylphenol	1.04	mg/kg dry		1.520	ND	68	55.7-120	6	40
3- & 4-Methylphenol	1.16	mg/kg dry		1.520	ND	76	60.2-124	6	40
Naphthalene	1.11	mg/kg dry		1.520	ND	73	47.3-120	9	40
2-Nitroaniline	1.04	mg/kg dry		1.520	ND	69	42.2-121	2	40
3-Nitroaniline	1.05	mg/kg dry		1.520	ND	69	45.1-120	11	40
4-Nitroaniline	1.82	mg/kg dry	R	1.520	ND	120	48-120	133	40
Nitrobenzene	0.961	mg/kg dry		1.520	ND	63	41.7-128	16	40



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike Dup (B532507-MSD1)		Sample: IE01764-01		Prepared & Analyzed: 05/12/25					
2-Nitrophenol	0.891	mg/kg dry		1.520	ND	59	47.9-120	13	40
4-Nitrophenol	0.907	mg/kg dry		1.520	ND	60	23.6-131	8	40
N-Nitrosodi-n-propylamine	0.892	mg/kg dry		1.520	ND	59	50.7-120	5	40
N-Nitrosodiphenylamine	1.08	mg/kg dry		1.520	ND	71	41.9-120	2	40
Pentachlorophenol	0.828	mg/kg dry		1.520	ND	54	26-120	19	40
Phenanthrene	1.34	mg/kg dry		1.520	0.0929	82	33.3-135	4	40
Phenol	0.949	mg/kg dry		1.520	ND	62	50.3-120	4	40
Pyrene	1.48	mg/kg dry		1.520	0.216	84	35.1-129	8	40
1,2,4-Trichlorobenzene	1.08	mg/kg dry		1.520	ND	71	55-120	12	40
2,4,5-Trichlorophenol	1.16	mg/kg dry		1.520	ND	76	49.6-120	9	40
2,4,6-Trichlorophenol	1.21	mg/kg dry		1.520	ND	80	51.4-120	1	40
Surrogate: 2-Fluorobiphenyl	0.545	mg/kg dry		0.7598		72	34-120		
Surrogate: 2-Fluorophenol	0.476	mg/kg dry		0.7598		63	12.6-123		
Surrogate: Nitrobenzene-d5	0.493	mg/kg dry		0.7598		65	31.6-120		
Surrogate: Phenol-d6	0.538	mg/kg dry		0.7598		71	30.9-121		
Surrogate: 4-Terphenyl-d14	0.584	mg/kg dry		0.7598		77	33.3-120		
Surrogate: 2,4,6-Tribromophenol	0.725	mg/kg dry		0.7598		95	26.1-124		

Batch B532509 - 04-No Prep WC Solid - EPA 9045D

Duplicate (B532509-DUP1)		Sample: IE01057-01		Prepared & Analyzed: 05/12/25					
pH	7.70	pH Units				7.75		0.6	10

Batch B532601 - 04-No Prep VOA - EPA 8260B

Blank (B532601-BLK1)		Prepared & Analyzed: 05/12/25							
Acetone	< 0.0500	mg/kg wet							
Acrolein	< 0.0500	mg/kg wet							
Acrylonitrile	< 0.0500	mg/kg wet							
Benzene	< 0.00500	mg/kg wet							
Bromobenzene	< 0.00500	mg/kg wet							
Bromochloromethane	< 0.00500	mg/kg wet							
Bromodichloromethane	< 0.00500	mg/kg wet							
Bromoform	< 0.00500	mg/kg wet							
Bromomethane	< 0.0100	mg/kg wet							
2-Butanone	< 0.0100	mg/kg wet							
n-Butylbenzene	< 0.00500	mg/kg wet							
sec-Butylbenzene	< 0.00500	mg/kg wet							
tert-Butylbenzene	< 0.00500	mg/kg wet							
Carbon disulfide	< 0.0100	mg/kg wet							
Carbon tetrachloride	< 0.00500	mg/kg wet							
Chlorobenzene	< 0.00500	mg/kg wet							
Chloroethane	< 0.0100	mg/kg wet							
Chloroform	< 0.00500	mg/kg wet							
Chloromethane	< 0.0100	mg/kg wet							
2-Chlorotoluene	< 0.00500	mg/kg wet							
4-Chlorotoluene	< 0.00500	mg/kg wet							
1,2-Dibromo-3-chloropropane	< 0.00500	mg/kg wet							
Dibromochloromethane	< 0.00500	mg/kg wet							



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Blank (B532601-BLK1)				Prepared & Analyzed: 05/12/25					
1,2-Dibromoethane	< 0.00500	mg/kg wet							
Dibromomethane	< 0.00500	mg/kg wet							
1,2-Dichlorobenzene	< 0.00500	mg/kg wet							
1,3-Dichlorobenzene	< 0.00500	mg/kg wet							
1,4-Dichlorobenzene	< 0.00500	mg/kg wet							
Dichlorodifluoromethane	< 0.0100	mg/kg wet							
1,1-Dichloroethane	< 0.00500	mg/kg wet							
1,2-Dichloroethane	< 0.00500	mg/kg wet							
1,1-Dichloroethene	< 0.00500	mg/kg wet							
cis-1,2-Dichloroethene	< 0.00500	mg/kg wet							
trans-1,2-Dichloroethene	< 0.00500	mg/kg wet							
1,2-Dichloroethene- Total	< 0.0100	mg/kg wet							
1,2-Dichloropropane	< 0.00500	mg/kg wet							
1,3-Dichloropropane	< 0.00500	mg/kg wet							
2,2-Dichloropropane	< 0.00500	mg/kg wet							
1,1-Dichloropropene	< 0.00500	mg/kg wet							
cis-1,3-Dichloropropene	< 0.00300	mg/kg wet							
trans-1,3-Dichloropropene	< 0.00300	mg/kg wet							
1,3-Dichloropropene - Total	< 0.00400	mg/kg wet							
Diethyl ether	< 0.00500	mg/kg wet							
Ethyl acetate	< 0.0100	mg/kg wet							
Ethylbenzene	< 0.00500	mg/kg wet							
Hexachlorobutadiene	< 0.0100	mg/kg wet							
n-Hexane	< 0.00500	mg/kg wet							
2-Hexanone	< 0.00500	mg/kg wet							
Isopropylbenzene	< 0.00500	mg/kg wet							
p-Isopropyl toluene	< 0.00500	mg/kg wet							
MTBE	< 0.00500	mg/kg wet							
4-Methyl-2-pentanone (MIBK)	< 0.00500	mg/kg wet							
Methylene chloride	< 0.00500	mg/kg wet							
Naphthalene	< 0.0120	mg/kg wet							
n-Propylbenzene	< 0.00500	mg/kg wet							
Styrene	< 0.00500	mg/kg wet							
1,1,1,2-Tetrachloroethane	< 0.00500	mg/kg wet							
1,1,2,2-Tetrachloroethane	< 0.00200	mg/kg wet							
Tetrachloroethene	< 0.00500	mg/kg wet							
Toluene	< 0.00500	mg/kg wet							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon)	< 0.00500	mg/kg wet							
1,2,3-Trichlorobenzene	< 0.00500	mg/kg wet							
1,2,4-Trichlorobenzene	< 0.00500	mg/kg wet							
1,1,1-Trichloroethane	< 0.00500	mg/kg wet							
1,1,2-Trichloroethane	< 0.00500	mg/kg wet							
Trichloroethene	< 0.00500	mg/kg wet							
Trichlorofluoromethane	< 0.0100	mg/kg wet							
1,2,3-Trichloropropane	< 0.00500	mg/kg wet							
1,2,4-Trimethylbenzene	< 0.00500	mg/kg wet							
1,3,5-Trimethylbenzene	< 0.00500	mg/kg wet							



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Blank (B532601-BLK1)				Prepared & Analyzed: 05/12/25					
Vinyl acetate	< 0.00500	mg/kg wet							
Vinyl chloride	< 0.00500	mg/kg wet							
Xylenes- Total	< 0.0150	mg/kg wet							
Surrogate: 4-Bromofluorobenzene	50.4	ug/L		50.00		101	53.6-133		
Surrogate: 1,2-Dichloroethane-d4	50.2	ug/L		50.00		100	60.2-146		
Surrogate: Toluene-d8	49.0	ug/L		50.00		98	64.6-128		
LCS (B532601-BS1)				Prepared & Analyzed: 05/12/25					
Acetone	0.0971	mg/kg wet		0.1000		97	74.9-134		
Acrolein	0.109	mg/kg wet		0.1250		87	42-158		
Acrylonitrile	0.0474	mg/kg wet		0.05000		95	60-138		
Benzene	0.0442	mg/kg wet		0.05000		88	66.9-121		
Bromobenzene	0.0491	mg/kg wet		0.05000		98	76-120		
Bromochloromethane	0.0491	mg/kg wet					80-137		
Bromodichloromethane	0.0460	mg/kg wet		0.05000		92	71.1-126		
Bromoform	0.0506	mg/kg wet		0.05000		101	74.1-137		
Bromomethane	0.0250	mg/kg wet		0.05000		50	39.4-143		
2-Butanone	0.0904	mg/kg wet		0.1000		90	61.5-144		
n-Butylbenzene	0.0487	mg/kg wet		0.05000		97	64.6-142		
sec-Butylbenzene	0.0481	mg/kg wet		0.05000		96	77.2-120		
tert-Butylbenzene	0.0461	mg/kg wet		0.05000		92	76.6-120		
Carbon disulfide	0.0460	mg/kg wet		0.05000		92	50-128		
Carbon tetrachloride	0.0460	mg/kg wet		0.05000		92	65.5-132		
Chlorobenzene	0.0485	mg/kg wet		0.05000		97	77.2-120		
Chloroethane	0.0478	mg/kg wet		0.05000		96	61.1-144		
Chloroform	0.0442	mg/kg wet		0.05000		88	65.9-120		
Chloromethane	0.0437	mg/kg wet		0.05000		87	54.9-127		
2-Chlorotoluene	0.0468	mg/kg wet		0.05000		94	77.2-120		
4-Chlorotoluene	0.0468	mg/kg wet		0.05000		94	76.1-120		
1,2-Dibromo-3-chloropropane	0.0464	mg/kg wet		0.05000		93	65.9-142		
Dibromochloromethane	0.0513	mg/kg wet		0.05000		103	78.1-128		
1,2-Dibromoethane	0.0502	mg/kg wet		0.05000		100	80-123		
Dibromomethane	0.0481	mg/kg wet		0.05000		96	69-127		
1,2-Dichlorobenzene	0.0471	mg/kg wet		0.05000		94	72.4-120		
1,3-Dichlorobenzene	0.0472	mg/kg wet		0.05000		94	74.2-120		
1,4-Dichlorobenzene	0.0486	mg/kg wet		0.05000		97	70.8-120		
Dichlorodifluoromethane	0.0423	mg/kg wet		0.05000		85	43-142		
1,1-Dichloroethane	0.0458	mg/kg wet		0.05000		92	66.7-121		
1,2-Dichloroethane	0.0473	mg/kg wet		0.05000		95	62.9-120		
1,1-Dichloroethene	0.0444	mg/kg wet		0.05000		89	64.3-123		
cis-1,2-Dichloroethene	0.0460	mg/kg wet		0.05000		92	69-121		
trans-1,2-Dichloroethene	0.0444	mg/kg wet		0.05000		89	67-120		
1,2-Dichloroethene- Total	< 0.0100	mg/kg wet					70-130		
1,2-Dichloropropane	0.0479	mg/kg wet		0.05000		96	66.7-125		
1,3-Dichloropropane	0.0510	mg/kg wet		0.05000		102	77.4-121		
2,2-Dichloropropane	0.0450	mg/kg wet		0.05000		90	70.9-120		
1,1-Dichloropropene	0.0466	mg/kg wet		0.05000		93	68.2-122		
cis-1,3-Dichloropropene	0.0501	mg/kg wet		0.05000		100	70.2-130		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
LCS (B532601-BS1)				Prepared & Analyzed: 05/12/25					
trans-1,3-Dichloropropene	0.0501	mg/kg wet		0.05000		100	80-128		
1,3-Dichloropropene - Total	< 0.00400	mg/kg wet					70-130		
Diethyl ether	0.0460	mg/kg wet					70-130		
Ethyl acetate	0.0457	mg/kg wet		0.05000		91	70-131		
Ethylbenzene	0.0467	mg/kg wet		0.05000		93	74.9-120		
Hexachlorobutadiene	0.0531	mg/kg wet		0.05000		106	70.4-124		
n-Hexane	0.0510	mg/kg wet		0.05000		102	64.9-135		
2-Hexanone	0.0946	mg/kg wet		0.1000		95	70.7-135		
Isopropylbenzene	0.0484	mg/kg wet		0.05000		97	75.5-120		
p-Isopropyl toluene	0.0468	mg/kg wet		0.05000		94	76.2-121		
MTBE	0.0470	mg/kg wet		0.05000		94	66.1-131		
4-Methyl-2-pentanone (MIBK)	0.0961	mg/kg wet		0.1000		96	74.9-134		
Methylene chloride	0.0436	mg/kg wet		0.05000		87	61.3-122		
Naphthalene	0.0478	mg/kg wet		0.05000		96	71.1-132		
n-Propylbenzene	0.0481	mg/kg wet		0.05000		96	76.1-120		
Styrene	0.0469	mg/kg wet		0.05000		94	71.4-131		
1,1,1,2-Tetrachloroethane	0.0496	mg/kg wet		0.05000		99	78.5-125		
1,1,2,2-Tetrachloroethane	0.0449	mg/kg wet		0.05000		90	73.6-127		
Tetrachloroethene	0.0476	mg/kg wet		0.05000		95	79.6-120		
Toluene	0.0455	mg/kg wet		0.05000		91	68.2-120		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon)	0.0478	mg/kg wet		0.05000		96	67-123		
1,2,3-Trichlorobenzene	0.0509	mg/kg wet		0.05000		102	67.8-138		
1,2,4-Trichlorobenzene	0.0504	mg/kg wet		0.05000		101	71.5-138		
1,1,1-Trichloroethane	0.0448	mg/kg wet		0.05000		90	69.9-120		
1,1,2-Trichloroethane	0.0465	mg/kg wet		0.05000		93	76.9-123		
Trichloroethene	0.0485	mg/kg wet		0.05000		97	70-120		
Trichlorofluoromethane	0.0485	mg/kg wet		0.05000		97	66.9-132		
1,2,3-Trichloropropane	0.0484	mg/kg wet		0.05000		97	72.3-126		
1,2,4-Trimethylbenzene	0.0484	mg/kg wet		0.05000		97	77.8-120		
1,3,5-Trimethylbenzene	0.0486	mg/kg wet		0.05000		97	77.7-120		
Vinyl acetate	0.0634	mg/kg wet		0.05000		127	72.1-138		
Vinyl chloride	0.0472	mg/kg wet		0.05000		94	65.7-132		
Surrogate: 4-Bromofluorobenzene	50.1	ug/L		50.00		100	53.6-133		
Surrogate: 1,2-Dichloroethane-d4	49.1	ug/L		50.00		98	60.2-146		
Surrogate: Toluene-d8	48.7	ug/L		50.00		97	64.6-128		
LCS Dup (B532601-BSD1)				Prepared & Analyzed: 05/12/25					
Acetone	0.0962	mg/kg wet		0.1000		96	74.9-134	0.9	40
Acrolein	0.112	mg/kg wet		0.1250		90	42-158	3	40
Acrylonitrile	0.0508	mg/kg wet		0.05000		102	60-138	7	40
Benzene	0.0444	mg/kg wet		0.05000		89	66.9-121	0.5	40
Bromobenzene	0.0473	mg/kg wet		0.05000		95	76-120	4	40
Bromochloromethane	0.0484	mg/kg wet					80-137	1	40
Bromodichloromethane	0.0452	mg/kg wet		0.05000		90	71.1-126	2	40
Bromoform	0.0489	mg/kg wet		0.05000		98	74.1-137	3	40
Bromomethane	0.0271	mg/kg wet		0.05000		54	39.4-143	8	40
2-Butanone	0.0906	mg/kg wet		0.1000		91	61.5-144	0.2	40
n-Butylbenzene	0.0487	mg/kg wet		0.05000		97	64.6-142	0.2	40



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
LCS Dup (B532601-BSD1)				Prepared & Analyzed: 05/12/25					
sec-Butylbenzene	0.0480	mg/kg wet		0.05000		96	77.2-120	0.08	40
tert-Butylbenzene	0.0466	mg/kg wet		0.05000		93	76.6-120	1	40
Carbon disulfide	0.0469	mg/kg wet		0.05000		94	50-128	2	40
Carbon tetrachloride	0.0465	mg/kg wet		0.05000		93	65.5-132	1	40
Chlorobenzene	0.0477	mg/kg wet		0.05000		95	77.2-120	2	40
Chloroethane	0.0501	mg/kg wet		0.05000		100	61.1-144	5	40
Chloroform	0.0442	mg/kg wet		0.05000		88	65.9-120	0.05	40
Chloromethane	0.0452	mg/kg wet		0.05000		90	54.9-127	3	40
2-Chlorotoluene	0.0465	mg/kg wet		0.05000		93	77.2-120	0.8	40
4-Chlorotoluene	0.0464	mg/kg wet		0.05000		93	76.1-120	0.9	40
1,2-Dibromo-3-chloropropane	0.0468	mg/kg wet		0.05000		94	65.9-142	0.9	40
Dibromochloromethane	0.0499	mg/kg wet		0.05000		100	78.1-128	3	40
1,2-Dibromoethane	0.0481	mg/kg wet		0.05000		96	80-123	4	40
Dibromomethane	0.0472	mg/kg wet		0.05000		94	69-127	2	40
1,2-Dichlorobenzene	0.0459	mg/kg wet		0.05000		92	72.4-120	3	40
1,3-Dichlorobenzene	0.0467	mg/kg wet		0.05000		93	74.2-120	1	40
1,4-Dichlorobenzene	0.0477	mg/kg wet		0.05000		95	70.8-120	2	40
Dichlorodifluoromethane	0.0443	mg/kg wet		0.05000		89	43-142	5	40
1,1-Dichloroethane	0.0465	mg/kg wet		0.05000		93	66.7-121	2	40
1,2-Dichloroethane	0.0461	mg/kg wet		0.05000		92	62.9-120	2	40
1,1-Dichloroethene	0.0454	mg/kg wet		0.05000		91	64.3-123	2	40
cis-1,2-Dichloroethene	0.0453	mg/kg wet		0.05000		91	69-121	1	40
trans-1,2-Dichloroethene	0.0451	mg/kg wet		0.05000		90	67-120	2	40
1,2-Dichloroethene- Total	< 0.0100	mg/kg wet					70-130		40
1,2-Dichloropropane	0.0469	mg/kg wet		0.05000		94	66.7-125	2	40
1,3-Dichloropropane	0.0494	mg/kg wet		0.05000		99	77.4-121	3	40
2,2-Dichloropropane	0.0455	mg/kg wet		0.05000		91	70.9-120	1	40
1,1-Dichloropropene	0.0473	mg/kg wet		0.05000		95	68.2-122	1	40
cis-1,3-Dichloropropene	0.0496	mg/kg wet		0.05000		99	70.2-130	1	40
trans-1,3-Dichloropropene	0.0483	mg/kg wet		0.05000		97	80-128	4	40
1,3-Dichloropropene - Total	< 0.00400	mg/kg wet					70-130		40
Diethyl ether	0.0445	mg/kg wet					70-130	3	40
Ethyl acetate	0.0458	mg/kg wet		0.05000		92	70-131	0.2	40
Ethylbenzene	0.0467	mg/kg wet		0.05000		93	74.9-120	0	40
Hexachlorobutadiene	0.0532	mg/kg wet		0.05000		106	70.4-124	0.1	40
n-Hexane	0.0502	mg/kg wet		0.05000		100	64.9-135	2	40
2-Hexanone	0.0940	mg/kg wet		0.1000		94	70.7-135	0.6	40
Isopropylbenzene	0.0482	mg/kg wet		0.05000		96	75.5-120	0.4	40
p-Isopropyl toluene	0.0466	mg/kg wet		0.05000		93	76.2-121	0.3	40
MTBE	0.0454	mg/kg wet		0.05000		91	66.1-131	4	40
4-Methyl-2-pentanone (MIBK)	0.0938	mg/kg wet		0.1000		94	74.9-134	2	40
Methylene chloride	0.0430	mg/kg wet		0.05000		86	61.3-122	1	40
Naphthalene	0.0457	mg/kg wet		0.05000		91	71.1-132	4	40
n-Propylbenzene	0.0480	mg/kg wet		0.05000		96	76.1-120	0.1	40
Styrene	0.0458	mg/kg wet		0.05000		92	71.4-131	2	40
1,1,1,2-Tetrachloroethane	0.0485	mg/kg wet		0.05000		97	78.5-125	2	40
1,1,2,2-Tetrachloroethane	0.0443	mg/kg wet		0.05000		89	73.6-127	1	40



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
LCS Dup (B532601-BSD1)				Prepared & Analyzed: 05/12/25					
Tetrachloroethene	0.0477	mg/kg wet		0.05000		95	79.6-120	0.08	40
Toluene	0.0457	mg/kg wet		0.05000		91	68.2-120	0.4	40
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon)	0.0485	mg/kg wet		0.05000		97	67-123	2	40
1,2,3-Trichlorobenzene	0.0470	mg/kg wet		0.05000		94	67.8-138	8	40
1,2,4-Trichlorobenzene	0.0471	mg/kg wet		0.05000		94	71.5-138	7	40
1,1,1-Trichloroethane	0.0460	mg/kg wet		0.05000		92	69.9-120	3	40
1,1,2-Trichloroethane	0.0452	mg/kg wet		0.05000		90	76.9-123	3	40
Trichloroethene	0.0492	mg/kg wet		0.05000		98	70-120	1	40
Trichlorofluoromethane	0.0500	mg/kg wet		0.05000		100	66.9-132	3	40
1,2,3-Trichloropropane	0.0475	mg/kg wet		0.05000		95	72.3-126	2	40
1,2,4-Trimethylbenzene	0.0476	mg/kg wet		0.05000		95	77.8-120	1	40
1,3,5-Trimethylbenzene	0.0478	mg/kg wet		0.05000		96	77.7-120	2	40
Vinyl acetate	0.0625	mg/kg wet		0.05000		125	72.1-138	1	40
Vinyl chloride	0.0496	mg/kg wet		0.05000		99	65.7-132	5	40
Surrogate: 4-Bromofluorobenzene	49.8	ug/L		50.00		100	53.6-133		
Surrogate: 1,2-Dichloroethane-d4	48.3	ug/L		50.00		97	60.2-146		
Surrogate: Toluene-d8	48.6	ug/L		50.00		97	64.6-128		
Matrix Spike (B532601-MS1)				Sample: IE01764-09		Prepared & Analyzed: 05/12/25			
Acetone	0.121	mg/kg dry		0.07744	0.0931	36	10-200		
Acrolein	0.0411	mg/kg dry	R	0.09680	ND	42	10-126		
Acrylonitrile	0.0207	mg/kg dry	R	0.03872	ND	54	13.8-143		
Benzene	0.0191	mg/kg dry	R	0.03872	0.000715	47	46-149		
Bromobenzene	0.00805	mg/kg dry	R	0.03872	ND	21	10-142		
Bromochloromethane	0.0186	mg/kg dry	R		ND		70-130		
Bromodichloromethane	0.0158	mg/kg dry	R	0.03872	ND	41	10-166		
Bromoform	0.0105	mg/kg dry	R	0.03872	ND	27	10-164		
Bromomethane	0.0143	mg/kg dry		0.03872	ND	37	10-150		
2-Butanone	0.0390	mg/kg dry	R	0.07744	0.00703	41	10-195		
n-Butylbenzene	0.00866	mg/kg dry	R	0.03872	ND	22	10-131		
sec-Butylbenzene	0.00908	mg/kg dry	R	0.03872	ND	23	10-135		
tert-Butylbenzene	0.00927	mg/kg dry	R	0.03872	ND	24	10-140		
Carbon disulfide	0.0284	mg/kg dry		0.03872	0.00500	60	17.6-136		
Carbon tetrachloride	0.0235	mg/kg dry		0.03872	ND	61	10-174		
Chlorobenzene	0.0111	mg/kg dry	R	0.03872	ND	29	15.9-145		
Chloroethane	0.0294	mg/kg dry		0.03872	ND	76	27.4-168		
Chloroform	0.0193	mg/kg dry	R	0.03872	ND	50	30.3-144		
Chloromethane	0.0259	mg/kg dry		0.03872	ND	67	28.3-159		
2-Chlorotoluene	0.00805	mg/kg dry	R	0.03872	ND	21	10-141		
4-Chlorotoluene	0.00805	mg/kg dry	R	0.03872	ND	21	10-142		
1,2-Dibromo-3-chloropropane	0.00894	mg/kg dry	R	0.03872	ND	23	10-178		
Dibromochloromethane	0.0139	mg/kg dry	R	0.03872	ND	36	10-167		
1,2-Dibromoethane	0.0146	mg/kg dry	R	0.03872	ND	38	10-162		
Dibromomethane	0.0165	mg/kg dry	R	0.03872	ND	42	10-167		
1,2-Dichlorobenzene	0.00583	mg/kg dry	R	0.03872	ND	15	10-137		
1,3-Dichlorobenzene	0.00643	mg/kg dry	R	0.03872	ND	17	10-141		
1,4-Dichlorobenzene	0.00652	mg/kg dry	R	0.03872	ND	17	10-142		
Dichlorodifluoromethane	0.0340	mg/kg dry		0.03872	ND	88	31.4-157		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike (B532601-MS1)		Sample: IE01764-09			Prepared & Analyzed: 05/12/25				
1,1-Dichloroethane	0.0230	mg/kg dry	R	0.03872	ND	59	33.7-161		
1,2-Dichloroethane	0.0184	mg/kg dry	R	0.03872	ND	48	27.4-144		
1,1-Dichloroethene	0.0277	mg/kg dry		0.03872	ND	71	28.3-172		
cis-1,2-Dichloroethene	0.0194	mg/kg dry	R	0.03872	ND	50	22.4-162		
trans-1,2-Dichloroethene	0.0230	mg/kg dry	R	0.03872	ND	59	31.4-154		
1,2-Dichloroethene- Total	< 0.00774	mg/kg dry			ND		70-130		
1,2-Dichloropropane	0.0184	mg/kg dry	R	0.03872	ND	48	31.9-152		
1,3-Dichloropropane	0.0160	mg/kg dry	R	0.03872	ND	41	19.3-164		
2,2-Dichloropropane	0.0245	mg/kg dry		0.03872	ND	63	57.6-136		
1,1-Dichloropropene	0.0227	mg/kg dry		0.03872	ND	59	45.8-139		
cis-1,3-Dichloropropene	0.0164	mg/kg dry	R	0.03872	ND	42	10-169		
trans-1,3-Dichloropropene	0.0146	mg/kg dry	R	0.03872	ND	38	10-167		
1,3-Dichloropropene - Total	< 0.00310	mg/kg dry			ND		70-130		
Diethyl ether	0.0192	mg/kg dry	R		ND		70-130		
Ethyl acetate	0.0196	mg/kg dry	R	0.03872	ND	51	10-186		
Ethylbenzene	0.0129	mg/kg dry	Q3, R	0.03872	ND	33	38-149		
Hexachlorobutadiene	0.00677	mg/kg dry	R	0.03872	ND	17	10-130		
n-Hexane	0.0289	mg/kg dry		0.03872	0.00337	66	32.2-154		
2-Hexanone	0.0589	mg/kg dry	R	0.07744	ND	76	10-200		
Isopropylbenzene	0.0113	mg/kg dry	R	0.03872	ND	29	17.7-136		
p-Isopropyl toluene	0.00808	mg/kg dry	R	0.03872	ND	21	10-130		
MTBE	0.0190	mg/kg dry	Q2, R	0.03872	ND	49	36.6-167		
4-Methyl-2-pentanone (MIBK)	0.0388	mg/kg dry	R	0.07744	ND	50	10-200		
Methylene chloride	0.0195	mg/kg dry	R	0.03872	ND	50	14.7-169		
Naphthalene	0.00245	mg/kg dry	Q3	0.03872	ND	6	10-160		
n-Propylbenzene	0.00968	mg/kg dry	R	0.03872	ND	25	10-134		
Styrene	0.00789	mg/kg dry	R	0.03872	ND	20	10-152		
1,1,1,2-Tetrachloroethane	0.0132	mg/kg dry	R	0.03872	ND	34	13.9-152		
1,1,1,2-Tetrachloroethane	0.0114	mg/kg dry	R	0.03872	ND	30	10-194		
Tetrachloroethene	0.0153	mg/kg dry	Q3, R	0.03872	ND	40	45.1-132		
Toluene	0.0167	mg/kg dry	R	0.03872	0.00122	40	37.9-145		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon)	0.0338	mg/kg dry		0.03872	ND	87	61.8-131		
1,2,3-Trichlorobenzene	0.00268	mg/kg dry	Q3, R	0.03872	ND	7	10-141		
1,2,4-Trichlorobenzene	0.00327	mg/kg dry	Q3, R	0.03872	ND	8	10-140		
1,1,1-Trichloroethane	0.0235	mg/kg dry		0.03872	ND	61	54.7-133		
1,1,2-Trichloroethane	0.0150	mg/kg dry	R	0.03872	ND	39	25-162		
Trichloroethene	0.0184	mg/kg dry	R	0.03872	ND	48	35.1-146		
Trichlorofluoromethane	0.0349	mg/kg dry		0.03872	ND	90	34.4-145		
1,2,3-Trichloropropane	0.0117	mg/kg dry	R	0.03872	ND	30	10-158		
1,2,4-Trimethylbenzene	0.00784	mg/kg dry	R	0.03872	ND	20	10-135		
1,3,5-Trimethylbenzene	0.00859	mg/kg dry	R	0.03872	ND	22	10-146		
Vinyl acetate	0.0259	mg/kg dry	R	0.03872	ND	67	10-184		
Vinyl chloride	0.0327	mg/kg dry		0.03872	ND	85	40.4-163		
Surrogate: 4-Bromofluorobenzene	47.1	ug/L		50.00		94	53.6-133		
Surrogate: 1,2-Dichloroethane-d4	56.6	ug/L		50.00		113	60.2-146		
Surrogate: Toluene-d8	50.3	ug/L		50.00		101	64.6-128		
Matrix Spike Dup (B532601-MSD1)		Sample: IE01764-09			Prepared & Analyzed: 05/12/25				



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike Dup (B532601-MSD1)	Sample: IE01764-09			Prepared & Analyzed: 05/12/25					
Acetone	0.0903	mg/kg dry	Q2	0.07512	0.0931	NR	10-200	29	40
Acrolein	0.0240	mg/kg dry	R	0.09390	ND	26	10-126	52	40
Acrylonitrile	0.00986	mg/kg dry	R	0.03756	ND	26	13.8-143	71	40
Benzene	0.0115	mg/kg dry	R	0.03756	0.000715	29	46-149	50	40
Bromobenzene	0.00423	mg/kg dry	R	0.03756	ND	11	10-142	62	40
Bromochloromethane	0.00981	mg/kg dry	R		ND		70-130	62	40
Bromodichloromethane	0.00820	mg/kg dry	R	0.03756	ND	22	10-166	63	40
Bromoform	0.00502	mg/kg dry	R	0.03756	ND	13	10-164	71	40
Bromomethane	0.0105	mg/kg dry		0.03756	ND	28	10-150	31	40
2-Butanone	0.0204	mg/kg dry	R	0.07512	0.00703	18	10-195	63	40
n-Butylbenzene	0.00475	mg/kg dry	R	0.03756	ND	13	10-131	58	40
sec-Butylbenzene	0.00567	mg/kg dry	R	0.03756	ND	15	10-135	46	40
tert-Butylbenzene	0.00586	mg/kg dry	R	0.03756	ND	16	10-140	45	40
Carbon disulfide	0.0201	mg/kg dry		0.03756	0.00500	40	17.6-136	34	40
Carbon tetrachloride	0.0168	mg/kg dry		0.03756	ND	45	10-174	33	40
Chlorobenzene	0.00617	mg/kg dry	R	0.03756	ND	16	15.9-145	57	40
Chloroethane	0.0222	mg/kg dry		0.03756	ND	59	27.4-168	28	40
Chloroform	0.0110	mg/kg dry	Q2, R	0.03756	ND	29	30.3-144	55	40
Chloromethane	0.0193	mg/kg dry		0.03756	ND	51	28.3-159	29	40
2-Chlorotoluene	0.00475	mg/kg dry	R	0.03756	ND	13	10-141	52	40
4-Chlorotoluene	0.00475	mg/kg dry	R	0.03756	ND	13	10-142	52	40
1,2-Dibromo-3-chloropropane	0.00395	mg/kg dry	R	0.03756	ND	11	10-178	77	40
Dibromochloromethane	0.00669	mg/kg dry	R	0.03756	ND	18	10-167	70	40
1,2-Dibromoethane	0.00702	mg/kg dry	R	0.03756	ND	19	10-162	70	40
Dibromomethane	0.00818	mg/kg dry	R	0.03756	ND	22	10-167	67	40
1,2-Dichlorobenzene	0.00308	mg/kg dry	Q2, R	0.03756	ND	8	10-137	62	40
1,3-Dichlorobenzene	0.00358	mg/kg dry	Q2, R	0.03756	ND	10	10-141	57	40
1,4-Dichlorobenzene	0.00365	mg/kg dry	Q2, R	0.03756	ND	10	10-142	56	40
Dichlorodifluoromethane	0.0309	mg/kg dry		0.03756	ND	82	31.4-157	9	40
1,1-Dichloroethane	0.0140	mg/kg dry	R	0.03756	ND	37	33.7-161	49	40
1,2-Dichloroethane	0.00929	mg/kg dry	Q2, R	0.03756	ND	25	27.4-144	66	40
1,1-Dichloroethene	0.0196	mg/kg dry		0.03756	ND	52	28.3-172	34	40
cis-1,2-Dichloroethene	0.0108	mg/kg dry	R	0.03756	ND	29	22.4-162	57	40
trans-1,2-Dichloroethene	0.0146	mg/kg dry	R	0.03756	ND	39	31.4-154	45	40
1,2-Dichloroethene- Total	< 0.00751	mg/kg dry			ND		70-130		40
1,2-Dichloropropane	0.0100	mg/kg dry	Q2, R	0.03756	ND	27	31.9-152	59	40
1,3-Dichloropropane	0.00773	mg/kg dry	R	0.03756	ND	21	19.3-164	70	40
2,2-Dichloropropane	0.0165	mg/kg dry	Q2	0.03756	ND	44	57.6-136	39	40
1,1-Dichloropropene	0.0159	mg/kg dry	Q2	0.03756	ND	42	45.8-139	35	40
cis-1,3-Dichloropropene	0.00832	mg/kg dry	R	0.03756	ND	22	10-169	65	40
trans-1,3-Dichloropropene	0.00717	mg/kg dry	R	0.03756	ND	19	10-167	68	40
1,3-Dichloropropene - Total	< 0.00300	mg/kg dry			ND		70-130		40
Diethyl ether	0.00965	mg/kg dry	R		ND		70-130	66	40
Ethyl acetate	0.00991	mg/kg dry	R	0.03756	ND	26	10-186	66	40
Ethylbenzene	0.00801	mg/kg dry	Q3, R	0.03756	ND	21	38-149	47	40
Hexachlorobutadiene	0.00390	mg/kg dry	R	0.03756	ND	10	10-130	54	40
n-Hexane	0.0229	mg/kg dry		0.03756	0.00337	52	32.2-154	23	40



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	
Matrix Spike Dup (B532601-MSD1)		Sample: IE01764-09			Prepared & Analyzed: 05/12/25					
2-Hexanone	0.0364	mg/kg dry	R	0.07512	ND	49	10-200	47	40	
Isopropylbenzene	0.00715	mg/kg dry	R	0.03756	ND	19	17.7-136	45	40	
p-Isopropyl toluene	0.00491	mg/kg dry	R	0.03756	ND	13	10-130	49	40	
MTBE	0.00961	mg/kg dry	Q2, R	0.03756	ND	26	36.6-167	66	40	
4-Methyl-2-pentanone (MIBK)	0.0180	mg/kg dry	R	0.07512	ND	24	10-200	73	40	
Methylene chloride	0.0108	mg/kg dry	R	0.03756	ND	29	14.7-169	57	40	
Naphthalene	< 0.00901	mg/kg dry	Q3	0.03756	ND		10-160		40	
n-Propylbenzene	0.00612	mg/kg dry	R	0.03756	ND	16	10-134	45	40	
Styrene	0.00413	mg/kg dry	R	0.03756	ND	11	10-152	63	40	
1,1,1,2-Tetrachloroethane	0.00703	mg/kg dry	R	0.03756	ND	19	13.9-152	61	40	
1,1,2,2-Tetrachloroethane	0.00530	mg/kg dry	R	0.03756	ND	14	10-194	73	40	
Tetrachloroethane	0.0101	mg/kg dry	Q3, R	0.03756	ND	27	45.1-132	42	40	
Toluene	0.0102	mg/kg dry	Q2, R	0.03756	0.00122	24	37.9-145	49	40	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon)	0.0269	mg/kg dry		0.03756	ND	71	61.8-131	23	40	
1,2,3-Trichlorobenzene	0.00146	mg/kg dry	Q3, R	0.03756	ND	4	10-141	59	40	
1,2,4-Trichlorobenzene	0.00178	mg/kg dry	Q3, R	0.03756	ND	5	10-140	59	40	
1,1,1-Trichloroethane	0.0162	mg/kg dry	Q2	0.03756	ND	43	54.7-133	37	40	
1,1,2-Trichloroethane	0.00741	mg/kg dry	Q2, R	0.03756	ND	20	25-162	68	40	
Trichloroethene	0.0118	mg/kg dry	Q2, R	0.03756	ND	31	35.1-146	44	40	
Trichlorofluoromethane	0.0312	mg/kg dry		0.03756	ND	83	34.4-145	11	40	
1,2,3-Trichloropropane	0.00533	mg/kg dry	R	0.03756	ND	14	10-158	75	40	
1,2,4-Trimethylbenzene	0.00466	mg/kg dry	R	0.03756	ND	12	10-135	51	40	
1,3,5-Trimethylbenzene	0.00519	mg/kg dry	R	0.03756	ND	14	10-146	49	40	
Vinyl acetate	0.0123	mg/kg dry	R	0.03756	ND	33	10-184	71	40	
Vinyl chloride	0.0270	mg/kg dry		0.03756	ND	72	40.4-163	19	40	
Surrogate: 4-Bromofluorobenzene	47.3	ug/L		50.00		95	53.6-133			
Surrogate: 1,2-Dichloroethane-d4	57.8	ug/L		50.00		116	60.2-146			
Surrogate: Toluene-d8	49.9	ug/L		50.00		100	64.6-128			

Batch B532643 - 04 SW 3550 (8081/8082) - EPA 8082

Blank (B532643-BLK1)		Prepared: 05/13/25 Analyzed: 05/14/25							
Aroclor 1016	< 0.02	mg/kg wet							
Aroclor 1221	< 0.02	mg/kg wet							
Aroclor 1232	< 0.02	mg/kg wet							
Aroclor 1242	< 0.02	mg/kg wet							
Aroclor 1248	< 0.02	mg/kg wet							
Aroclor 1254	< 0.02	mg/kg wet							
Aroclor 1260	< 0.02	mg/kg wet							
Aroclor 1262	< 0.02	mg/kg wet							
Aroclor 1268	< 0.02	mg/kg wet							
Aroclors - Total	< 0.02	mg/kg wet							
Surrogate: TCMX	0.012	mg/kg wet		0.01316		93	45.2-173		
Surrogate: Decachlorobiphenyl	0.013	mg/kg wet		0.01316		102	23.9-152		

LCS (B532643-BS1)		Prepared: 05/13/25 Analyzed: 05/14/25							
Aroclor 1016	< 0.02	mg/kg wet					74.5-132		
Aroclor 1242	< 0.02	mg/kg wet					70-130		
Aroclor 1260	< 0.02	mg/kg wet					57.1-148		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
LCS (B532643-BS1)				Prepared: 05/13/25 Analyzed: 05/14/25					
Aroclor 1262	< 0.02	mg/kg wet					70-130		
Aroclor 1268	< 0.02	mg/kg wet					70-130		
Surrogate: TCMX	0.0	mg/kg wet		0.01329			45.2-173		
Surrogate: Decachlorobiphenyl	0.0	mg/kg wet		0.01329			23.9-152		
LCS (B532643-BS2)				Prepared: 05/13/25 Analyzed: 05/14/25					
Aroclor 1016	0.1	mg/kg wet		0.1620		79	74.5-132		
Aroclor 1242	< 0.02	mg/kg wet					70-130		
Aroclor 1260	0.1	mg/kg wet		0.1620		70	57.1-148		
Aroclor 1262	< 0.02	mg/kg wet					70-130		
Aroclor 1268	< 0.02	mg/kg wet					70-130		
Surrogate: TCMX	0.011	mg/kg wet		0.01296		88	45.2-173		
Surrogate: Decachlorobiphenyl	0.014	mg/kg wet		0.01296		110	23.9-152		
Matrix Spike (B532643-MS1)				Sample: IE01764-02		Prepared: 05/13/25 Analyzed: 05/14/25			
Aroclor 1016	< 0.02	mg/kg dry			ND		46.4-155		
Aroclor 1242	< 0.02	mg/kg dry			ND		70-130		
Aroclor 1260	< 0.02	mg/kg dry			ND		36.8-151		
Aroclor 1262	< 0.02	mg/kg dry			ND		70-130		
Aroclor 1268	< 0.02	mg/kg dry			ND		70-130		
Surrogate: TCMX	0.0	mg/kg dry		0.01657			45.2-173		
Surrogate: Decachlorobiphenyl	0.0	mg/kg dry		0.01657			23.9-152		
Matrix Spike (B532643-MS2)				Sample: IE01764-03		Prepared: 05/13/25 Analyzed: 05/14/25			
Aroclor 1016	0.2	mg/kg dry		0.2053	ND	83	46.4-155		
Aroclor 1242	< 0.02	mg/kg dry			ND		70-130		
Aroclor 1260	0.1	mg/kg dry		0.2053	0.008	51	36.8-151		
Aroclor 1262	< 0.02	mg/kg dry			ND		70-130		
Aroclor 1268	< 0.02	mg/kg dry			ND		70-130		
Surrogate: TCMX	0.012	mg/kg dry		0.01642		75	45.2-173		
Surrogate: Decachlorobiphenyl	0.014	mg/kg dry		0.01642		85	23.9-152		
Matrix Spike Dup (B532643-MSD1)				Sample: IE01764-02		Prepared: 05/13/25 Analyzed: 05/14/25			
Aroclor 1016	< 0.02	mg/kg dry			ND		46.4-155		40
Aroclor 1242	< 0.02	mg/kg dry			ND		70-130		40
Aroclor 1260	< 0.02	mg/kg dry			ND		36.8-151		40
Aroclor 1262	< 0.02	mg/kg dry			ND		70-130		40
Aroclor 1268	< 0.02	mg/kg dry			ND		70-130		40
Surrogate: TCMX	0.0	mg/kg dry		0.01627			45.2-173		
Surrogate: Decachlorobiphenyl	0.0	mg/kg dry		0.01627			23.9-152		
Matrix Spike Dup (B532643-MSD2)				Sample: IE01764-03		Prepared: 05/13/25 Analyzed: 05/14/25			
Aroclor 1016	0.2	mg/kg dry		0.2058	ND	83	46.4-155	0.02	40
Aroclor 1242	< 0.02	mg/kg dry			ND		70-130		40
Aroclor 1260	0.1	mg/kg dry		0.2058	0.008	59	36.8-151	14	40
Aroclor 1262	< 0.02	mg/kg dry			ND		70-130		40
Aroclor 1268	< 0.02	mg/kg dry			ND		70-130		40
Surrogate: TCMX	0.013	mg/kg dry		0.01647		78	45.2-173		
Surrogate: Decachlorobiphenyl	0.016	mg/kg dry		0.01647		95	23.9-152		
Batch B532645 - 04-SW 7471A - SW 7471									
Blank (B532645-BLK1)				Prepared & Analyzed: 05/13/25					



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Blank (B532645-BLK1)				Prepared & Analyzed: 05/13/25					
Mercury	< 0.0370	mg/kg wet							
LCS (B532645-BS1)				Prepared & Analyzed: 05/13/25					
Mercury	0.00916	mg/kg wet		0.009259		99	80-120		
Matrix Spike (B532645-MS1)				Sample: IE01403-01RE1 Prepared & Analyzed: 05/13/25					
Mercury	4.54	mg/kg dry		4.448	0.813	84	75-125		
Matrix Spike Dup (B532645-MSD1)				Sample: IE01403-01RE1 Prepared & Analyzed: 05/13/25					
Mercury	4.52	mg/kg dry		4.283	0.813	87	75-125	0.5	20
<u>Batch B534017 - 04 SW 3010A TCLP - EPA 6010B</u>									
Blank (B534017-BLK1)				Prepared & Analyzed: 05/29/25					
Chromium	< 0.00556	mg/L							
LCS (B534017-BS1)				Prepared & Analyzed: 05/29/25					
Chromium	0.291	mg/L		0.2222		131	80-120		
Matrix Spike (B534017-MS1)				Sample: IE01764-05 Prepared & Analyzed: 05/29/25					
Chromium	0.285	mg/L		0.2222	0.00468	126	70-130		
Matrix Spike Dup (B534017-MSD1)				Sample: IE01764-05 Prepared & Analyzed: 05/29/25					
Chromium	0.286	mg/L		0.2222	0.00468	126	70-130	0.3	20
Dilution Check (B534017-SRL1)				Sample: IE01764-05 Prepared & Analyzed: 05/29/25					
Chromium	0.00531	mg/L			0.00468			13	200
<u>Batch B534121 - 04 SW 3010A TCLP - EPA 6010B</u>									
Blank (B534121-BLK1)				Prepared: 05/30/25 Analyzed: 06/02/25					
Chromium	< 0.00556	mg/L							
LCS (B534121-BS1)				Prepared: 05/30/25 Analyzed: 06/02/25					
Chromium	0.216	mg/L		0.2222		97	80-120		
Matrix Spike (B534121-MS1)				Sample: IE04207-01 Prepared: 05/30/25 Analyzed: 06/02/25					
Chromium	0.215	mg/L		0.2222	0.00534	94	70-130		
Matrix Spike Dup (B534121-MSD1)				Sample: IE04207-01 Prepared: 05/30/25 Analyzed: 06/02/25					
Chromium	0.219	mg/L		0.2222	0.00534	96	70-130	2	20
Dilution Check (B534121-SRL1)				Sample: IE04207-01 Prepared: 05/30/25 Analyzed: 06/02/25					
Chromium	0.00638	mg/L			0.00534			18	200



NOTES

Specifications regarding method revisions, method modifications, and calculations used for analysis are available upon request. Please contact your project manager.

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050

TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615

TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553

Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)

Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807

USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050

Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050

Qualifiers

- BS1 Blank Spike recovery exceeds the acceptance criteria. Sample result is less than the method reporting limit.
- J Estimated value; value between the Method Detection Limit and Method Reporting Limit.
- Mrl Reporting limit set between LOQ and MDL
- Q1 Matrix Spike failed % recovery acceptance limits. The associated blank spike recovery was acceptable.
- Q2 Matrix Spike Duplicate failed % recovery acceptance limits. The associated blank spike recovery was acceptable.
- Q3 Matrix Spike/Matrix Spike Duplicate both failed % recovery acceptance limits. The associated blank spike recovery was acceptable.
- Q4 The matrix spike recovery result is unusable since the analyte concentration in the sample is greater than four times the spike level. The associated blank spike was acceptable.
- R Matrix Spike/Matrix Spike Duplicate Failed %Relative Percent Difference criterion.
- V2 Acceptance criteria for the Continuing Calibration Verification (CCV) were exceeded high with associated non-detect samples. The associated non-detect results are qualified and reported.
- X Associated internal standard above upper limit of acceptance due to matrix interference present in the chromatography. Results biased low. Sample visually non-detect for associated analytes.
- Xa Internal standard recovery is low. Data has a potential high bias. Target analytes are ND and/or <MRL.
- Xb MS recovery outside acceptance criteria. Matrix interference, verified by post digestion spike
- Xc MS/MSD outside acceptance criteria. Matrix interference confirmed by post spike.



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

A handwritten signature in black ink that reads "Diane Billings".



Certified by: Diane Billings, Project Manager

IED1764

Pace® Location Requested (City/State): CHAIN-OF-CUSTODY Analytical Request Document
 Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company Name: Hampton Lenzini and Renwick
Street Address: 1707 N Randall Road Suite 100
 Elgin IL 60123
Customer Project #: Fullerton PSI 24.0043
Project Name: Fullerton PSI
Site Collection Info/Facility ID (as applicable):

Contact/Report To: Kate Kasch Schulstad
Phone #:
E-Mail: kkasch@hireng.com
Cc E-Mail: kfmup@hireng.com
Invoice to:
Invoice E-mail:
Purchase Order # (if applicable):
Quote #:

County / State of origin of sample(s):
Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [] Yes [] No
TACO & CCDD
Rush (Pre-approval required):
 [] Same Day [] 1 Day [] 2 Day [] 3 Day Other _____
Date Results Requested:
 [] Other _____

Time Zone Collected: [] AK [] PT [] MT [] CT [] ET
Data Deliverables:
 [] Level II [] Level III [] Level IV
 [] EQUIS
 [] Other _____

Matrix *: Soil Grab
Comp / Grab: 8
Composite Start: Date: 05/07/2025 Time: 10:20
 Date: 05/07/2025 Time: 10:45
 Date: 05/07/2025 Time: 11:15
 Date: 05/07/2025 Time: 11:30
 Date: 05/07/2025 Time: 11:45
 Date: 05/07/2025 Time: 12:05
 Date: 05/07/2025 Time: 12:30
 Date: 05/07/2025 Time: 12:50
 Date: 05/07/2025 Time: 1:30

Customer Sample ID: SB-1, SB-2, SB-3, SB-4, SB-5, SB-6, SB-7, SB-8, SB-9
Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SS), Oil (OL), Vape (VP), Tissue (TS), Biossily (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Additional Instructions from Pace®:
 Collected By: Kayla Furrup
 Printed Name: Kayla Furrup
 Signature: [Signature]

Received by (Company, Signature):
 Received by (Company, Signature): [Signature]
 Received by (Company, Signature): [Signature]
 Received by (Company, Signature): [Signature]



LAB USE ONLY - Affix Workorder/Label Here
 Scan QR Code for instructions

Specify Container Size **
 *** Preservative Types ***
 (4) 125mL, (5) 100mL, (6) 40mL Vial, (7) EnCore, (8) TerraCore, (9) 50mL, (10) Other
 *** Preservative Types ***
 (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Acetic Acid, (10) Mech., (11) Other

Analysis Requested
 VOCS
 Semi-VOCS
 PNAs
 RCRA Metals
 PCBS
 PH

Lab Use Only
 AccNum / Client ID:
 Table #:
 Profile / Template:
 Prelog / Bottle Ord. ID:
 Preservation non-conformance identified for sample

Proj. Mgr.:
 IR Gun # 68
 Correction Factor (Deg C) -0.2
 Observed Temp (Deg C) 5.2
 Corrected Temp (Deg C) 5.0
 Delivery Method: FedEx UPS Walkin USPS Jitter

Customer Remarks / Special Conditions / Possible Hazards:
 # Coolers: []
 Thermometer ID: []
 Correction Factor (C): []
 Obs. Temp (C): []
 Corrected Temp (C): []
 On Ice: []

Tracking Number:
 Date/Time: 5/8/25 8:41
 Delivered by: [] In-Person [] Courier
 [] FedEx [] UPS [] Other
 Page: 5/9 of 25
 Date/Time: 5/8/25 12:30
 Date/Time: 5/8/25 14:43
 Date/Time: 5/9/25 6:20

ENV-FRM-PEOR-0098 v05_Sample Condition Upon Receipt

Client Name: HLR Work Order #: IED1764 Completed by / Date: [Signature] 5/9/25

Custody seal on cooler/box present and seal intact:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Chain of Custody (CoC) Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
CoC is Legible:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sampler Name Present on CoC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sampler Signature Present on CoC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Collection Date Present on CoC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Collection Time Present on CoC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
CoC Relinquished by Client:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Unique Sample ID's Present on CoC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
CoC and Sample Container Labels Match:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample chilling process started prior to receipt: If yes, what type of ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Wet <input type="checkbox"/> Blue
Samples received within temperature compliance: ($\leq 6^{\circ}\text{C}$, but above freezing or received same day collected and chill process started prior to receipt)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Container(s) Received Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Containers Received Labeled and Labels are Legible:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Appropriate Bottles Received for Analysis Requested:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sufficient Sample Volume Received:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
USDA Regulated Soil: Country of Origin: _____ State of Origin: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Trip Blank(s) Received: If present, are they Listed on CoC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No
VOA vials are free of any headspace larger than pea sized bubble (>6mm) – Applies to methods 8260, 624, 524.2 - including THM vials *If headspace is present, note sample ID and # of vials	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
All (Non-Field) Analysis Received Within Hold Times:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Rush Turn Around Time Requested or Time Sensitive Analysis:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Short Hold Time Analysis (48 Hours or Less):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Client Notification/ Resolution: If checked, please see attached form for additional comments

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

PM Review is documented electronically in LIMS. By releasing the project, the PM acknowledges they have reviewed the sample.



BLUFF CITY MATERIALS, INC

**2252 SOUTHWIND BLVD
BARTLETT, IL 60103**

8 July 2025

Kate Kasch Schulstad P.E.
Hampton Lenzini and Renwick Inc.
380 Shepard Dr.
Elgin, IL 60123
Office: 847-697-6700
Cell: 815-404-0753
Email:kkasch@hlreng.com

Re: Letter of Acceptance
Fullerton Ave-Gary to Schmale CCDD Project

Dear Ms. Schulstad:

Bluff City Materials has reviewed the LPC-663 and the pH test results for your project located on Fullerton Ave. from Gary Ave. to Schmale Rd. in Carol Stream. Based on the project information provided in your LPC-663 certification, Bluff City Materials agrees to accept the CCDD certified material at our facilities located in Elgin and Lake in the Hills, IL. The following material is excluded from acceptance-

- Material within the yellow hashed area on page 2 map.

Bluff City Materials is permitted by the IEPA to accept this material and our IEPA Permit number is CCDD2011-001-DE/OP. All loads entering the facility are inspected visually, with a photo ionization detector (PID) meter, and manifested from the source location. Our facilities comply with all local zoning codes and all applicable local, state and federal rules and regulations.

Please note that the awarded contractor will need to complete the page 3 fill application form, submit this letter, and the completed application to andyp@grp7.com for project setup.

If you have any questions, please contact me at 630.497.8700 x 289

Sincerely,

Andy Paxson
Bluff City Materials
Environmental Assessments

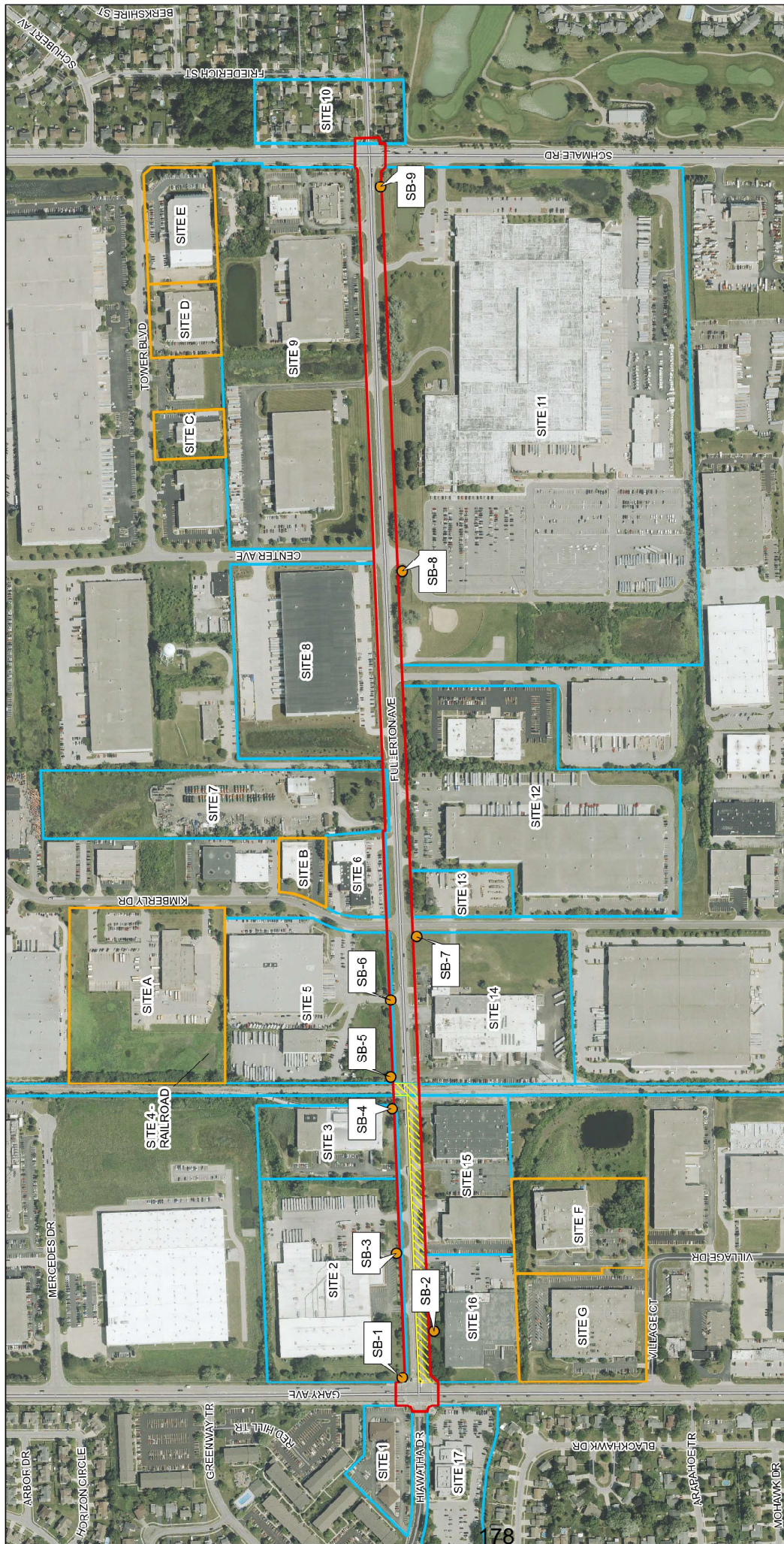


Figure 1
Fullerton Avenue
 Evaluated Site Locations
 Scale: 1:4,800
 Hampton, Lenzi and Renwick, Inc.
 Civil & Structural Engineers • Land Surveyors • Environmental Specialists
 P.E. 000107000 • C.S. 000107000 • W. 000107000
 www.hlr-engineering.com

↑ N

RECs were identified at the following Sites along the project:
 Site 1 Greenway Shoppes REC(s); former or present hazardous chemical use, de minimis condition(s); potential ACM and lead paint.
 Site 2 International Paper Co., REC(s); former diethyl/petroleum leaks/spills, potential UST(s), solid waste, and potential chemical use, de minimis condition(s); potential ACM and lead paint.
 Site 4 Canadian National Railway REC(s); railroad corridor
 Site 5 Midwest Star Group REC(s); Spills (non-hazardous and hazardous materials)
 Site 11 United States Postal Service REC(s); USTs, Gasoline and diesel spill, large unknown barrels
 Site 13 Neenah Foundry REC(s); UST and potential chemical use, de minimis condition(s); potential ACM and lead paint
 Site 14 Tri-Sure Carol Stream REC(s); UST and spills, de minimis condition(s); potential chemical use, potential ACM, and lead paint
 Site 15 Time Messenger & Trucking Ltd REC(s); SR?; de minimis condition(s); potential ACM and lead paint

Imagery: 2023 National Agriculture Imagery Program

Project Description	Symbol
Project Area	Red outline
Evaluated Site Locations	Blue outline
Adjoining Sites	Yellow outline
Sample Location	Orange dot
Preliminary Exclusion Zone	Yellow hatched area

1 inch = 400 feet
 0 100 200 400 Feet

USDA-FSA-AFPO Aerial Photography Field Office, Prairie View, FEMA, USGS, US Census, ICDT



Dirt/Fill Questions? (630) 497-8700 x 3

Incoming Fill Application

Facility Applied For:

- Lyons - 4401 S. 1st Ave., Lyons, IL 60534
- Pulaski - 3741 S. Pulaski Rd., Chicago, IL 60623
- Thornton - 610 183rd St., Thornton, IL 60476
- Grand Avenue - 4613 W. Grand Ave., Chicago, IL 60639
- Bartlett - 1245 Gifford Rd., Elgin, IL 60120
- Lake in the Hills - 8813 Route 31, Lake in the Hills, IL 60156
- South Beloit - 4525 Prairie Hill Rd., South Beloit, IL 61080
- Creekside/Lorang - 2S785 Lorang Rd. Elburn, IL 60119

Project Information:

Project Address _____ Project Name _____
 City _____ State _____ Zip _____

Scope of Work: _____

Type of Incoming Material

- *Uncontaminated Soil
- Brick/Block
- Reclaimed Asphalt Pavement
- Concrete w/o Protruding Metal
- Other: _____

Sales Tax Exempt Yes (Attach Documentation) No

Purchase Order # _____

Contract # _____

Anticipated Load Quantity _____

Misc Project Information:

General Contractor _____
 Gen. Contractor Business Address _____
 Gen. Contractor Phone # _____

IEPA CERTIFICATION ATTACHED* Required for Uncontaminated Soil:

LPC-662 Form (No Known Environmental Concerns) **OR** LPC-663 Form (Potentially Impacted by Environmental Concerns)

Customer Information:

Company Name _____
 Mailing Address _____
 City _____ State _____ Zip _____
 Phone Number _____ Fax or Email _____

Printed Name _____

Signature _____

Title _____

Today's Date _____

Email to fill@reliablematerials.com OR Fax to 630-524-9020

FILL AGREEMENT
CLEAN CONSTRUCTION DEMOLITION
DEBRIS

PURPOSE OF AGREEMENT

This document constitutes an Agreement between Amrize and the Site Owner or Operator identified below (“Customer”) to allow the Customer to deposit Uncontaminated Soil and/or Clean Construction or Demolition Debris (“CCDD”) on designated properties owned and/or operated by Amrize.

AGREEMENT TERMS AND CONDITIONS

The Customer, as the Site Owner or Operator of fill materials on record with Amrize, agrees to the following terms and conditions under this *Fill Agreement*:

This Agreement, along with a fully completed *Uncontaminated Soil Certification Form* (IEPA required form) must be submitted for **EACH** project/jobsite.

The Customer understands that only Uncontaminated Soil and CCDD as defined in 415 ILCS 5/3.160 is permitted for deposit on designated Amrize properties. “**CCDD**” is defined under Illinois statute as follows: “Uncontaminated broken concrete without protruding metal bars, bricks, rock, stone, reclaimed asphalt pavement, or soil generated from construction or demolition activities.” “**Uncontaminated Soil**” is defined as “soil that does not contain contaminants in concentrations that pose a threat to human health and safety and the environment.”

The customer represents and warrants that the uncontaminated soil and/or CCDD to be deposited at Amrize will satisfy the conditions contained herein and are not subject to any Federal, State or Local treatment, storage or disposal restrictions. This includes any materials or wastes that are defined as “special”, “hazardous” or “toxic” by the United States government or the State of Illinois.

Customer further represents and warrants to Amrize that the information provided to Amrize regarding the source, nature and quantity of fill materials deposited from the above project or source are in compliance with the definition of Uncontaminated Soil and CCDD as described in this Fill Agreement and as set forth in 415 ILCS 5/3.160. Customer hereby further represents and warrants to Amrize that the uncontaminated soil and/or CCDD being deposited was not removed from a site as part of a cleanup or removal of contaminants, including, but not limited to, activities conducted under CERCLA, RCRA, LUST or other similar state and federal remediation program.

The Customer understands that Amrize has the sole discretion to randomly inspect, screen and analyze the uncontaminated soil and CCDD deposited from each of the Customer’s projects. In accordance with Illinois State statutes, Amrize will document and archive the records of all uncontaminated soil and CCDD deposited from each project.

Amrize reserves the right to inspect the excavating project or material source, prior to, during, or after acceptance of any uncontaminated soil or CCDD. Amrize may reject any Customer deposits and terminate this Agreement if an investigation of the project or source indicates the presence or potential presence of any contaminant that does not meet the standards for acceptance of uncontaminated soil and/or CCDD as set forth in 415 ILCS 5/3.160 and related administrative rules. Amrize reserves the right to reject any load at any time for any reason.

INDEMNIFICATION

The Customer shall protect, hold harmless, defend and indemnify Amrize and its officers, employees and agents from and against any liability for losses, claims, demands, suits or judgments and any payments made in settlement thereof, including but not limited to, reasonable attorney’s fees and litigation expenses, investigation and clean-up costs, consultant fees and investigation fees which arise out of, are incidental to, or connected with one or more of the following:

- (a) death, injury or damage to persons or property or claim of breach of any requirement imposed by any State, Federal or Local government authority, whether judicial, administrative or legislative, arising out of, incidental to, or connected with Customer’s agents or employees acts, omissions or deposits of uncontaminated soil or CCDD at/on Amrize properties or connected with the presence of Customer trucks or trucks under hire to Customer, on Amrize operated CCDD facilities; and
- (b) any breach of any reason representation, warranty covenant or certification made by Customer to Amrize; and
- (c) Customer’s negligent or intentional acts, omissions and breaches of duty; and
- (d) any investigation or monitoring of project conditions or any clean-up, containment, restoration, removal or other remedial work required under any applicable Federal, State or Local law, by any judicial order or by any governmental entity arising out of, incidental to, or connected with Customer’s acts, omissions and/or deposits of uncontaminated soil or CCDD on Amrize operated CCDD facilities.

The parties acknowledge that Customer’s indemnification of Amrize as provided herein shall survive the termination of this Agreement. If any other provision of this Agreement or any specific application shall be invalid or unenforceable, the remainder of this Agreement, or the application of the provision in other circumstances, shall not be affected, and each provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

Company Name	Project Name	
Printed Name	Start Date	Completion Date (90 Day Max)
Signature	Est. Load Quantity	Material Type
IEPA Form Required (Must check one)		
<input type="checkbox"/> LPC-662	<input type="checkbox"/> LPC-663	<input type="checkbox"/> LPC-667

**This document must be completed by the Site Owner or Operator and returned to Amrize’s Fox River CCDD office, faxed to 815-483-2363 or emailed to the attention of Angelica Munoz at angelica.munoz@amrize.com

CONTRACTORS (DOT) INFORMATION

First Name	<input type="text"/>	Middle Name	<input type="text"/>	Last Name	<input type="text"/>
Phone 1	<input type="text"/>	Phone 2	<input type="text"/>		
Business Name	<input type="text"/>				
Address Line 1	<input type="text"/>				
Address Line 2	<input type="text"/>				
City	<input type="text"/>	State	<input type="text"/>	Zip	<input type="text"/>
E-mail	<input type="text"/>				
24 hour emergency # *	<input type="text"/>	CONTRACTOR INFORMATION			
		Type (Business/Cell)	<input type="text"/>	Emergency Contact Name (if different from contact above)	<input type="text"/>

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.”

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CEMENT, FINELY DIVIDED MINERALS, ADMIXTURES, CONCRETE, AND MORTAR (BDE)

Effective: January 1, 2025

Revised: January 1, 2026

Revise the first paragraph of Article 285.05 of the Standard Specifications to read:

“285.05 Fabric Formed Concrete Revetment Mat. The grout shall consist of a mixture of cement, fine aggregate, and water so proportioned and mixed as to provide a pumpable slurry. Fly ash or ground granulated blast furnace (GGBF) slag, and concrete admixtures may be used at the option of the Contractor. The grout shall have an air content of not less than 6.0 percent nor more than 9.0 percent of the volume of the grout. The mix shall obtain a compressive strength of 2500 psi (17,000 kPa) at 28 days according to Article 1020.09.”

Revise Article 302.02 of the Standard Specifications to read:

“302.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Hydrated Lime	1012.01
(d) By-Product, Hydrated Lime	1012.02
(e) By-Product, Non-Hydrated Lime	1012.03
(f) Lime Slurry	1012.04
(g) Fly Ash	1010
(h) Soil for Soil Modification (Note 1)	1009.01
(i) Bituminous Materials (Note 2)	1032

Note 1. This soil requirement only applies when modifying with lime (slurry or dry).

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

Revise Article 312.07(c) of the Standard Specifications to read:

“(c) Cement 1001”

Add Article 312.07(i) of the Standard Specifications to read:

“(i) Ground Granulated Blast Furnace (GGBF) Slag 1010”

Revise the first paragraph of Article 312.09 of the Standard Specifications to read:

“312.09 Proportioning and Mix Design. At least 60 days prior to start of placing CAM II, the Contractor shall submit samples of materials to be used in the work for proportioning and testing. The mixture shall contain a minimum of 200 lb (120 kg) of cement per cubic yard (cubic meter). Cement may be replaced with fly ash or ground granulated blast furnace (GGBF) slag according to Article 1020.05(c)(1) or 1020.05(c)(2), respectively, however the minimum cement content in the mixture shall be 170 lbs/cu yd (101 kg/cu m). Blends of coarse and fine aggregates will be permitted, provided the volume of fine aggregate does not exceed the volume of coarse aggregate. The Engineer will determine the proportions of materials for the mixture according to the “Portland Cement Concrete Level III Technician Course” manual. However, the Contractor may substitute their own mix design. Article 1020.05(a) shall apply, and a Level III PCC Technician shall develop the mix design.”

Revise Article 352.02 of the Standard Specifications to read:

“352.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Cement (Note 1)	1001
(b) Soil for Soil-Cement Base Course	1009.03
(c) Water	1002
(d) Bituminous Materials (Note 2)	1032

Note 1. Bulk cement may be used for the traveling mixing plant method if the equipment for handling, weighing, and spreading the cement is approved by the Engineer.

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

Revise Article 404.02 of the Standard Specifications to read:

“404.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Fine Aggregate	1003.08
(d) Bituminous Material (Tack Coat)	1032.06
(e) Emulsified Asphalts (Note 1) (Note 2)	1032.06
(f) Fiber Modified Joint Sealer	1050.05
(g) Additives (Note 3)	

Note 1. When used for slurry seal, the emulsified asphalt shall be CQS-1h according to Article 1032.06(b).

Note 2. When used for micro-surfacing, the emulsified asphalt shall be CQS-1hP according to Article 1032.06(e).

Note 3. Additives may be added to the emulsion mix or any of the component materials to provide the control of the quick-traffic properties. They shall be included as part of the mix design and be compatible with the other components of the mix.

Revise the last sentence of the fourth paragraph of Article 404.08 of the Standard Specifications to read:

“When approved by the Engineer, the sealant may be dusted with fine sand, cement, or mineral filler to prevent tracking.”

Revise Note 2 of Article 516.02 of the Standard Specifications to read:

“Note 2. The sand-cement grout mix shall be according to Section 1020 and shall be a 1:1 blend of sand and cement comprised of a Type I, IL, or II cement at 185 lb/cu yd (110 kg/cu m). The maximum water cement ratio shall be sufficient to provide a flowable mixture with a typical slump of 10 in. (250 mm).”

Revise Note 2 of Article 543.02 of the Standard Specifications to read:

“Note 2. The grout mixture shall be 6.50 hundredweight/cu yd (385 kg/cu m) of cement plus fine aggregate and water. Fly ash or ground granulated blast furnace (GGBF) slag may replace a maximum of 5.25 hundredweight/cu yd (310 kg/cu m) of the cement. The water/cement ratio, according to Article 1020.06, shall not exceed 0.60. An air-entraining admixture shall be used to produce an air content, according to Article 1020.08, of not less than 6.0 percent nor more than 9.0 percent of the volume of the grout. The Contractor shall have the option to use a water-reducing or high range water-reducing admixture.”

Revise Article 583.01 of the Standard Specifications to read:

“**583.01 Description.** This work shall consist of placing cement mortar along precast, prestressed concrete bridge deck beams as required for fairing out any unevenness between adjacent deck beams prior to placing of waterproofing membrane and surfacing.”

Revise Article 583.02(a) of the Standard Specifications to read:

“(a) Cement 1001”

Revise the first paragraph of Article 583.03 of the Standard Specifications to read:

“**583.03 General.** This work shall only be performed when the air temperature is 45 °F (7 °C) and rising. The mixture for cement mortar shall consist of three parts sand to one part cement by volume. The amount of water shall be no more than that necessary to produce a workable, plastic mortar.”

Revise Article 606.02(h) of the Standard Specifications to read:

“(h) Fibers (Note 1)1014”

Revise Note 1 in Article 606.02(h) of the Standard Specifications to read:

“Note 1. Fibers, when required, shall only be used in the concrete mixture for slipform applications.”

Revise the third paragraph in Article 606.10 of the Standard Specifications to read:

“Welded wire fabric shall be 6 x 6 in. (150 x 150 mm) mesh, #4 gauge (5.74 mm), 58 lb (26 kg) per 100 sq ft (9 sq m).”

Revise Article 1001.01(d) of the Standard Specifications to read:

“(d) Rapid Hardening Cement. Rapid hardening cement shall be according to the Bureau of Materials Policy Memorandum “Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants”, and ASTM C 1600, Type URH, Type VRH, or Type RH-CAC. It shall be used according to Article 1020.04 or when approved by the Engineer. The Contractor shall submit a report from the manufacturer or an independent lab that contains results for testing according to ASTM C 1600 which shows the cement meets the requirements of either Type URH, Type VRH, or Type RH-CAC. Test data shall be less than 1 year old from the date of submittal.

Revise Article 1001.01(e) of the Standard Specifications to read:

“(e) Other Cements. Other cements shall be according to the Bureau of Materials Policy Memorandum “Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants”, and ASTM C 1157 or ASTM C 1600, as applicable. Other cements shall be used according to Article 1020.04 or when approved by the Engineer. For cements according to ASTM C 1157, the Contractor shall submit a report from the manufacturer or an independent lab that contains results of tests which shows the cement meets the requirements Type GU, HE, MS, MH, or LH. For cements according to ASTM C 1600, the Contractor shall submit a report from the manufacturer or an independent lab that contains results of tests which shows the cement meets the requirements Type MRH or GRH. Test data shall be less than 1 year old from the date of submittal.”

Revise Article 1002.02 of the Standard Specifications to read:

“**1002.02 Quality.** Water used with cement in concrete or mortar and water used for curing concrete shall be clean, clear, and free from sugar. In addition, water shall be tested and evaluated for acceptance according to one of the following options.

OPTION 1.

(a) Acceptable limits for acidity and alkalinity when tested according to ITP T 26.

- (1) Acidity -- 0.1 Normal NaOH 2 ml max.*
 - (2) Alkalinity -- 0.1 Normal HCl..... 10 ml max.*
- *To neutralize 200 ml sample.

(b) Acceptable limits for solids when tested according to the following.

- (1) Organic (ITP T 26)..... 0.02% max.
- (2) Inorganic (ITP T 26)..... 0.30% max.
- (3) Sulfate (SO₄) (ASTM D 516-82) 0.05% max.
- (4) Chloride (ASTM D 512) 0.06% max.

(c) The following tests shall be performed on the water sample and on deionized water. The same cement and sand shall be used for both tests.

- (1) Unsoundness (ASTM C 151).
- (2) Initial and Final Set Time (ASTM C 266).
- (3) Strength (ASTM C 109).

The test results for the water sample shall not deviate from the test results for the deionized water, except as allowed by the precision in the test method.

OPTION 2. Water shall meet the requirements ASTM C 1602 Tables 1 and 2 as outlined in Sections 5.1, 5.2, and 5.4.”

Revise Note 2/ in Article 1003.01(b) of the Standard Specifications to read:

“2/ Applies only to sand. Sand exceeding the colorimetric test standard of 11 (Illinois Modified AASHTO T 21) will be checked for mortar making properties according to Illinois Modified ASTM C 87 and shall develop a compressive strength at the age of 14 days when using Type I, IL, or II cement of not less than 95 percent of the comparable standard.

Revise the second sentence of Article 1003.02(e)(1) of the Standard Specifications to read:

“The test will be performed with Type I, IL, or II portland cement having a total equivalent alkali content (Na₂O + 0.658K₂O) of 0.90 percent or greater.”

Revise the first sentence of the second paragraph of Article 1003.02(e)(3) of the Standard Specifications to read:

“The ASTM C 1293 test shall be performed with Type I, IL, or II portland cement having a total equivalent alkali content (Na₂O + 0.658K₂O) of 0.80 percent or greater.”

Revise the second sentence of Article 1004.02(g)(1) of the Standard Specifications to read:

“The test will be performed with Type I, IL, or II portland cement having a total equivalent alkali content ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$) of 0.90 percent or greater.”

Add the following Section to the Standard Specifications.

“SECTION 1014. FIBERS FOR CONCRETE

1014.01 General. Fibers used in concrete shall be Type II or Type III (polyolefin or carbon) according to ASTM C 1116. The testing required for Type II fibers or Type III polyolefin fibers shall be performed by an independent lab a minimum of once every five years, and the test results provided to the Department. Manufacturers of Type III carbon fibers shall provide materials certification documentation not more than 6 years old a minimum of once every 5 years to the Department. The Department will maintain a qualified product list. The method of inclusion of fibers into concrete mixtures shall be according to the manufacturer’s specifications.

At the discretion of the Engineer, the concrete mixture shall be evaluated in a field demonstration for fiber clumping, ease of placement, and ease of finishing. The field demonstration shall consist of a minimum 2 cu yd (1.5 cu m) trial batch placed in a 12 ft x 12 ft (3.6 m x 3.6 m) slab.

1014.02 Concrete Gutter, Curb, Median and Paved Ditch. Fibers shall be Type III. Fibers shall have a minimum length of 1/2 in. (13 mm) and a maximum length of 0.75 in. (19 mm). The maximum dosage rate in the concrete mixture shall not exceed 1.5 lb/cu yd (0.9 kg/cu m). The minimum dosage rate shall be per the manufacturer’s recommendation.

1014.03 Concrete Inlay or Overlay. Fibers shall be Type III. Fibers shall have a minimum length of 1.0 in. (25 mm), a maximum length of 2 1/2 in. (63 mm), and a maximum aspect ratio (length divided by the equivalent diameter of the fiber) of 150. The maximum dosage rate shall not exceed 5.0 lb/cu yd (3.0 kg/cu m). The minimum dosage rate shall be per the manufacturer’s recommendation.

1014.04 Bridge Deck Fly Ash, Ground Granulated Blast Furnace (GGBF) Slag, High Reactivity Metakaolin, or Microsilica (Silica Fume) Concrete Overlay. Fibers shall be Type III. The dosage rate shall be a minimum of 3.0 lb/cu yd (1.8 kg/cu m), unless a field demonstration according to Article 1014.01 indicates that a lower dosage rate is necessary. Based on the results of the field demonstration, the Department has the option to reduce the dosage rate of fibers, but the dosage will not be reduced to less than 2.0 lb / cu yd (1.2 kg/cu m).

1014.05 Bridge Deck Latex Concrete Overlay. Fibers shall be Type II or III. Fibers shall have a minimum length of 0.75 in. (19 mm), a maximum length of 1.75 in. (45 mm), and an aspect ratio (length divided by the equivalent diameter of the fiber) of between 70 and 100. The dosage rate shall be a minimum of 3.0 lb/cu yd (1.8 kg/cu m), unless a field demonstration according to Article 1014.01 indicates that a lower dosage rate is necessary. Based on the results of the field

demonstration, the Department has the option to reduce the dosage rate of fibers, but the dosage will not be reduced to less than 2.0 lb/cu yd (1.2 kg/cu m).”

Add the following Section to the Standard Specifications:

“SECTION 1015. HIGH PERFORMANCE SHOTCRETE

1015.01 Packaged Shotcrete With Aggregate. The packaged shotcrete with aggregate shall be a pre-blended dry combination of materials for the wet-mix shotcrete method according to ASTM C 1480, Type FA or CA, Grade FR, Class I. The fibers shall be Type III according to Article 1014.01. The cement and finely divided minerals in the mixture shall be a minimum 6.65 cwt/cu yd (395 kg/cu m), and the portland cement shall not be below 4.70 cwt/cu yd (279 kg/cu m). Microsilica is required in the mixture and shall be a minimum of 5 percent by weight (mass) of cementitious material, and a maximum of 10 percent. Strength requirements shall be according to ASTM C 1480 except that the strength at 28 days shall be at least 4000 psi (27,500 kPa). Strength testing shall be according to ASTM C 1140. The air content as shot shall be 4.0 – 8.0 percent when tested according to AASHTO T 152, and the coarse aggregate shall be a maximum size of 1/2 in. (12.5 mm).

The packaged shotcrete shall have a water soluble chloride ion content of less than 0.15% by weight of cementitious material when tested according to ASTM C 1218 or AASHTO T 260.

The testing according to ASTM C 1480, ASTM C 1140, AASHTO 152, and ASTM C 1218 or AASHTO T 260 shall be performed by an independent lab a minimum of once every 5 years, and the test results shall be provided to the Department. The Department will maintain a qualified product list. Batching and mixing shall be per the manufacturer’s recommendations.

1015.02 Packaged Shotcrete Without Aggregate. The packaged shotcrete that does not include pre-blended aggregate shall be according to Article 1015.01, except the added aggregate shall be according to Articles 1003.02 and 1004.02. The aggregate gradation shall be according to the manufacturer. The Department will maintain a qualified product list. Batching and mixing shall be per the manufacturer’s recommendations.”

Revise Section 1017 of the Standard Specifications to read:

“SECTION 1017. PACKAGED, DRY, COMBINED MATERIALS FOR MORTAR AND CONCRETE

1017.01 Mortar. The mortar shall be high-strength according to ASTM C 387 and shall have a minimum 80.0 percent relative dynamic modulus of elasticity when tested according to AASHTO T 161. For prestressed concrete applications, the mortar shall have a water-soluble chloride ion content of less than 0.06 percent by weight of cementitious material when tested according to ASTM C 1218 or AASHTO T 260; and for non-prestressed concrete applications, the water soluble chloride content shall be less than 0.15 percent by weight of cementitious material. The testing according to ASTM C 387, AASHTO T 161, and either ASTM C 1218 or AASHTO T 260 shall be performed by an independent lab a minimum of once every five years, and the test results

shall be provided to the Department. The Department will maintain a qualified product list. Mixing of the high-strength mortar shall be according to the manufacturer's specifications.

1017.02 Concrete. The materials, testing, and preparation of aggregate for the "high slump" packaged concrete mixture shall be according to ASTM C 387. The mixture shall be air entrained, the slump shall be 5-10 in. (125-250 mm), and the coarse aggregate shall be a maximum size of 1/2 in. (12.5 mm). Strength requirements shall be according to ASTM C 387 except that the strength at 28 days shall be at least 4000 psi (27,500 kPa). The "high slump" packaged concrete mixture shall have a water soluble chloride ion content of less than 0.15% by weight of cementitious material when tested according to ASTM C 1218 or AASHTO T 260. The testing according to ASTM C 387, and either ASTM C 1218 or AASHTO T 260 shall be performed by an independent lab a minimum of once every 5 years, and the test results shall be provided to the Department. The Department will maintain a qualified product list. Mixing shall be per the manufacturer's recommendations.

1017.02 Self-Consolidating Concrete. The materials, testing, and preparation of aggregate for the "self-consolidating concrete" packaged concrete mixture shall be according to ASTM C 387. The mixture shall be air entrained, it should be uniformly graded, and the coarse aggregate shall be a maximum size of 1/2 in. (12.5 mm). Strength requirements shall be according to ASTM C 387 except that the strength at 28 days shall be at least 4000 psi (27,500 Pa). Slump flow range shall be 22 in. (550 mm) minimum to 28 in. (700 mm) maximum when tested according to AASHTO T 347. The visual stability index shall be a maximum of 1 when tested according to AASHTO T 351. At the option of the manufacturer, either the J-Ring value shall be a maximum of 2 in. (50 mm) when tested according to AASHTO T 347 or the L-Box blocking ratio shall be a minimum of 80 percent when tested according AASHTO T 419. The hardened visual stability index shall be a maximum of 1 when tested according to AASHTO R 81.

The "self -consolidating concrete" packaged concrete mixture shall have a water soluble chloride ion content of less than 0.15 percent by weight of cementitious material when tested according to ASTM C 1218 or AASHTO T 260.

The testing according to ASTM C 387, AASHTO T 347, AASHTO T 351, AASHTO T 419, AASHTO R 81, ASTM C 1218 and AASHTO T 260 shall be performed by an independent lab a minimum of once every 5 years, and the test results shall be provided to the Department. The Department will maintain a qualified product list. Mixing shall be per the manufacturer's recommendations."

Revise Article 1018.01 of the Standard Specifications to read:

"1018.01 Requirements. The rapid hardening mortar or concrete shall be according to ASTM C 928 and shall have successfully completed and remain current with the AASHTO Product Eval and Audit Rapid Hardening Concrete Patching Materials (RHCP) testing program. R1, R2, or R3 concrete shall be air entrained, the slump shall be 5-10 in. (125-250 mm), and the coarse aggregate shall be a maximum size of 1/2 in. (12.5 mm). For prestressed concrete applications, the mortar or concrete shall have a water-soluble chloride ion content of less than 0.06 percent by weight of cementitious material when tested according to ASTM C 1218 or AASHTO T 260;

and for non-prestressed concrete applications, the water soluble chloride content shall be less than 0.15 percent by weight of cementitious material. The Department will maintain a qualified product list. Mixing of the mortar or concrete shall be according to the manufacturer's specifications..”

Revise Article 1019.02 of the Standard Specifications to read:

“**1019.02 Materials.** Materials shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Fine Aggregate for Controlled Low-Strength Material (CLSM)	1003.06
(d) Fly Ash	1010
(e) Ground Granulated Blast Furnace (GGBF) Slag.....	1010
(f) Admixtures (Note 1)	

Note 1. The air-entraining admixture may be in powder or liquid form. The air content produced by the admixture shall be 15-25 percent when incorporated into Mix 2 or an equivalent mixture as determined by the Department and tested according to AASHTO T 121 or AASHTO T 152. The testing according to AASHTO T 121 or AASHTO T 152 shall be performed by an independent lab a minimum of once every five years, and the test results shall be provided to the Department. The Department will maintain a qualified product list.”

Revise the third paragraph of Article 1019.04 of the Standard Specifications to read:

“The Engineer will instruct the Contractor to adjust the proportions of the mix design in the field as needed to meet the design criteria, provide adequate flowability, maintain proper solid suspension, or other criteria established by the Engineer.”

Revise Article 1019.05 of the Standard Specifications to read:

“**1019.05 Department Mix Design.** The Department mix design shall be Mix 1, 2, or 3 and shall be proportioned to yield approximately one cubic yard (cubic meter).

Mix 1	
Cement	50 lb (30 kg)
Fly Ash – Class C or F, and/or GGBF Slag	125 lb (74 kg)
Fine Aggregate – Saturated Surface Dry	2900 lb (1720 kg)
Water	50-65 gal (248-322 L)
Air Content	No air is entrained
Mix 2	
Cement	125 lb (74 kg)

Fine Aggregate – Saturated Surface Dry	2500 lb (1483 kg)
Water	35-50 gal (173-248 L)
Air Content	15-25 %

Mix 3	
Cement	40 lb (24 kg)
Fly Ash – Class C or F, and/or GGBF Slag	125 lb (74 kg)
Fine Aggregate – Saturated Surface Dry	2500 lb (1483 kg)
Water	35-50 gal (179-248 L)
Air Content	15-25 %

Revise Article 1020.04, Table 1, Note (8) of the Standard Specifications to read:

“(8) In addition to the Type III portland cement, 100 lb/cu yd of ground granulated blast-furnace slag and 50 lb/cu yd of microsilica (silica fume) shall be used. For an air temperature greater than 85 °F, the Type III portland cement may be replaced with Type I, IL, or II portland cement.”

Revise Article 1020.04, Table 1 (Metric), Note (8) of the Standard Specifications to read:

“(8) In addition to the Type III portland cement, 60 kg/cu m of ground granulated blast-furnace slag and 30 kg/cu m of microsilica (silica fume) shall be used. For an air temperature greater than 30 °C, the Type III portland cement may be replaced with Type I, IL, or II portland cement.”

Revise Note 9 of Table 1 of Article 1020.04 of the Standard Specifications to read:

“(9) The cement shall be a rapid hardening according to Article 1001.01(d). Minimum or maximum cement factor may be adjusted when approved by the Engineer.”

Revise the second paragraph of Article 1020.05(a) of the Standard Specifications to read:

“For a mix design using a portland-pozzolan cement, portland blast-furnace slag cement, portland-limestone cement, or replacing portland cement with finely divided minerals per Articles 1020.05(c) and 1020.05(d), the Contractor may submit a mix design with a minimum portland cement content less than 400 lbs/cu yd (237 kg/cu m), but not less than 375 lbs/cu yd (222 kg/cu m), if the mix design is shown to have a minimum relative dynamic modulus of elasticity of 80 percent determined according to AASHTO T 161. Testing shall be performed by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete.”

Revise the first sentence of the first paragraph of Article 1020.05(b) of the Standard Specifications to read:

“Corrosion inhibitors and concrete admixtures shall be according to the qualified product lists.”

Delete the fourth and fifth sentences of the second paragraph of Article 1020.05(b) of the Standard Specifications.

Revise Article 1020.05(b)(5) of the Standard Specifications to read:

“(5) For Class PP-4 concrete, a high range water-reducing admixture, retarder, and/or hydration stabilizer may be used in addition to the air-entraining admixture. The Contractor also has the option to use a water-reducing admixture with the high range water-reducing admixture. An accelerator shall not be used. A mobile portland cement concrete plant shall be used to produce the patching mixture.

For PP-5 concrete, a non-chloride accelerator, high range water-reducing admixture, retarder, hydration stabilizer, and/or air-entraining admixture may be used. The accelerator, high range water-reducing admixture, retarder, hydration stabilizer, and/or air-entraining admixture shall be per the Contractor’s recommendation and dosage. The qualified product list of concrete admixtures shall not apply. A mobile portland cement concrete plant shall be used to produce the patching mixture.”

Revise second paragraph of Article 1020.05(b)(10) of the Standard Specifications to read:

“When calcium nitrite is used, it shall be added at the rate of 4 gal/cu yd (20 L/cu m) and shall be added to the mix immediately after all compatible admixtures have been introduced to the batch. Other corrosion inhibitors shall be added per the manufacturer’s specifications.”

Delete the third paragraph of Article 1020.05(b)(10) of the Standard Specifications.

Revise Article 1020.15(b)(1)c. of the Standard Specifications to read:

“c. The minimum portland cement content in the mixture shall be 375 lbs/cu yd (222 kg/cu m). When the total of organic processing additions, inorganic processing additions, and limestone addition exceed 5.0 percent in the cement, the minimum portland cement content in the mixture shall be 400 lbs/cu yd (237 kg/cu m). For a drilled shaft, foundation, footing, or substructure, the minimum portland cement may be reduced to as low as 330 lbs/cu yd (196 kg/cu m) if the concrete has adequate freeze/thaw durability. The Contractor shall provide freeze/thaw test results according to AASHTO T 161, and the relative dynamic modulus of elasticity of the mix design shall be a minimum of 80 percent. Testing shall be performed by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete. Freeze/thaw testing will not be required for concrete that will not be exposed to freezing and thawing conditions as determined by the Engineer.”

Revise Article 1021.01 of the Standard Specifications to read:

“1021.01 General. Admixtures shall be furnished in liquid or powder form ready for use. The admixtures shall be delivered in the manufacturer's original containers, bulk tank trucks or such containers or tanks as are acceptable to the Engineer. Delivery shall be accompanied by a ticket which clearly identifies the manufacturer, the date of manufacture, and trade name of the material. Containers shall be readily identifiable as to manufacturer, the date of manufacture, and trade name of the material they contain.

Concrete admixtures shall be on one of the Department's qualified product lists. Unless otherwise noted, admixtures shall have successfully completed and remain current with the AASHTO Product Eval and Audit Concrete Admixture (CADD) testing program. For admixture submittals to the Department; the product brand name, manufacturer name, admixture type or types, an electronic link to the product's technical data sheet, and the NTPEP testing number which contains an electronic link to all test data shall be provided. In addition, a letter shall be submitted certifying that no changes have been made in the formulation of the material since the most current round of tests conducted by AASHTO Product Eval and Audit. After 28 days of testing by AASHTO Product Eval and Audit, air-entraining admixtures may be provisionally approved and used on Departmental projects. For all other admixtures, unless otherwise noted, the time period after which provisionally approved status may be earned is 6 months.

The manufacturer shall include the following in the submittal to the AASHTO Product Eval and Audit CADD testing program: the manufacturing range for specific gravity, the midpoint and manufacturing range for residue by oven drying, and manufacturing range of pH. The submittal shall also include an infrared spectrophotometer trace no more than five years old.

For air-entraining admixtures according to Article 1021.02, the specific gravity allowable manufacturing range established by the manufacturer shall be according to AASHTO M 194. For residue by oven drying and pH, the allowable manufacturing range and test methods shall be according to AASHTO M 194.

For admixtures according to Articles 1021.03, 1021.04, 1021.05, 1021.06, 1021.07, and 1021.08, the pH allowable manufacturing range established by the manufacturer shall be according to ASTM E 70. For specific gravity and residue by oven drying, the allowable manufacturing range and test methods shall be according to AASHTO M 194.

All admixtures, except chloride-based accelerators, shall contain a maximum of 0.3 percent chloride by weight (mass) as determined by an appropriate test method. To verify the test result, the Department will use Illinois Modified AASHTO T 260, Procedure A, Method 1.

Prior to final approval of an admixture, the Engineer reserves the right to request a sample for testing. The test and reference concrete mixtures tested by the Engineer will contain a cement content of 5.65 cwt/cu yd (335 kg/cu m). For freeze-thaw testing, the Department will perform the test according to Illinois Modified AASHTO T 161. The flexural strength test will be performed according to AASHTO T 177. If the Engineer decides to test the admixture, the manufacturer shall submit AASHTO T 197 water content and set time test results on the standard cement used by the Department. The manufacturer may select their lab or an independent lab to perform this testing. The laboratory is not required to be accredited by AASHTO.

Random field samples may be taken by the Department to verify an admixture meets specification. A split sample will be provided to the manufacturer if requested. Admixtures that do not meet specification requirements or an allowable manufacturing range established by the manufacturer shall be replaced with new material.”

Revise Article 1021.03 of the Standard Specifications to read:

“**1021.03 Retarding and Water-Reducing Admixtures.** The admixture shall be according to the following.

- (a) Retarding admixtures shall be according to AASHTO M 194, Type B (retarding) or Type D (water-reducing and retarding).
- (b) Water-reducing admixtures shall be according to AASHTO M 194, Type A.
- (c) High range water-reducing admixtures shall be according to AASHTO M 194, Type F (high range water-reducing) or Type G (high range water-reducing and retarding).”

Revise Article 1021.05 of the Standard Specifications to read:

“**1021.05 Self-Consolidating Admixtures.** Self-consolidating admixture systems shall consist of either a high range water-reducing admixture only or a high range water-reducing admixture combined with a separate viscosity modifying admixture. The one or two component admixture system shall be capable of producing a concrete that can flow around reinforcement and consolidate under its own weight without additional effort and without segregation.

High range water-reducing admixtures shall be according to AASHTO M 194, Type F.

Viscosity modifying admixtures shall be according to AASHTO M 194, Type S (specific performance).”

Revise Article 1021.06 of the Standard Specifications to read:

“**1021.06 Rheology-Controlling Admixture.** Rheology-controlling admixtures shall be capable of producing a concrete mixture with a lower yield stress that will consolidate easier for slipform applications used by the Contractor. Rheology-controlling admixtures shall be according to AASHTO M 194, Type S (specific performance).”

Revise Article 1021.07 of the Standard Specifications to read:

“**1021.07 Corrosion Inhibitor.** The corrosion inhibitor shall be according to one of the following.

- (a) Calcium Nitrite. Corrosion inhibitors shall contain a minimum 30 percent calcium nitrite by weight (mass) of solution and shall comply with either the requirements of AASHTO

M 194, Type C (accelerating) or the requirements of ASTM C 1582. The corrosion inhibiting performance requirements of ASTM C 1582 shall not apply.

(b) Other Materials. The corrosion inhibitor shall be according to ASTM C 1582.

For submittals requiring testing according to ASTM M 194, Type C (accelerating), the admixture shall meet the requirements of the AASHTO Product Eval and Audit CADD testing program according to Article 1021.01.

For submittals requiring testing according to ASTM C 1582, a report prepared by an independent laboratory accredited by AASHTO re:source for portland cement concrete shall be provided. The report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications. However, ASTM G 109 test information specified in ASTM C 1582 is not required to be from an independent accredited lab. All other information in ASTM C 1582 shall be from an independent accredited lab. Test data and other information required to be submitted to AASHTO Product Eval and Audit according to Article 1021.01, shall instead be submitted directly to the Department.”

Add Article 1021.08 of the Standard Specifications as follows:

“1021.08 Other Specific Performance Admixtures. Other specific performance admixtures shall, at a minimum, be according to AASHTO M 194, Type S (specific performance). The Department also reserves the right to require other testing, as determined by the Engineer, to show evidence of specific performance characteristics.

Initial testing according to AASHTO M 194 may be conducted under the AASHTO Product Eval and Audit CADD testing program according to Article 1021.01, or by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete. In either case, test data and other information required to be submitted to AASHTO Product Eval and Audit according to Article 1021.01, shall also be submitted directly to the Department. The independent accredited lab report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications.”

Add Article 1021.09 of the Standard Specifications as follows:

“1021.09 Latex Admixtures. The latex admixture shall be a uniform, homogeneous, non-toxic, film-forming, polymeric emulsion in water to which all stabilizers have been added at the point of manufacture. The latex admixture shall not contain any chlorides and shall contain 46-49 percent solids.

In lieu of meeting the requirements of Article 1021.01, the Contractor shall submit a manufacturer's certification that the latex emulsion meets the requirements of FHWA Research Report RD-78-35, Chapter VI. The certificate shall include the date of manufacture of the latex admixture, batch or lot number, quantity represented, manufacturer's name, and the location of the manufacturing plant. The latex emulsion shall be sampled and tested in accordance with RD-78-35, Chapter VII, Certification Program.

The latex admixture shall be packaged and stored in containers and storage facilities which will protect the material from freezing and from temperatures above 85°F (30°C). Additionally, the material shall not be stored in direct sunlight and shall be shaded when stored outside of buildings during moderate temperatures.”

Revise Article 1024.01 of the Standard Specifications to read:

“1024.01 Requirements for Grout. The grout shall be proportioned by dry volume, thoroughly mixed, and shall have a minimum temperature of 50 °F (10 °C). Water shall not exceed the minimum needed for placement and finishing.

Materials for the grout shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Fine Aggregate	1003.02
(d) Fly Ash	1010
(e) Ground Granulated Blast Furnace (GGBF) Slag.....	1010
(f) Concrete Admixtures	1021”

Revise Note 1 of Article 1024.02 of the Standard Specifications to read:

“Note 1. Nonshrink grout shall be according to ASTM C 1107.

For prestressed concrete applications, the nonshrink grout shall have a water soluble chloride ion content of less than 0.06 percent by weight of cementitious material when tested according to ASTM C 1218 or AASHTO T 260; and for non-prestressed concrete applications, the water soluble chloride ion content shall be less than 0.15 percent by weight of cementitious material. The testing according to ASTM 1107, and either ASTM C 1218 or AASHTO T 260 shall be performed by an independent lab a minimum of once every five years, and the test results shall be provided to the Department. The Department will maintain a qualified product list. Mixing of the nonshrink grout shall be according to the manufacturer’s specifications.”

Revise Article 1029.02 of the Standard Specifications to read:

“1029.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Cement.....	1001
(b) Fly Ash	1010
(c) Ground Granulated Blast Furnace (GGBF) Slag	1010
(d) Water.....	1002
(e) Fine Aggregate.....	1003
(f) Concrete Admixtures	1021

(g) Foaming Agent (Note 1)

Note 1. The manufacturer shall submit infrared spectrophotometer trace and test results indicating the foaming agent meets the requirements of ASTM C 869 in order to be on the Department's qualified product list. Submitted data/results shall not be more than five years old."

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."

Revise Article 1103.04 of the Standard Specifications to read:

"1103.04 Mobile Portland Cement Concrete Plants. The mobile concrete plant shall be according to AASHTO M 241 and the Bureau of Materials Policy Memorandum "Approval of Volumetric Mobile Mixers for Concrete". The mixer shall be capable of carrying sufficient unmixed materials to produce not less than 6 cu yd (4.6 cu m) of concrete."

Revise the first two sections of Check Sheet #11 "Subsealing of Concrete Pavements" of the Recurring Special Provisions to read:

"Description. This work shall consist of filling voids beneath rigid and composite pavements with cement grout.

Materials. Materials shall be according to the following Articles/Sections of the Standard Specifications:

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Fly Ash	1010
(d) Ground Granulated Blast Furnace (GGBF) Slag.....	1010
(e) Admixtures	1021
(f) Packaged Rapid Hardening Mortar or Concrete	1018"

Revise the Materials section of Check Sheet #28 "Portland Cement Concrete Inlay or Overlay" of the Recurring Special Provisions to read:

"Materials. Materials shall be according to the following Articles/Sections of the Standard Specifications.

Item	Article/Section
(a) Portland Cement Concrete (Note 1)	1020
(b) Fibers for Concrete.....	1014
(c) Protective Coat.....	1023.01

Note 1. Class PV concrete shall be used, except the cement factor for central mixed concrete shall be 6.05 cwt/cu yd (360 kg/cu m). A cement factor reduction according to Article 1020.05(b)(8) of the Standard Specifications will be permitted. CA 5 shall not be used and CA 7 may only be used for overlays that are a minimum of 4.5 in. (113 mm) thick. The Class PV concrete shall have a minimum flexural strength of 550 psi (3800 kPa) or a minimum compressive strength of 3000 psi (20,700 kPa) at 14 days.”

80460

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

CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

Effective: June 1, 2010

Revised: January 1, 2025

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 according to the table below.

Horsepower Range	Model Year and Older
50-99	2003
100-299	2002
300-599	2000
600-749	2001
750 and up	2005

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* (<https://www.epa.gov/verified-diesel-tech/verified-technologies-list-clean-diesel>), 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

EROSION CONTROL BLANKET (BDE)

Effective: August 1, 2025

Revise Article 251.02 of the Standard Specifications to read:

“251.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Compost	1081.05(b)
(b) Mulch	1081.06(a)
(c) Chemical Mulch Binder	1081.06(a)(3)
(d) Chemical Compost Binder	1081.06(a)(4)
(e) Erosion Control Blanket	1081.10(a)
(f) Wildlife Friendly Erosion Control Blanket	1081.10(b)
(g) Wire Staples.....	1081.10(c)
(h) Wood Stakes	1081.10(d)
(i) Turf Reinforcement Mat	1081.10(e)”

Revise the first and second sentences of Article 251.04 of the Standard Specifications to read:

“251.04 Erosion Control Blanket. All erosion control blanket materials shall be placed on the areas specified within 24 hours of seed placement.”

Revise the second paragraph of Article 251.04 of the Standard Specifications to read:

“After the area has been properly shaped, fertilized (when applicable), and seeded, the blanket shall be laid out flat, evenly, and smoothly, without stretching the material. The erosion control blanket shall be placed according to the manufacture’s recommendations.”

Revise the second sentence of Article 251.06(b) of the Standard Specifications to read:

“Erosion control blanket, wildlife friendly erosion control blanket, and turf reinforcement mat will be measured for payment in square yards (square meters).”

Revise Article 251.07 of the Standard Specifications to read:

“251.07 Basis of Payment. This work will be paid for at the contract unit price per acre (hectare) for MULCH, of the method specified; and at the contract unit price per square yard (square meter) for EROSION CONTROL BLANKET, WILDLIFE FRIENDLY EROSION CONTROL BLANKET, or TURF REINFORCEMENT MAT.”

Revise first sentence of Article 280.04(h) of the Standard Specifications to read:

“This system consists of temporarily installing erosion control blanket or wildlife friendly erosion control blanket over areas that are to be reworked during a later construction phase.”

Revise Article 280.08(g) of the Standard Specifications to read:

“(g) Temporary Erosion Control Blanket. Temporary erosion control blanket will be paid for at the contract unit price per square yard (square meter) for TEMPORARY EROSION CONTROL BLANKET or TEMPORARY WILDLIFE FRIENDLY EROSION CONTROL BLANKET.

The work of removing, storing, and reinstalling the blanket over areas to be reworked more than once will not be paid for separately but shall be included in the cost of the temporary erosion control blanket or temporary wildlife friendly erosion control blanket.”

Revise Article 1081.10 of the Standard Specifications to read:

“**1081.10 Erosion Control Blankets.** The manufacturer shall furnish a certificate with each shipment stating the amount of product furnished and that the material complies with these requirements.

(a) Erosion Control Blanket. Erosion control blanket shall be covered on top and bottom, also known as double net, with a 100 percent biodegradable woven, natural fiber or jute net meeting the following.

Material	Minimum Value
Excelsior	80%
Straw	100%
Coconut or Coir	100% Coconut or Coir
Straw/Coconut or Coir	70% Straw / 30% Coconut or Coir

(b) Wildlife Friendly Erosion Control Blanket. Wildlife friendly erosion control blanket shall be according to Article 1081.10(a) except the netting shall be loose weave, also known as leno weave or gauze weave, with a moveable joint.

(c) Wire Staples. Staples shall be made from No. 11 gauge or heavier uncoated black carbon steel wire, a minimum of 1 in. (25 mm) wide at the top and a minimum overall length of 8 in. (200 mm).

(d) Wood Stakes. Hardwood blanket anchors shall be nominally 7 in. (180 mm) long from neck of hook to tip of anchor. The anchor shall have a minimum 1/2 in. (13 mm) curving hook to hold the blanket in place.

(e) Turf Reinforcement Mat (TRM). The TRM shall be comprised of non-degradable, ultraviolet stabilized synthetic fibers, filaments, netting, and/or wire mesh processed into

a three-dimensional reinforced mat. The mats may include degradable material to assist with vegetation establishment. Soil filled mats will not be allowed.

The TRM shall meet the following physical and performance properties:

Property	Value	Test Method
Tensile Strength, lb/ft (kN/m)	150 (2.19) min.	ASTM D 6818
UV Stability, (% Tensile Retained)	80 min.	ASTM D 4355 (1000 Hour Exposure)
Resiliency, (% Thickness Retained)	80 min.	ASTM D 6524
Allowable Shear Stress, lb/sq ft (Pa) ^{1/}	8 (384)	ECTC approved test method and independent laboratory

1/ Minimum shear stress the TRM (fully vegetated) can sustain without physical damage or excess erosion (> 1/2 in. (13 mm) soil loss) during a 30 minute flow event in large scale testing.

For TRMs containing degradable components, all property values shall be obtained on the non-degradable portion of the matting alone.”

80467

HOT-MIX ASPHALT – LONGITUDINAL JOINT SEALANT (BDE)

Effective: November 1, 2022

Revised: August 1, 2023

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

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

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

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

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

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

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

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

“Aggregate for covering tack, LJS, or FLS will not be measured for payment.”

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

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

80446

INLET FILTERS

Effective: April 1, 2026

Revise the first paragraph of Article 1081.15(h) of the Standard Specifications to read:

“(h) Inlet Filters. An inlet filter shall consist of a steel frame with a two piece geotextile fabric bag or a single reinforced geotextile fabric bag attached with a stainless steel band and locking cap that is suspended from the frame. A clean, used bag and a used steel frame in good condition meeting the approval of the Engineer may be substituted for new materials. Materials for the inlet filter assembly shall be according to the following.”

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

“(3) Geotextile Fabric Bag. The sediment bag shall have a minimum silt and debris capacity of 2.0 cu ft (0.06 cu m). The sediment bag shall also meet one of the following options.

- a. OPTION 1. Two piece geotextile fabric bag.

The inner filter bag shall be constructed of a polypropylene geotextile fabric according to the following.

Inner Filter Bag		
Material Property	Test Method	Minimum Average Roll Value
Grab Tensile Strength	ASTM D 4632	100 lb (45 kg)
Grab Tensile Elongation	ASTM D 4632	50%
Puncture Strength	ASTM D 4833/ ASTM D 6241	65 lb (29 kg)
Trapezoidal Tear	ASTM D 4533	45 lb (20 kg)
UV Resistance	ASTM D 4355	70% at 500 hours
Apparent Opening Size	ASTM D 4751	No. 70 (212 µm) sieve
Permittivity	ASTM D 4491	2.0/sec
Water Flow Rate	ASTM D 4491	145 gpm/sq ft (5900 Lpm/sq m)

The outer reinforcement bag shall be constructed of a polyester mesh material according to the following.

Outer Reinforcement Bag		
Material Property	Test Method	Value
Content	ASTM D 629	Polyester
Weight	ASTM D 3776	4.55 oz/sq yd (155 g/sq m) ± 15%
Apparent Opening Size	ASTM D 4751	No. 30 (600 µm) sieve
Water Flow Rate	ASTM D 4491	225 gpm/sq ft (9150 Lpm/sq m)
Burst	ASTM D 3786/ ASTM D 3787	120 psi (830 kPa) min.
Thickness	ASTM D 1777	0.040 ± 0.0050 in. (1.0 ± 0.1 mm)

b. OPTION 2. Reinforced geotextile fabric bag.

The filter bag shall be constructed of a polypropylene geotextile fabric reinforced with continuous filament fiberglass according to the following.

Reinforced Filter Bag		
Material Property	Test Method	Value or Minimum Average Roll Value
Weight	ASTM D 3776	5.00 oz/sq yd (170 g/sq m) ± 15%
Grab Tensile Strength	ASTM D 4632	200 lb (90 kg)
Grab Tensile Elongation	ASTM D 4632	50%
Puncture Strength	ASTM D 4833/ ASTM D 6241	95 lb (42 kg)
Trapezoidal Tear	ASTM D 4533	70 lb (31 kg)
Burst Strength	ASTM D 3786/ ASTM D 3787	325 psi (2240 kPa)
UV Resistance	ASTM D 4355	70% at 500 hours
Apparent Opening Size	ASTM D 4751	No. 70 (212 µm) sieve
Permittivity	ASTM D 4491	2.0/sec
Water Flow Rate	ASTM D 4491	145 gpm/sq ft (5900 Lpm/sq m)

- (4) Certification. The manufacturer shall furnish a certification with each shipment of inlet filters, stating the amount of product furnished and that the material complies with these requirements.”

80483

PAVEMENT MARKING (BDE)

Effective: April 1, 2025

Revised: November 1, 2025

Revise the fourth sentence of the fourth paragraph of Article 780.05 of the Standard Specifications to read:

“Grooves for letters and symbols shall be cut in a rectangular shape or in the shape of the proposed marking so the entire marking will fit within the limits of the grooved area.”

Revise the last sentence of the third paragraph of Article 780.08 of the Standard Specifications to read:

“The Contractor shall install the preformed plastic pavement markings according to the manufacturer’s recommendations.”

Revise the second sentence of the first paragraph of Article 780.13 of the Standard Specifications to read:

“In addition, thermoplastic, preformed plastic, epoxy, preformed thermoplastic, polyurea, and modified urethane pavement markings will be inspected following a winter performance period that extends from November 15 to April 1 of the next year.”

80464

PERFORMANCE GRADED ASPHALT BINDER (BDE)

Effective: January 1, 2023

Revised: April 1, 2026

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, ΔT_c , 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 (SBS). Elastomers shall be added to the base asphalt binder to achieve the specified performance grade and shall be a styrene-butadiene-styrene without oil extension. The polymer modified asphalt binder shall be smooth, homogeneous, and be according to the following requirements for the grade shown on the plans.

Requirements for Styrene-Butadiene Copolymer (SBS) Modified Asphalt Binders			
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.	
Tests on Residue from Rolling Thin Film Oven Test (RTFO), AASHTO T 240			
Multiple Stress Creep Recovery (MSCR), AASHTO T 350			
Asphalt Grade	Test Temperature	Maximum J _{nr} (3.2 kPa)	Minimum % Recovery (3.2 kPa)
SBS 76-22	64 °C	≤ 0.5	≥ 75 %
SBS 70-22		≤ 2	≥ 30 %
SBS 76-28	58 °C	≤ 0.5	≥ 80 %
SBS 70-28		≤ 1	≥ 60 %
SBS 64-28		≤ 2	≥ 30 %

- (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.

Requirements for Ground Tire Rubber (GTR) Modified Asphalt Binders		
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, 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 Article 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.

Requirements for Softener Modified (SM) Asphalt Binders		
Test	Asphalt Grade	
		SM PG 46-28
	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, ΔT_c , 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, $\Delta G^* _{peak}$, 40 hrs PAV (40 hrs continuous or 2 PAV at 20 hrs)	≥ 54 %	

- (4) Polymer/Softener Modification (SBS/SM). Polymer/Softener modification is the addition of organic compounds, such as engineered flux, bio-oil blends, modified vegetable oils, amines, and fatty acid derivatives, used in combination with SBS modified PG asphalt binder as modified in accordance with Article 1032.05(b)(1) to achieve the specified performance grade. Polymer/Softeners shall be compatible with

each other and dissolved, dispersed, or reacted in the asphalt binder to enhance its performance and shall remain compatible with the asphalt binder with no separation. Polymer/Softeners shall not be added to modified PG asphalt binder as defined in Article 1032.05(b)(2).

An Attenuated Total Reflectance-Fourier Transform Infrared spectrum (ATR-FTIR) shall be collected for both the polymer and the softening compound as well as the polymer/softener modified asphalt binder at the dose intended for qualification. The ATR-FTIR spectra shall be collected on unaged polymer/softener modified binder, 20-hour Pressurized Aging Vessel (PAV) aged polymer/softener modified binder, and 40-hour PAV aged polymer/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.

Requirements for Polymer/Softener Modified (SBS-SM) Asphalt Binders			
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.	
Tests on Residue from Rolling Thin Film Oven Test (RTFO), AASHTO T 240			
Multiple Stress Creep Recovery (MSCR), AASHTO T 350			
Asphalt Grade	Test Temperature	Maximum J_{nr} (3.2 kPa)	Minimum % Recovery (3.2 kPa)
SBS-SM 76-22	64 °C	≤ 0.5	≥ 75 %
SBS-SM 70-22		≤ 2	≥ 30 %
SBS-SM 76-28	58 °C	≤ 0.5	≥ 80 %
SBS-SM 70-28		≤ 1	≥ 60 %
SBS-SM 64-28		≤ 2	≥ 30 %
Small Strain Parameter (AASHTO PP 113) BBR, ΔT_c , 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, $\Delta G^* _{peak}$ τ , 40 hrs PAV (40 hrs continuous or 2 PAV at 20 hrs)			≥ 60 %

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 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 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

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
Canadian National Railroad 17641 Ashland Avenue Homewood, IL 60430	N/A	2 Per Day 5 to 10 mph
Class 1 RR (Y or N): Y DOT/AAR No.: 289886YT RR Division: IOWA	RR Mile Post: 0001.390 RR Sub-Division: Freeport	
For Freight/Passenger Information Contact: For Insurance Information Contact:	Paul Chojenski Brian Vercruysse	Phone: 708-332-3042 Phone: 312-636-7760

Class 1 RR (Y or N):
 DOT/AAR No.:
 RR Division:
 RR Mile Post:
 RR Sub-Division:
 For Freight/Passenger Information Contact: Phone:
 For Insurance Information Contact: Phone:

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, 2026

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 (RSM DR)”.

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 fourth paragraph of Article 669.10 of the Standard Specifications.

"Regulated substances monitoring will be measured for payment per calendar day, where 4 or more hours of monitoring activities is defined as 1.0 calendar day and less than 4 hours of monitoring activities is defined as 0.5 calendar day."

Revise the second paragraph of Article 669.11 of the Standard Specification to read:

"Regulated substances monitoring, including completion of form BDE 2732 for each day of work, will be paid for at the contract unit price per calendar day for REGULATED SUBSTANCES MONITORING. In no case will more than 1.0 calendar day be paid on a given calendar day."

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)
	<i>Festuca rubra</i> ssp. <i>rubra</i> (Creeping Red Fescue)	40 (50)
1A Salt Tolerant Lawn Mixture 1/	Kentucky Bluegrass	60 (70)
	Perennial Ryegrass	20 (20)
	<i>Festuca rubra</i> ssp. <i>rubra</i> (Creeping Red Fescue)	20 (20)
	<i>Festuca brevipilla</i> (Hard Fescue)	20 (20)
	<i>Puccinellia distans</i> (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)
	<i>Festuca rubra</i> ssp. <i>rubra</i> (Creeping Red Fescue)	20 (20)
2 Roadside Mixture 1/	<i>Lolium arundinaceum</i> (Tall Fescue)	100 (110)
	Perennial Ryegrass	50 (55)
	<i>Festuca rubra</i> ssp. <i>rubra</i> (Creeping Red Fescue)	40 (50)
	Red Top	10 (10)
2A Salt Tolerant Roadside Mixture 1/	<i>Lolium arundinaceum</i> (Tall Fescue)	60 (70)
	Perennial Ryegrass	20 (20)
	<i>Festuca rubra</i> ssp. <i>rubra</i> (Creeping Red Fescue)	30 (20)
	<i>Festuca brevipila</i> (Hard Fescue)	30 (20)
	<i>Puccinellia distans</i> (Fults Saltgrass or Salty Alkaligrass)	60 (70)
3 Northern Illinois Slope Mixture 1/	<i>Elymus canadensis</i> (Canada Wild Rye) 5/	5 (5)
	Perennial Ryegrass	20 (20)
	Alsike Clover 4/	5 (5)
	<i>Desmanthus illinoensis</i> (Illinois Bundleflower) 4/ 5/	2 (2)
	<i>Schizachyrium scoparium</i> (Little Bluestem) 5/	12 (12)
	<i>Bouteloua curtipendula</i> (Side-Oats Grama) 5/	10 (10)
	<i>Puccinellia distans</i> (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
<i>Elymus canadensis</i> (Canada Wild Rye) 5/		20 (20)
<i>Panicum virgatum</i> (Switchgrass) 5/		10 (10)
<i>Schizachyrium scoparium</i> (Little Blue Stem) 5/		12 (12)
<i>Bouteloua curtipendula</i> (Side-Oats Grama) 5/		10 (10)
<i>Dalea candida</i> (White Prairie Clover) 4/ 5/		5 (5)
<i>Rudbeckia hirta</i> (Black-Eyed Susan) 5/		5 (5)
Oats, Spring		50 (55)

Class – Type	Seeds	lb/acre (kg/hectare)
4 Native Grass 2/ 6/	<i>Andropogon gerardi</i> (Big Blue Stem) 5/	4 (4)
	<i>Schizachyrium scoparium</i> (Little Blue Stem) 5/	5 (5)
	<i>Bouteloua curtipendula</i> (Side-Oats Grama) 5/	5 (5)
	<i>Elymus canadensis</i> (Canada Wild Rye) 5/	1 (1)
	<i>Panicum virgatum</i> (Switch Grass) 5/	1 (1)
	<i>Sorghastrum nutans</i> (Indian Grass) 5/	2 (2)
	Annual Ryegrass	25 (25)
	Oats, Spring	25 (25)
	Perennial Ryegrass	15 (15)
	4A Low Profile Native Grass 2/ 6/	<i>Schizachyrium scoparium</i> (Little Blue Stem) 5/
<i>Bouteloua curtipendula</i> (Side-Oats Grama) 5/		5 (5)
<i>Elymus canadensis</i> (Canada Wild Rye) 5/		1 (1)
<i>Sporobolus heterolepis</i> (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)
<u>Species:</u>		<u>% By Weight</u>
<i>Calamagrostis canadensis</i> (Blue Joint Grass)		12
<i>Carex lacustris</i> (Lake-Bank Sedge)		6
<i>Carex slipata</i> (Awl-Fruited Sedge)		6
<i>Carex stricta</i> (Tussock Sedge)		6
<i>Carex vulpinoidea</i> (Fox Sedge)		6
<i>Eleocharis acicularis</i> (Needle Spike Rush)		3
<i>Eleocharis obtusa</i> (Blunt Spike Rush)		3
<i>Glyceria striata</i> (Fowl Manna Grass)		14
<i>Juncus effusus</i> (Common Rush)		6
<i>Juncus tenuis</i> (Slender Rush)		6
<i>Juncus torreyi</i> (Torrey's Rush)		6
<i>Leersia oryzoides</i> (Rice Cut Grass)		10
<i>Scirpus acutus</i> (Hard-Stemmed Bulrush)		3
<i>Scirpus atrovirens</i> (Dark Green Rush)		3
<i>Bolboschoenus fluviatilis</i> (River Bulrush)		3
<i>Schoenoplectus tabernaemontani</i> (Softstem Bulrush)		3
<i>Spartina pectinata</i> (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:	
	<i>Coreopsis lanceolata</i> (Sand Coreopsis) <i>Leucanthemum maximum</i> (Shasta Daisy) <i>Gaillardia pulchella</i> (Blanket Flower) <i>Ratibida columnifera</i> (Prairie Coneflower) <i>Rudbeckia hirta</i> (Black-Eyed Susan)	
	Forb Mixture - Mixture not exceeding 5 % by weight PLS of any one species, of the following:	
	<i>Amorpha canescens</i> (Lead Plant) 4/ <i>Anemone cylindrica</i> (Thimble Weed) <i>Asclepias tuberosa</i> (Butterfly Weed) <i>Aster azureus</i> (Sky Blue Aster) <i>Symphotrichum leave</i> (Smooth Aster) <i>Aster novae-angliae</i> (New England Aster) <i>Baptisia leucantha</i> (White Wild Indigo) 4/ <i>Coreopsis palmata</i> (Prairie Coreopsis) <i>Echinacea pallida</i> (Pale Purple Coneflower) <i>Eryngium yuccifolium</i> (Rattlesnake Master) <i>Helianthus mollis</i> (Downy Sunflower) <i>Heliopsis helianthoides</i> (Ox-Eye) <i>Liatris aspera</i> (Rough Blazing Star) <i>Liatris pycnostachya</i> (Prairie Blazing Star) <i>Monarda fistulosa</i> (Prairie Bergamot) <i>Parthenium integrifolium</i> (Wild Quinine) <i>Dalea candida</i> (White Prairie Clover) 4/ <i>Dalea purpurea</i> (Purple Prairie Clover) 4/ <i>Physostegia virginiana</i> (False Dragonhead) <i>Potentilla arguta</i> (Prairie Cinquefoil) <i>Ratibida pinnata</i> (Yellow Coneflower) <i>Rudbeckia subtomentosa</i> (Fragrant Coneflower) <i>Silphium laciniatum</i> (Compass Plant) <i>Silphium terebinthinaceum</i> (Prairie Dock) <i>Oligoneuron rigidum</i> (Rigid Goldenrod) <i>Tradescantia ohiensis</i> (Spiderwort) <i>Veronicastrum virginicum</i> (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)
	<u>Species:</u>	<u>% By Weight</u>
	<i>Aster novae-angliae</i> (New England Aster)	5
	<i>Echinacea pallida</i> (Pale Purple Coneflower)	10
	<i>Helianthus mollis</i> (Downy Sunflower)	10
	<i>Heliopsis helianthoides</i> (Ox-Eye)	10
	<i>Liatris pycnostachya</i> (Prairie Blazing Star)	10
	<i>Ratibida pinnata</i> (Yellow Coneflower)	5
	<i>Rudbeckia hirta</i> (Black-Eyed Susan)	10
	<i>Silphium laciniatum</i> (Compass Plant)	10
	<i>Silphium terebinthinaceum</i> (Prairie Dock)	20
	<i>Oligoneuron rigidum</i> (Rigid Goldenrod)	10
5B Wetland Forb 2/ 5/ 6/	Forb Mixture (see below)	2 (2)
	<u>Species:</u>	<u>% By Weight</u>
	<i>Acorus calamus</i> (Sweet Flag)	3
	<i>Angelica atropurpurea</i> (Angelica)	6
	<i>Asclepias incarnata</i> (Swamp Milkweed)	2
	<i>Aster puniceus</i> (Purple Stemmed Aster)	10
	<i>Bidens cernua</i> (Beggarticks)	7
	<i>Eutrochium maculatum</i> (Spotted Joe Pye Weed)	7
	<i>Eupatorium perfoliatum</i> (Boneset)	7
	<i>Helenium autumnale</i> (Autumn Sneezeweed)	2
	<i>Iris virginica shrevei</i> (Blue Flag Iris)	2
	<i>Lobelia cardinalis</i> (Cardinal Flower)	5
	<i>Lobelia siphilitica</i> (Great Blue Lobelia)	5
	<i>Lythrum alatum</i> (Winged Loosestrife)	2
	<i>Physostegia virginiana</i> (False Dragonhead)	5
	<i>Persicaria pensylvanica</i> (Pennsylvania Smartweed)	10
	<i>Persicaria lapathifolia</i> (Curlytop Knotweed)	10
	<i>Pycnanthemum virginianum</i> (Mountain Mint)	5
	<i>Rudbeckia laciniata</i> (Cut-leaf Coneflower)	5
	<i>Oligoneuron riddellii</i> (Riddell Goldenrod)	2
	<i>Sparganium eurycarpum</i> (Giant Burreed)	5
6 Conservation Mixture 2/ 6/	<i>Schizachyrium scoparium</i> (Little Blue Stem) 5/ <i>Elymus canadensis</i> (Canada Wild Rye) 5/ Buffalo Grass 5/ 7/ Vernal Alfalfa 4/ Oats, Spring	5 (5) 2 (2) 5 (5) 15 (15) 48 (55)
6A Salt Tolerant Conservation Mixture 2/ 6/	<i>Schizachyrium scoparium</i> (Little Blue Stem) 5/ <i>Elymus canadensis</i> (Canada Wild Rye) 5/ Buffalo Grass 5/ 7/ Vernal Alfalfa 4/ Oats, Spring <i>Puccinellia distans</i> (Fulfs Saltgrass or Salty Alkaligrass)	5 (5) 2 (2) 5 (5) 15 (15) 48 (55) 20 (20)
7 Temporary Turf Cover Mixture	Perennial Ryegrass Oats, Spring	50 (55) 64 (70)

Notes:

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

SIGN PANELS AND APPURTENANCES (BDE)

Effective: January 1, 2025

Revised: January 1, 2026

Add Article 720.02(c) of the Standard Specifications to read:

“(c) Aluminum Epoxy Mastic 1008.03”

Revise the second and third paragraphs of Article 720.02 of the Standard Specifications to read:

“The sign mounting support channel shall be manufactured from steel or aluminum and shall be according to Standard 720001.

Steel support channels shall be according to ASTM A 1011 (A 1011M), ASTM A 635 (A 635M), ASTM A 568 (A 568M), or ASTM A 684 (A 684M), and shall be galvanized. Galvanizing shall be according to ASTM A 653 (A 653M) when galvanized before fabrication, and AASHTO M 111 (M 111M) when galvanized after fabrication. Field or post fabricated drilled holes shall be spot painted with one coat of aluminum epoxy mastic paint prior to installation.”

Revise the fifth paragraph of Article 720.02 of the Standard Specifications to read:

“The stainless steel banding for mounting signs or sign support channels to light or signal standards shall be according to ASTM A 240 (A 240M) Type 302 stainless steel.”

Revise the first sentence of the tenth paragraph of Article 720.03 of the Standard Specifications to read:

“The backs of all sign panels shall be marked in a manner designed to last as long as the sign face material, in letters and numerals at least 3/8 in. (9.5 mm) but no more than 3/4 in. (19 mm) in height with the month and year of manufacture, the name of the sign manufacturer, the name of the sign sheeting manufacturer, the method of manufacture (“screened”, “EC film”, “direct applied”, or “digital print”), and the initials IDOT.”

Revise the first sentence of the fourth paragraph of Article 1091.03(a)(10) of the Standard Specifications to read:

“Transparent colors screened, or transparent acrylic electronic cutting films, or digital printing on white sheeting, shall meet the minimum initial coefficient of retroreflection values of the 0.2 degree observation angle, -4.0 degree entrance angle values as listed in the previous tables for the color being applied.”

Add the following after the fourth paragraph of Article 1091.03(a)(10) of the Standard Specifications:

“Digitally printed signs shall be produced using digital print technologies and ink systems, products and processes that comply with the sheeting manufacturer’s recommendation. The digitally printed signs shall be fabricated with a full sign protective overlay film designed to provide a smooth surface needed for retroreflectivity, and to protect the sign from fading and UV degradation. The overlamine shall comply with the sheeting manufacturer’s recommendations to ensure proper adhesion and transparency.”

Add the following after the third paragraph of Article 1106.01 of the Standard Specifications:

“Digitally printed signs may omit protective overlay film.”

80462

SOURCE OF SUPPLY AND QUALITY REQUIREMENTS (BDE)

Effective: January 2, 2023

Revised: January 1, 2026

Revise the third through ninth paragraphs of Article 106.01 of the Standard Specifications to read:

“Articles, materials, and supplies shall be classified into only one of the following categories.

- (a) Iron and Steel. All iron and steel products, which are to be incorporated into the work, shall be domestically manufactured or produced and fabricated, unless an exception is expressly permitted under Federal and/or State law and written permission is given by the Department. The Contractor shall obtain from the iron or steel producer and/or fabricator, in addition to the mill analysis, a certification that all iron or steel materials meet these domestic source requirements.

The applications of all coatings, epoxy, galvanizing, painting, etc. to iron and steel products shall be domestically applied.

- (b) Manufactured Products. Manufactured products shall include articles, materials or supplies that have been processed into a specific form or shape; or have been combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies. Manufactured products incorporated into the work shall have the final assembly for the manufacturing process occur domestically.

A manufactured product may include components that are construction materials, iron or steel products, or exempt materials.

Precast concrete products and intelligent transportation systems (ITS) or other electronic hardware systems shall comply with the requirements of Article 106.01(a) in addition to the requirements of manufactured products.

- (c) Construction Materials. All manufacturing processes for construction materials shall occur within the United States. Construction materials shall include an article, material, or supply consisting of only one of the following.

(1) Non-ferrous metals;

(2) Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);

(3) Glass (including optic glass);

(4) Fiber optic cable (including drop cable);

(5) Optical fiber;

(6) Lumber;

(7) Drywall;

(8) Engineered wood.

Minor additions of articles, materials, supplies, or binding agents to a construction material do not change the categorization of the construction material.

(d) Exempt Materials. Materials exempt from domestic production requirements are cement or cementitious materials, aggregates, aggregate binding agents or additives, or items not permanently incorporated into the work. Exempt materials may be combined with other materials into a final form to produce a manufactured product.”

80448

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 BIDDERS LIST INFORMATION (BDE)

Effective: January 2, 2025

Revised: March 2, 2025

In accordance with 49 CFR 26.11(c) all DBE and non-DBEs who bid as prime contractors and subcontractors shall provide bidders list information, including all DBE and non-DBE firms from whom the bidder has received a quote or bid to work as a subcontractor, whether or not the bidder has relied upon that bid in placing its bid as the prime contractor.

The bidders list information shall be submitted with the bid using the link provided within the “Integrated Contractor Exchange (iCX)” application of the Department’s “EBids System”.

80463

SUBMISSION OF PAYROLL RECORDS – FEDERAL AID CONTRACT (BDE)

Effective: April 1, 2026

If the prevailing rate of wages published by the Illinois Department of Labor (IDOL) is equal to or greater than the prevailing wage determination by the United States Secretary of Labor for the same locality for the same type of construction used to classify the federal construction project, the requirements of the Illinois Prevailing Wage Act (820 ILCS 130) shall apply, including the “ILLINOIS PREVAILING WAGE ACT” section below. If not, only the requirements of the Davis-Bacon Act shall apply, including the “DAVIS-BACON ACT” section below.

DAVIS-BACON ACT. 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.”

ILLINOIS PREVAILING WAGE ACT. Revise the following section of Check Sheet #1 of the Recurring Special Provisions to read:

“STATEMENTS AND PAYROLLS

- (1) Prevailing Wages. All wages paid by the Contractor and each subcontractor shall be in compliance with The Prevailing Wage Act (820 ILCS 130), as amended, except where a prevailing wage violates a federal law, order, or ruling, the rate conforming to the federal law, order, or ruling shall govern. The Contractor shall be responsible to notify each subcontractor of the wage rates set forth in this contract and any revisions thereto. If the Department of Labor revises the wage rates, the Contractor will not be allowed additional compensation on account of said revisions.

- (2) Payroll Records. The Contractor and each subcontractor shall make and keep, for a period of five years from the later of the date of final payment under the contract or completion of the contract, records of the wages paid to his/her workers. The payroll records shall include the worker's name, the worker's address, the worker's telephone number when available, the worker's social security number, the worker's classification or classifications, the worker's gross and net wages paid in each pay period, the worker's number of hours worked each day, and the worker's starting and ending times of work each day. However, any Contractor or subcontractor who remits contributions to a fringe benefit fund that is not jointly maintained and jointly governed by one or more employer and one or more labor organization must additionally submit the worker's hourly wage rate, the worker's hourly overtime wage rate, the worker's hourly fringe benefit rates, the name and address of each fringe benefit fund, the plan sponsor of each fringe benefit, if applicable, and the plan administrator of each fringe benefit, if applicable. Upon seven business days' notice, these records shall be available at a location within the State, during reasonable hours, for inspection by the Department or the Department of Labor; and Federal, State, or local law enforcement agencies and prosecutors.
- (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 Certified Transcript of Payroll Portal in compliance with the State Prevailing Wage Act (820 ILCS 130). The portal can be found on the IDOL website at <https://labor.illinois.gov>. 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.

- (4) Employee Interviews. The Contractor and each subcontractor shall permit his/her employees to be interviewed on the job, during working hours, by compliance investigators of the Department or the Department of Labor."

80482

SURVEYING SERVICES (BDE)

Effective: April 1, 2025

Delete the fourth paragraph of Article 667.04 of the Standard Specifications.

Delete Section 668 of the Standard Specifications.

80465

TRAINING SPECIAL PROVISIONS (BDE)

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

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

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

The Contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be 1. In the event the Contractor subcontracts a portion of the contract work, it shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The Contractor shall also ensure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

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

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

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

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

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

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

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

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

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

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

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

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

WOOD SIGN SUPPORT (BDE)

Effective: November 1, 2023

Add the following to Article 730.02 of the Standard Specifications:

“(c) Preservative Treatment1007.12”

Revise the first paragraph of Article 730.03 of the Standard Specifications to read:

“**730.03 General.** Wood sign supports shall be treated. When the 4 x 6 in. (100 x 150 mm) posts are used, they shall be modified to satisfy the breakaway requirements by drilling 1 1/2 in. (38 mm) diameter holes centered at 4 and 18 in. (100 and 450 mm) above the groundline and perpendicular to the centerline of the roadway.”

80454

WORK ZONE TRAFFIC CONTROL DEVICES (BDE)

Effective: March 2, 2020

Revised: January 1, 2026

Add the following to Article 701.03 of the Standard Specifications:

“(q) Temporary Sign Supports 1106.02”

Revise Article 701.03(p) of the Standard Specifications to read:

“(p) Detectable Pedestrian Channelizing Barricades 1106.02(m)”

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 shall be MASH compliant.

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 shall be MASH compliant.

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 compliant. Category 3 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350, 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 sign supports, speed feedback displays, 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 compliant is available, an NCHRP 350 compliant device may be used, even if manufactured after December 31, 2019.”

Revise the first paragraph of Section 1106.02(a) of the Standard Specifications to read:

“(a) Lights. Lights shall meet the requirements of Chapter 13 of the “Equipment and Materials Standards of the Institute of Transportation Engineers,” 1998, Institute of Transportation Engineers, and shall be visible on a clear night from a distance of 3000 ft (900 m). Lights are classified as follows.”

Revise Articles 1106.02(g), 1106.02(k), 1106.02(l), and 1106.02(m) of the Standard Specifications 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.

- (m) Detectable Pedestrian Channelizing Barricades. The top panel or handrail shall be continuous and there should be at least a 2 in. (50 mm) gap between the hand trailing edge and its support. When visible to vehicular traffic, the top rail shall have alternating white and orange retroreflective stripes sloping at 45 degrees. The bottom panel shall be continuous and have alternating white and orange retroreflective stripes sloping at 45 degrees. Barricade stripes shall be 6 in. (150 mm) in width. The predominant color for other barricade components shall be white, orange, or silver.”

80427

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within 90 working days.

80071

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

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

ATTACHMENTS

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

I. GENERAL

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

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

Form FHWA-1273 must be included in all Federal-aid 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 procurement 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/WHDLegacy/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 procurement 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.

* * * * *

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

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

* * * * *

3. Instructions for Certification - Lower Tier Participants:

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

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

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

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

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

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

* * * * *

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.