BID PROPOSAL INSTRUCTIONS

ABOUT IDOT PROPOSALS: All proposals are potential bidding proposals. Each proposal contains all certifications and affidavits, a proposal signature sheet and a proposal bid bond.

PREQUALIFICATION

Any contractor who desires to become pre-qualified to bid on work advertised by IDOT must submit the properly completed pre-qualification forms to the Bureau of Construction no later than 4:30 p.m. prevailing time twenty-one days prior to the letting of interest. This pre-qualification requirement applies to first time contractors, contractors renewing expired ratings, contractors maintaining continuous pre-qualification or contractors requesting revised ratings. To be eligible to bid, existing pre-qualification ratings must be effective through the date of letting.

WHO CAN BID ?

Bids will be accepted from only those companies that request and receive written Authorization to Bid from IDOT's Central Bureau of Construction.

REQUESTS FOR AUTHORIZATION TO BID

Contractors wanting to bid on items included in a particular letting must submit the properly completed "Request for Authorization to Bid/or Not For Bid Status" (BDE 124) and the ORIGINAL "Affidavit of Availability" (BC 57) to the proper office no later than 4:30 p.m. prevailing time, three (3) days prior to the letting date.

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?

When a prospective prime bidder submits a "Request for Authorization to Bid/or Not For Bid Status"(BDE 124) he/she must indicate at that time which items are being requested For Bidding purposes. Only those items requested For Bidding will be analyzed. After the request has been analyzed, the bidder will be issued an **Authorization to Bid or Not for Bid Report**, approved by the Central Bureau of Construction and the Chief Procurement Officer that indicates which items have been approved For Bidding. If **Authorization to Bid** cannot be approved, the **Authorization to Bid or Not for Bid Report** will indicate the reason for denial.

ABOUT AUTHORIZATION TO BID

Firms that have not received an Authorization to Bid or Not For Bid Report within a reasonable time of complete and correct original document submittal should contact the Department as to the status. Firms unsure as to authorization status should call the Prequalification Section of the Bureau of Construction at the number listed at the end of these instructions.

ADDENDA AND REVISIONS

It is the bidder's responsibility to determine which, if any, addenda or revisions pertain to any project they may be bidding. Failure to incorporate all relevant addenda or revisions may cause the bid to be declared unacceptable.

Each addendum or revision will be included with the Electronic Plans and Proposals. Addenda and revisions will also be placed on the Addendum/Revision Checklist and each subscription service subscriber will be notified by e-mail of each addendum and revision issued.

The Internet is the Department's primary way of doing business. The subscription service emails are an added courtesy the Department provides. It is suggested that bidders check IDOT's website at http://www.idot.illinois.gov/doing-business/procurements/construction-services/construction-bulletins/transportation-bulletin/index#TransportationBulletin before submitting final bid information.

IDOT IS NOT RESPONSIBLE FOR ANY E-MAIL FAILURES.

Addenda questions may be directed to the Contracts Office at (217)782-7806 or DOT.D&Econtracts@illlinois.gov

Technical questions about downloading these files may be directed to Tim Garman at (217)524-1642 or Timothy.Garman@illinois.gov.

STANDARD GUIDELINES FOR SUBMITTING BIDS

- All pages should be single sided.
- Use the Cover Page that is provided in the Bid Proposal (posted on the IDOT Web Site) as the first page of your submitted bid. It has the item number in large bold type in the upper left-hand corner and lines provided for your company name and address in the upper right-hand corner.
- Do not use report covers, presentation folders or special bindings and do not staple multiple times on left side like a book. Use only 1 staple in the upper left hand corner. Make sure all elements of your bid are stapled together including the bid bond or guaranty check (if required).
- Do not include any certificates of eligibility, your authorization to bid, Addendum Letters or affidavit of availability.
- Do not include the Subcontractor Documentation with your bid (pages i – iii and pages a – g). This documentation is required only if you are awarded the project.
- Use the envelope cover sheet (provided with the proposal) as the cover for the proposal envelope.
- Do not rely on overnight services to deliver your proposal prior to 10 AM on letting day. It will not be read if it is delivered after 10 AM.
- Do not submit your Substance Abuse Prevention Program (SAPP) with your bid. If you are awarded the contract this form is to be submitted to the district engineer at the pre-construction conference.

BID SUBMITTAL CHECKLIST

☐ **Cover page** (the sheet that has the item number on it) **–** This should be the first page of your bid proposal, **followed by your bid (the Schedule of Prices/Pay Items).** If you are using special software or CBID to generate your schedule of prices, do not include the blank pages of the schedule of prices that came with the proposal package.

☐ **Page 4 (Item 9)** – Check "YES" if you will use a subcontractor(s) with an annual value over $50,000. Include the subcontractor(s) name, address, general type of work to be performed and the dollar amount. If you will use subcontractor(s) but are uncertain who or the dollar amount; check "YES" but leave the lines blank.

☐ **After page 4 –** Insert the following documents: The I**llinois Office Affidavit** (Not applicable to federally funded projects) followed by Cost Adjustments for Steel, Bituminous and Fuel (if applicable) and the Contractor Letter of Assent (if applicable). The general rule should be, if you don't know where it goes, put it after page 4.

☐ **Page 10 (Paragraph J)** – Check "YES" or "NO" whether your company has any business in Iran.

☐ **Page 10 (Paragraph K)** – (Not applicable to federally funded projects) List the name of the apprenticeship and training program sponsor holding the certificate of registration from the US Department of Labor. If no applicable program exists, please indicate the work/job category. Do not include certificates with your bid. Keep the certificates in your office in case they are requested by IDOT.

☐ **Page 11 (Paragraph L)** – A copy of your State Board of Elections certificate of registration is no longer required with your bid.

☐ **Page 11 (Paragraph M)** – Indicate if your company has hired a lobbyist in connection with the job for which you are submitting the bid proposal.

☐ **Page 12 (Paragraph C)** – This is a work sheet to determine if a completed Form A is required. It is not part of the form and you do not need to make copies for each completed Form A.

☐ **Pages 14-17 (Form A)** – One Form A (4 pages) is required for each applicable person in your company. Copies of the forms can be used and only need to be changed when the information changes. The certification signature and date must be original for each letting. **Do not staple the forms together**. If you answered "NO" to all of the questions in Paragraph C (page 12), complete the first section (page 14) with your company information and then sign and date the Not Applicable statement on page 17.

☐ **Page 18 (Form B)** - If you check "YES" to having other current or pending contracts it is acceptable to use the phrase, "See Affidavit of Availability on file". **Ownership Certification** (at the bottom of the page) - Check N/A if the Form A(s) you submitted accounts for 100 percent of the company ownership. Check YES if any percentage of ownership falls outside of the parameters that require reporting on the Form A. Checking NO indicates that the Form A(s) you submitted is not correct and you will be required to submit a revised Form A.

☐ **Page 20 (Workforce Projection)** – Be sure to include the Duration of the Project. It is acceptable to use the phrase "Per Contract Specifications".

☐ **Proposal Bid Bond –** (Insert after the proposal signature page) Submit your proposal Proposal Bid Bond (if applicable) using the current Proposal Bid Bond form provided in the proposal package. The Power of Attorney page should be stapled to the Proposal Bid Bond. If you are using an electronic bond, include your bid bond number on the Proposal Bid Bond and attach the Proof of Insurance printed from the Surety's Web Site.

☐ **Disadvantaged Business Utilization Plan and/or Good Faith Effort –** The last items in your bid should be the DBE Utilization Plan (SBE 2026), followed by the DBE Participation Statement (SBE 2025) and supporting paperwork. If you have documentation of a Good Faith Effort, it is to follow the SBE Forms.

The Bid Letting is now available in streaming Audio/Video from the IDOT Web Site. A link to the stream will be placed on the main page of the current letting on the day of the Letting. The stream will not begin until 10 AM. The actual reading of the bids does not begin until approximately 10:30 AM.

Following the Letting, the As-Read Tabulation of Bids will be posted by the end of the day. You will find the link on the main Web page for the current letting.

QUESTIONS: pre-letting up to execution of the contract

Contractor pre-qualification	217-782-3413
Small Business, Disadvantaged Business Enterprise (DBE)	217-785-4611
Contracts, Bids, Letting process or Internet downloads	217-782-7806
Estimates Unit	217-785-3483
Aeronautics	217-785-8515
IDNR (Land Reclamation, Water Resources, Natural Resources)	217-782-6302

QUESTIONS: following contract execution

Subcontractor documentation, payments	217-782-3413
Railroad Insurance	217-785-0275

RETURN WITH BID

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Proposal Submitted By
Name
Address
City

Letting January 30, 2015

NOTICE TO PROSPECTIVE BIDDERS
This proposal can be used for bidding purposes by only those companies that request and receive written AUTHORIZATION TO BID from IDOT's Central Bureau of Construction.
BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAL

Notice to Bidders, Specifications, Proposal, Contract and Contract Bond

Illinois Department of Transportation

Springfield, Illinois 62764

Contract No. 61A85
COOK County
Section 13-00084-00-BT (Northlake)
Route ADDISON CREEK TRAIL
Project M-4003(403)
District 1 Construction Funds

PLEASE MARK THE APPROPRIATE BOX BELOW:

☐ A Bid Bond is included.

☐ A Cashier's Check or a Certified Check is included

☐ An Annual Bid Bond is included or is on file with IDOT.

Prepared by

Checked by F

(Printed by authority of the State of Illinois)

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RETURN WITH BID

Illinois Department of Transportation

PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of _____

   _____

   Taxpayer Identification Number (Mandatory) _____

   For the improvement identified and advertised for bids in the Invitation for Bids as:

   Contract No. 61A85
   COOK County
   Section 13-00084-00-BT (Northlake)
   Project M-4003(403)
   Route ADDISON CREEK TRAIL
   District 1 Construction Funds

   Construction of a pedestrian path in the Village of Northlake. Path will be constructed in Grant Park from Whitehall Ave. to Golfview Dr. and adjacent to the King Arthur Residential Development from Rhodes Ave. to Fullerton Avenue.

2. The undersigned bidder will furnish all labor, material and equipment to complete the above described project in a good and workmanlike manner as provided in the contract documents provided by the Department of Transportation. This proposal will become part of the contract and the terms and conditions contained in the contract documents will govern performance and payments.

3. **ASSURANCE OF EXAMINATION AND INSPECTION/WAIVER.** The undersigned bidder further declares that he/she has carefully examined the proposal, plans, specifications, addenda form of contract and contract bond, and special provisions, and that he/she has inspected in detail the site of the proposed work, and that he/she has familiarized themselves with all of the local conditions affecting the contract and the detailed requirements of construction, and understands that in making this bid proposal he/she waives all right to plead any misunderstanding regarding the same.

4. **EXECUTION OF CONTRACT AND CONTRACT BOND.** The undersigned bidder further agrees to execute a contract for this work and present the same to the department within fifteen (15) days after the contract has been mailed to him/her. The undersigned further agrees that he/she and his/her surety will execute and present within fifteen (15) days after the contract has been mailed to him/her contract bond satisfactory to and in the form prescribed by the Department of Transportation, in the penal sum of the full amount of the contract, or as specified in the special provisions, guaranteeing the faithful performance of the work in accordance with the terms of the contract.

5. **PROPOSAL GUARANTY.** Accompanying this proposal is either a bid bond on the department form, executed by a corporate surety company satisfactory to the department, or a proposal guaranty check consisting of a bank cashier's check or a properly certified check for not less than 5 per cent of the amount bid or for the amount specified in the following schedule:

Amount of Bid			Proposal Guaranty	Amount of Bid			Proposal Guaranty
Up to		$5,000	$150	$2,000,000	to	$3,000,000	$100,000
$5,000	to	$10,000	$300	$3,000,000	to	$5,000,000	$150,000
$10,000	to	$50,000	$1,000	$5,000,000	to	$7,500,000	$250,000
$50,000	to	$100,000	$3,000	$7,500,000	to	$10,000,000	$400,000
$100,000	to	$150,000	$5,000	$10,000,000	to	$15,000,000	$500,000
$150,000	to	$250,000	$7,500	$15,000,000	to	$20,000,000	$600,000
$250,000	to	$500,000	$12,500	$20,000,000	to	$25,000,000	$700,000
$500,000	to	$1,000,000	$25,000	$25,000,000	to	$30,000,000	$800,000
$1,000,000	to	$1,500,000	$50,000	$30,000,000	to	$35,000,000	$900,000
$1,500,000	to	$2,000,000	$75,000	over		$35,000,000	$1,000,000

Bank cashier's checks or properly certified checks accompanying bid proposals will be made payable to the Treasurer, State of Illinois.

If a combination bid is submitted, the proposal guaranties which accompany the individual bid proposals making up the combination will be considered as also covering the combination bid.

The amount of the proposal guaranty check is _____ $( ). If this proposal is accepted and the undersigned will fail to execute a contract bond as required herein, it is hereby agreed that the amount of the proposal guaranty will become the property of the State of Illinois, and shall be considered as payment of damages due to delay and other causes suffered by the State because of the failure to execute said contract and contract bond; otherwise, the bid bond will become void or the proposal guaranty check will be returned to the undersigned.

Attach Cashier's Check or Certified Check Here

In the event that one proposal guaranty check is intended to cover two or more bid proposals, the amount must be equal to the sum of the proposal guaranties which would be required for each individual bid proposal. If the guaranty check is placed in another bid proposal, state below where it may be found.

The proposal guaranty check will be found in the bid proposal for:

Item _____

Section No. _____

County _____

Mark the proposal cover sheet as to the type of proposal guaranty submitted.

6. **COMBINATION BIDS.** The undersigned bidder further agrees that if awarded the contract for the sections contained in the following combination, he/she will perform the work in accordance with the requirements of each individual contract comprising the combination bid specified in the schedule below, and that the combination bid shall be prorated against each section in proportion to the bid submitted for the same. If an error is found to exist in the gross sum bid for one or more of the individual sections included in a combination, the combination bid shall be corrected as provided in the specifications.

When a combination bid is submitted, the schedule below must be completed in each proposal comprising the combination.

If alternate bids are submitted for one or more of the sections comprising the combination, a combination bid must be submitted for each alternate.

Schedule of Combination Bids

Combination No.	Sections Included in Combination	Combination Bid Dollars	Cents

7. **SCHEDULE OF PRICES.** The undersigned bidder submits herewith, in accordance with the rules and instructions, a schedule of prices for the items of work for which bids are sought. The unit prices bid are in U.S. dollars and cents, and all extensions and summations have been made. The bidder understands that the quantities appearing in the bid schedule are approximate and are provided for the purpose of obtaining a gross sum for the comparison of bids. If there is an error in the extension of the unit prices, the unit prices will govern. Payment to the contractor awarded the contract will be made only for actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as provided elsewhere in the contract.

8. **AUTHORITY TO DO BUSINESS IN ILLINOIS.** Section 20-43 of the Illinois Procurement Code (the Code) (30 ILCS 500/20-43) provides that a person (other than an individual acting as a sole proprietor) must be a legal entity authorized to transact business or conduct affairs in the State of Illinois prior to submitting the bid.

9. **EXECUTION OF CONTRACT**: The Department of Transportation will, in accordance with the rules governing Department procurements, execute the contract and shall be the sole entity having the authority to accept performance and make payments under the contract. Execution of the contract by the Chief Procurement Officer (CPO) or the State Purchasing Officer (SPO) is for approval of the procurement process and execution of the contract by the Department. Neither the CPO nor the SPO shall be responsible for administration of the contract or determinations respecting performance or payment there under except as otherwise permitted in the Code.

10. **The services of a subcontractor will be used.**

Check box Yes ☐
Check box No ☐

For known subcontractors with subcontracts with an annual value of more than $50,000, the contract shall include their name, address, general type of work to be performed, and the dollar allocation for each subcontractor. (30 ILCS 500/20-120)

COUNTY NAME	CODE	DIST	SECTION NUMBER	PROJECT NUMBER	ROUTE
COOK	031	01	13-00084-00-BT (NORTHLAKE)	M-4003/403/000	ADDISON CREEK TRAIL

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE DOLLARS	UNIT PRICE CENTS		TOTAL PRICE DOLLARS	TOTAL PRICE CTS
C2012460	S-VIBURN LENT 5'	EACH	5.000	X		=		
X0324390	FLOOD LIGHTING UNIT	EACH	2.000	X		=		
X0326654	ORNAM LIGHT UNIT COMP	EACH	61.000	X		=		
X2110100	TOPSOIL F & P SPL	CU YD	620.000	X		=		
Z0013797	STAB CONSTR ENTRANCE	SQ YD	196.000	X		=		
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000	X		=		
Z0022800	FENCE REMOVAL	FOOT	300.000	X		=		
Z0033028	MAINTAIN LIGHTING SYS	CAL MO	2.000	X		=		
20100500	TREE REMOV ACRES	ACRE	0.150	X		=		
20101100	TREE TRUNK PROTECTION	EACH	4.000	X		=		
20101200	TREE ROOT PRUNING	EACH	37.000	X		=		
20101300	TREE PRUN 1-10	EACH	60.000	X		=		
20101350	TREE PRUN OVER 10	EACH	40.000	X		=		
20800150	TRENCH BACKFILL	CU YD	12.000	X		=		
21001000	GEOTECH FAB F/GR STAB	SQ YD	1,165.000	X		=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY		UNIT PRICE DOLLARS	UNIT PRICE CENTS		TOTAL PRICE DOLLARS	TOTAL PRICE CTS
25000100	SEEDING CL 1	ACRE	2.500	X			=		
25000400	NITROGEN FERT NUTR	POUND	225.000	X			=		
25000500	PHOSPHORUS FERT NUTR	POUND	225.000	X			=		
25000600	POTASSIUM FERT NUTR	POUND	225.000	X			=		
25100125	MULCH METHOD 3	ACRE	2.500	X			=		
25200200	SUPPLE WATERING	UNIT	75.000	X			=		
28000400	PERIMETER EROS BAR	FOOT	9,950.000	X			=		
28000510	INLET FILTERS	EACH	2.000	X			=		
30300001	AGG SUBGRADE IMPROVE	CU YD	385.000	X			=		
35102100	AGG BASE CSE B 9	SQ YD	6,025.000	X			=		
40600275	BIT MATLS PR CT	POUND	13,110.000	X			=		
40603335	HMA SC "D" N50	TON	1,050.000	X			=		
44000100	PAVEMENT REM	SQ YD	500.000	X			=		
44000500	COMB CURB GUTTER REM	FOOT	25.000	X			=		
542A0220	P CUL CL A 1 15	FOOT	50.000	X			=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY		UNIT PRICE DOLLARS	UNIT PRICE CENTS		TOTAL PRICE DOLLARS	TOTAL PRICE CTS
542C0213	P CUL CL C 1 8	FOOT	22.000	X			=		
54215543	MET END SEC 8	EACH	2.000	X			=		
54215550	MET END SEC 15	EACH	2.000	X			=		
56400100	FIRE HYDNTS TO BE MVD	EACH	1.000	X			=		
60251200	CB ADJ NEW T8G	EACH	2.000	X			=		
60603900	COMB CC&G TB6.12 AEP	FOOT	25.000	X			=		
63200310	GUARDRAIL REMOV	FOOT	10.000	X			=		
66400305	CH LK FENCE 6	FOOT	50.000	X			=		
66900200	NON SPL WASTE DISPOSL	CU YD	3,295.000	X			=		
66900450	SPL WASTE PLNS/REPORT	L SUM	1.000	X			=		
66900530	SOIL DISPOSAL ANALY	EACH	2.000	X			=		
67100100	MOBILIZATION	L SUM	1.000	X			=		
70102620	TR CONT & PROT 701501	L SUM	1.000	X			=		
70102640	TR CONT & PROT 701801	L SUM	1.000	X			=		
72000100	SIGN PANEL T1	SQ FT	3.000	X			=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY		UNIT PRICE DOLLARS	UNIT PRICE CENTS		TOTAL PRICE DOLLARS	TOTAL PRICE CTS
72900100	METAL POST TY A	FOOT	13.000	X			=		
78000400	THPL PVT MK LINE 6	FOOT	45.000	X			=		
78000600	THPL PVT MK LINE 12	FOOT	32.000	X			=		
78000650	THPL PVT MK LINE 24	FOOT	6.000	X			=		
80400100	ELECT SERV INSTALL	EACH	1.000	X			=		
80400200	ELECT UTIL SERV CONN	L SUM	1.000	X	2,500	00	=	2,500	00
81028200	UNDRGRD C GALVS 2	FOOT	40.000	X			=		
81028210	UNDRGRD C GALVS 2 1/2	FOOT	75.000	X			=		
81028720	UNDRGRD C CNC 1	FOOT	1,950.000	X			=		
81028730	UNDRGRD C CNC 1 1/4	FOOT	9,650.000	X			=		
81400730	HANDHOLE C CONC	EACH	13.000	X			=		
81702120	EC C XLP USE 1C 8	FOOT	35,930.000	X			=		
81702150	EC C XLP USE 1C 2	FOOT	150.000	X			=		
82500335	LT CONT PEDM 240V100	EACH	1.000	X			=		
83600200	LIGHT POLE FDN 24D	FOOT	366.000	X			=		

TOTAL $

NOTE:
*** PLEASE TURN PAGE FOR IMPORTANT NOTES ***

NOTE:

1. EACH PAY ITEM SHOULD HAVE A UNIT PRICE AND A TOTAL PRICE.

2. THE UNIT PRICE SHALL GOVERN IF NO TOTAL PRICE IS SHOWN OR IF THERE IS A DISCREPANCY BETWEEN THE PRODUCT OF THE UNIT PRICE MULTIPLIED BY THE QUANTITY.

3. IF A UNIT PRICE IS OMITTED, THE TOTAL PRICE WILL BE DIVIDED BY THE QUANTITY IN ORDER TO ESTABLISH A UNIT PRICE.

4. A BID MAY BE DECLARED UNACCEPTABLE IF NEITHER A UNIT PRICE NOR A TOTAL PRICE IS SHOWN.

RETURN WITH BID

STATE REQUIRED ETHICAL STANDARDS GOVERNING CONTRACT PROCUREMENT: ASSURANCES, CERTIFICATIONS AND DISCLOSURES

I. GENERAL

A. Article 50 of the Code establishes the duty of all State CPOs, SPOs, and their designees to maximize the value of the expenditure of public moneys in procuring goods, services, and contracts for the State of Illinois and to act in a manner that maintains the integrity and public trust of State government. In discharging this duty, they are charged by law to use all available information, reasonable efforts, and reasonable actions to protect, safeguard, and maintain the procurement process of the State of Illinois.

B. In order to comply with the provisions of Article 50 and to carry out the duty established therein, all bidders are to adhere to ethical standards established for the procurement process, and to make such assurances, disclosures and certifications required by law. Except as otherwise required in subsection III, paragraphs J-M, by execution of the Proposal Signature Sheet, the bidder indicates that each of the mandated assurances have been read and understood, that each certification is made and understood, and that each disclosure requirement has been understood and completed.

C. In addition to all other remedies provided by law, failure to comply with any assurance, failure to make any disclosure or the making of a false certification shall be grounds for the CPO to void the contract, and may result in the suspension or debarment of the bidder or subcontractor. If a false certification is made by a subcontractor the contractor's submitted bid and the executed contract may not be declared void unless the contractor refuses to terminate the subcontract upon the State's request after a finding that the subcontractor's certification was false.

☐ I acknowledge, understand and accept these terms and conditions.

II. ASSURANCES

The assurances hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder.

A. Conflicts of Interest

Section 50-13. Conflicts of Interest.

(a) Prohibition. It is unlawful for any person holding an elective office in this State, holding a seat in the General Assembly, or appointed to or employed in any of the offices or agencies of state government and who receives compensation for such employment in excess of 60% of the salary of the Governor of the State of Illinois, or who is an officer or employee of the Capital Development Board or the Illinois State Toll Highway Authority, or who is the spouse or minor child of any such person to have or acquire any contract, or any direct pecuniary interest in any contract therein, whether for stationery, printing, paper, or any services, materials, or supplies, that will be wholly or partially satisfied by the payment of funds appropriated by the General Assembly of the State of Illinois or in any contract of the Capital Development Board or the Illinois State Toll Highway Authority.

(b) Interests. It is unlawful for any firm, partnership, association or corporation, in which any person listed in subsection (a) is entitled to receive (i) more than 7 1/2% of the total distributable income or (ii) an amount in excess of the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.

(c) Combined interests. It is unlawful for any firm, partnership, association, or corporation, in which any person listed in subsection (a) together with his or her spouse or minor children is entitled to receive (i) more than 15%, in the aggregate, of the total distributable income or (ii) an amount in excess of 2 times the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.

(d) Securities. Nothing in this Section invalidates the provisions of any bond or other security previously offered or to be offered for sale or sold by or for the State of Illinois.

(e) Prior interests. This Section does not affect the validity of any contract made between the State and an officer or employee of the State or member of the General Assembly, his or her spouse, minor child or any combination of those persons if that contract was in existence before his or her election or employment as an officer, member, or employee. The contract is voidable, however, if it cannot be completed within 365 calendar days after the officer, member, or employee takes office or is employed. The current salary of the Governor is $177,412.00. Sixty percent of the salary is $106,447.20.

The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-13, or that an effective exemption has been issued by the Board of Ethics to any individual subject to the Section 50-13 prohibitions pursuant to the provisions of Section 50-20 of the Code. Information concerning the exemption process is available from the Department upon request.

B. Negotiations

Section 50-15. Negotiations.

It is unlawful for any person employed in or on a continual contractual relationship with any of the offices or agencies of State government to participate in contract negotiations on behalf of that office or agency with any firm, partnership, association, or corporation with whom that person has a contract for future employment or is negotiating concerning possible future employment.

The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-15, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

C. Inducements

Section 50-25. Inducement.

Any person who offers or pays any money or other valuable thing to any person to induce him or her not to provide a submission to a vendor portal or to bid for a State contract or as recompense for not having bid on a State contract is guilty of a Class 4 felony. Any person who accepts any money or other valuable thing for not bidding for a State contract, not making a submission to a vendor portal, or who withholds a bid or submission to a vendor portal in consideration of the promise for the payment of money or other valuable thing is guilty of a Class 4 felony.

The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-25, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

D. Revolving Door Prohibition

Section 50-30. Revolving door prohibition.

CPOs, SPOs, procurement compliance monitors, their designees whose principal duties are directly related to State procurement, and executive officers confirmed by the Senate are expressly prohibited for a period of 2 years after terminating an affected position from engaging in any procurement activity relating to the State agency most recently employing them in an affected position for a period of at least 6 months. The prohibition includes, but is not limited to: lobbying the procurement process; specifying; bidding; proposing bid, proposal, or contract documents; on their own behalf or on behalf of any firm, partnership, association, or corporation. This Section applies only to persons who terminate an affected position on or after January 15, 1999.

The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-30, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

E. Reporting Anticompetitive Practices

Section 50-40. Reporting anticompetitive practices.

When, for any reason, any vendor, bidder, contractor, CPO, SPO, designee, elected official, or State employee suspects collusion or other anticompetitive practice among any bidders, offerors, contractors, proposers, or employees of the State, a notice of the relevant facts shall be transmitted to the Attorney General and the CPO.

The bidder assures the Department that it has not failed to report any relevant facts concerning the practices addressed in Section 50-40 which may involve the contract for which the bid or submission to a vendor portal is submitted.

F. Confidentiality

Section 50-45. Confidentiality.

Any CPO, SPO, designee, or executive officer who willfully uses or allows the use of specifications, competitive bid documents, proprietary competitive information, proposals, contracts, or selection information to compromise the fairness or integrity of the procurement, bidding, or contract process shall be subject to immediate dismissal, regardless of the Personnel code, any contract, or any collective bargaining agreement, and may in addition be subject to criminal prosecution.

The bidder assures the Department that it has no knowledge of any fact relevant to the practices addressed in Section 50-45 which may involve the contract for which the bid is submitted.

G. Insider Information

Section 50-50. Insider information.

It is unlawful for any current or former elected or appointed State official or State employee to knowingly use confidential information available only by virtue of that office or employment for actual or anticipated gain for themselves or another person.

The bidder assures the Department that it has no knowledge of any facts relevant to the practices addressed in Section 50-50 which may involve the contract for which the bid is submitted.

☐ I acknowledge, understand and accept these terms and conditions for the above assurances.

III. CERTIFICATIONS

The certifications hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. Section 50-2 of the Code provides that every person that has entered into a multi-year contract and every subcontractor with a multi-year subcontract shall certify, by July 1 of each fiscal year covered by the contract after the initial fiscal year, to the responsible CPO whether it continues to satisfy the requirements of Article 50 pertaining to the eligibility for a contract award. If a contractor or subcontractor is not able to truthfully certify that it continues to meet all requirements, it shall provide with its certification a detailed explanation of the circumstances leading to the change in certification status. A contractor or subcontractor that makes a false statement material to any given certification required under Article 50 is, in addition to any other penalties or consequences prescribed by law, subject to liability under the Whistleblower Reward and Protection Act for submission of a false claim.

A. Bribery

Section 50-5. Bribery.

(a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:

(1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or

(2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.

(b) Businesses. No business shall be barred from contracting with any unit of State or local government, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:

(1) the business has been finally adjudicated not guilty; or

(2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 2012.

(c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.

(d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50-5.

B. Felons

Section 50-10. Felons.

(a) Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any State agency, or enter into a subcontract, from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.

(b) Certification. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code and every vendor's submission to a vendor portal shall contain a certification by the bidder or contractor or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any of the certifications required by this Section are false.

C. Debt Delinquency

Section 50-11 and 50-12. Debt Delinquency.

The contractor or bidder or subcontractor, respectively, certifies that it, or any affiliate, is not barred from being awarded a contract or subcontract under the Code. Section 50-11 prohibits a person from entering into a contract with a State agency, or entering into a subcontract, if it knows or should know that it, or any affiliate, is delinquent in the payment of any debt to the State as defined by the Debt Collection Board. Section 50-12 prohibits a person from entering into a contract with a State agency, or entering into a subcontract, if it, or any affiliate, has failed to collect and remit Illinois Use Tax on all sales of tangible personal property into the State of Illinois in accordance with the provisions of the Illinois Use Tax Act. The bidder or contractor or subcontractor, respectively, further acknowledges that the CPO may declare the related contract void if this certification is false or if the bidder, contractor, or subcontractor, or any affiliate, is determined to be delinquent in the payment of any debt to the State during the term of the contract.

D. Prohibited Bidders, Contractors and Subcontractors

Section 50-10.5 and 50-60(c). Prohibited bidders, contractors and subcontractors.

The bidder or contractor or subcontractor, respectively, certifies in accordance with Section 50-10.5 that no officer, director, partner or other managerial agent of the contracting business has been convicted of a felony under the Sarbanes-Oxley Act of 2002 or a Class 3 or Class 2 felony under the Illinois Securities Law of 1953 or if in violation of Subsection (c) for a period of five years from the date of conviction. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code shall contain a certification by the bidder, contractor, or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO shall declare the related contract void if any of the certifications completed pursuant to this Section are false.

E. Section 42 of the Environmental Protection Act

Section 50-14 Environmental Protection Act violations.

The bidder or contractor or subcontractor, respectively, certifies in accordance with Section 50-14 that the bidder, contractor, or subcontractor, is not barred from being awarded a contract or entering into a subcontract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency, or entering into any subcontract, that is subject to the Code by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The bidder or contractor or subcontractor, respectively, acknowledges that the CPO may declare the contract void if this certification is false.

F. Educational Loan

Section 3 of the Educational Loan Default Act, 5 ILCS 385/3.

Pursuant to the Educational Loan Default Act no State agency shall contract with an individual for goods or services if that individual is in default on an educational loan.

The bidder, if an individual as opposed to a corporation, partnership or other form of business organization, certifies that the bidder is not in default on an educational loan as provided in Section 3 of the Act.

G. Bid-Rigging/Bid Rotating

Section 33E-11 of the Criminal Code of 2012, 720 ILCS 5/3BE-11.

(a) Every bid submitted to and public contract executed pursuant to such bid by the State or a unit of local government shall contain a certification by the prime contractor that the prime contractor is not barred from contracting with any unit of State or local government as a result of a violation of either Section 33E-3 or 33E-4 of this Article.

(b) A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

A violation of Section 33E-3 would be represented by a conviction of the crime of bid-rigging which, in addition to Class 3 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be barred for 5 years from the date of conviction from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

The bidder certifies that it is not barred from contracting with the Department by reason of a violation of either Section 33E-3 or Section 33E-4.

H. International Anti-Boycott

Section 5 of the International Anti-Boycott Certification Act provides every contract entered into by the State of Illinois for the manufacture, furnishing, or purchasing of supplies, material, or equipment or for the furnishing of work, labor, or services, in an amount exceeding the threshold for small purchases according to the purchasing laws of this State or $10,000.00, whichever is less, shall contain certification, as a material condition of the contract, by which the contractor agrees that neither the contractor nor any substantially-owned affiliated company is participating or shall participate in an international boycott in violation of the provisions of the U.S. Export Administration Act of 1979 or the regulations of the U.S. Department of Commerce promulgated under that Act.

The bidder makes the certification set forth in Section 5 of the Act.

I. Drug Free Workplace

The Illinois "Drug Free Workplace Act" applies to this contract and it is necessary to comply with the provisions of the "Act" if the contractor is a corporation, partnership, or other entity (including a sole proprietorship) which has 25 or more employees.

The bidder certifies that if awarded a contract in excess of $5,000 it will provide a drug free workplace in compliance with the provisions of the Act.

J. Disclosure of Business Operations in Iran

Section 50-36 of the Code provides that each bid, offer, or proposal submitted for a State contract shall include a disclosure of whether or not the Company acting as the bidder, offeror, or proposing entity, or any of its corporate parents or subsidiaries, within the 24 months before submission of the bid, offer, or proposal had business operations that involved contracts with or provision of supplies or services to the Government of Iran, companies in which the Government of Iran has any direct or indirect equity share, consortiums or projects commissioned by the Government of Iran, or companies involved in consortiums or projects commissioned by the Government of Iran and either of the following conditions apply:

(1) More than 10% of the Company's revenues produced in or assets located in Iran involve oil-related activities or mineral-extraction activities; less than 75% of the Company's revenues produced in or assets located in Iran involve contracts with or provision of oil-related or mineral-extraction products or services to the Government of Iran or a project or consortium created exclusively by that government; and the Company has failed to take substantial action.

(2) The Company has, on or after August 5, 1996, made an investment of $20 million or more, or any combination of investments of at least $10 million each that in the aggregate equals or exceeds $20 million in any 12-month period, which directly or significantly contributes to the enhancement of Iran's ability to develop petroleum resources of Iran.

The terms "Business operations", "Company", "Mineral-extraction activities", "Oil-related activities", "Petroleum resources", and "Substantial action" are all defined in the Code.

Failure to make the disclosure required by the Code may cause the bid, offer or proposal to be considered not responsive. The disclosure will be considered when evaluating the bid or awarding the contract. The name of each Company disclosed as doing business or having done business in Iran will be provided to the State Comptroller.

Check the appropriate statement:

/___/ Company has no business operations in Iran to disclose.

/___/ Company has business operations in Iran as disclosed on the attached document.

K. Apprenticeship and Training Certification (Does not apply to federal aid projects)

In accordance with the provisions of Section 30-22 (6) of the Code, the bidder certifies that it is a participant, either as an individual or as part of a group program, in the approved apprenticeship and training programs applicable to each type of work or craft that the bidder will perform with its own forces. The bidder further certifies for work that will be performed by subcontract that each of its subcontractors submitted for approval either (a) is, at the time of such bid, participating in an approved, applicable apprenticeship and training program; or (b) will, prior to commencement of performance of work pursuant to this contract, begin participation in an approved apprenticeship and training program applicable to the work of the subcontract. The Department, at any time before or after award, may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. Applicable apprenticeship and training programs are those that have been approved and registered with the United States Department of Labor. The bidder shall list in the space below, the official name of the program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the bidder is a participant and that will be performed with the bidder's forces. Types of work or craft work that will be subcontracted shall be included and listed as subcontract work. The list shall also indicate any type of work or craft job category that does not have an applicable apprenticeship or training program. **The bidder is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project as reported on the Construction Employee Workforce Projection (Form BC-1256) and returned with the bid is accounted for and listed.**

Addtionally, Section 30-22 of the Code requires that the bidder certify that an Illinois office be maintained as the primary place of employment for persons employed for this contract.

_____**NA-FEDERAL**_____

_____

_____

The requirements of these certifications and disclosures are a material part of the contract, and the contractor shall require these certification provisions to be included in all approved subcontracts. In order to fulfill this requirement, it shall not be necessary that an applicable program sponsor be currently taking, or that it will take applications for apprenticeship, training or employment during the performance of the work of this contract.

L. Political Contributions and Registration with the State Board of Elections

Sections 20-160 and 50-37 of the Code regulate political contributions from business entities and any affiliated entities or affiliated persons bidding on or contracting with the state. Generally under Section 50-37, any business entity, and any affiliated entity or affiliated person of the business entity, whose current year contracts with all state agencies exceed an awarded value of $50,000, are prohibited from making any contributions to any political committees established to promote the candidacy of the officeholder responsible for the awarding of the contracts or any other declared candidate for that office for the duration of the term of office of the incumbent officeholder or a period 2 years after the termination of the contract, whichever is longer. Any business entity and affiliated entities or affiliated persons whose state contracts in the current year do not exceed an awarded value of $50,000, but whose aggregate pending bids and proposals on state contracts exceed $50,000, either alone or in combination with contracts not exceeding $50,000, are prohibited from making any political contributions to any political committee established to promote the candidacy of the officeholder responsible for awarding the pending contract during the period beginning on the date the invitation for bids or request for proposals or any other procurement opportunity is issued and ending on the day after the date of award or selection if the entity was not awarded or selected. Section 20-160 requires certification of registration of affected business entities in accordance with procedures found in Section 9-35 of The Election Code.

By submission of a bid, the contractor business entity acknowledges and agrees that it has read and understands Sections 20-160 and 50-37 of the Code, and that it makes the following certification:

The undersigned bidder certifies that it has registered as a business with the State Board of Elections and acknowledges a continuing duty to update the registration in accordance with the above referenced statutes. If the business entity is required to register, the CPO shall verify that it is in compliance on the date the bid or proposal is due. The CPO shall not accept a bid or proposal if the business entity is not in compliance with the registration requirements.

These requirements and compliance with the above referenced statutory sections are a material part of the contract, and any breach thereof shall be cause to void the contract under Section 50-60 of the Code. This provision does not apply to Federal-aid contracts.

M. Lobbyist Disclosure

Section 50-38 of the Code requires that any bidder or offeror on a State contract that hires a person required to register under the Lobbyist Registration Act to assist in obtaining a contract shall:

(i) Disclose all costs, fees, compensation, reimbursements, and other remunerations paid or to be paid to the lobbyist related to the contract,
(ii) Not bill or otherwise cause the State of Illinois to pay for any of the lobbyist's costs, fees, compensation, reimbursements, or other remuneration, and
(iii) Sign a verification certifying that none of the lobbyist's costs, fees, compensation, reimbursements, or other remuneration were billed to the State.

This information, along with all supporting documents, shall be filed with the agency awarding the contract and with the Secretary of State. The CPO shall post this information, together with the contract award notice, in the online Procurement Bulletin.

Pursuant to Subsection (c) of this Section, no person or entity shall retain a person or entity to attempt to influence the outcome of a procurement decision made under the Code for compensation contingent in whole or in part upon the decision or procurement. Any person who violates this subsection is guilty of a business offense and shall be fined not more than $10,000.

Bidder acknowledges that it is required to disclose the hiring of any person required to register pursuant to the Illinois Lobbyist Registration Act (25 ILCS 170) in connection with this contract.

☐ Bidder has not hired any person required to register pursuant to the Illinois Lobbyist Registration Act in connection with this contract.

Or

☐ Bidder has hired the following persons required to register pursuant to the Illinois Lobbyist Registration Act in connection with the contract:

Name and address of person: _____
All costs, fees, compensation, reimbursements and other remuneration paid to said person: _____
_____
_____
_____

☐ I acknowledge, understand and accept these terms and conditions for the above certifications.

IV. DISCLOSURES

A. The disclosures hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The bidder further certifies that the Department has received the disclosure forms for each bid.

The CPO may void the bid, or contract, respectively, if it is later determined that the bidder or subcontractor rendered a false or erroneous disclosure. A contractor or subcontractor may be suspended or debarred for violations of the Code. Furthermore, the CPO may void the contract and the surety providing the performance bond shall be responsible for completion of the contract.

B. Financial Interests and Conflicts of Interest

1. Section 50-35 of the Code provides that all bids of more than $50,000 and all submissions to a vendor portal shall be accompanied by disclosure of the financial interests of the bidder. This disclosed information for the successful bidder, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act, filed with the Procurement Policy Board, and shall be incorporated as a material term of the contract. Furthermore, pursuant to Section 5-5, the Procurement Policy Board may review a proposal, bid, or contract and issue a recommendation to void a contract or reject a proposal or bid based on any violation of the Code or the existence of a conflict of interest as provided in subsections (b) and (d) of Section 50-35.

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the bidding entity or its parent entity, whichever is less, unless the contractor or bidder is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 100 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any individual or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each individual making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each individual making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.
The current annual salary of the Governor is $177,412.00.

In addition, all disclosures shall indicate any other current or pending contracts, proposals, leases, or other ongoing procurement relationships the bidding entity has with any other unit of state government and shall clearly identify the unit and the contract, proposal, lease, or other relationship.

2. Disclosure Forms. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. A separate Disclosure Form A must be submitted with the bid for each individual meeting the above requirements. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies and a total ownership certification. **The forms must be included with each bid.**

C. Disclosure Form Instructions

Form A Instructions for Financial Information & Potential Conflicts of Interest

If the bidder is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 100 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any individual or entity holding any ownership share that is in excess of 5%. If a bidder is not subject to Federal 10K reporting, the bidder must determine if any individuals are required by law to complete a financial disclosure form. To do this, the bidder should answer each of the following questions. A "YES" answer indicates Form A must be completed. If the answer to each of the following questions is "NO", then the NOT APPLICABLE STATEMENT on Form A must be signed and dated by an individual that is authorized to execute contracts for the bidding company. Note: These questions are for assistance only and are not required to be completed.

1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES ___ NO ___
2. Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than 60% of the annual salary of the Governor? YES ___ NO___
3. Does anyone in your organization receive more than 60% of the annual salary of the Governor of the bidding entity's or parent entity's distributive income? YES ___ NO __
4. Does anyone in your organization receive greater than 5% of the bidding entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES ___ NO __

   (Note: Only one set of forms needs to be completed per individual per bid even if a specific individual would require a yes answer to more than one question.)

A "YES" answer to any of these questions requires the completion of Form A. The bidder must determine each individual in the bidding entity or the bidding entity's parent company that would cause the questions to be answered "Yes". Each form must be signed and dated by an individual that is authorized to execute contracts for your organization. The individual signing can be, but does not have to be, the individual for which the form is being completed. The bidder is responsible for the accuracy of any information provided.

If the answer to each of the above questions is "NO", then the NOT APPLICABLE STATEMENT of Form A must be signed and dated by an individual that is authorized to execute contracts for your company.

RETURN WITH BID

Form B: Instructions for Identifying Other Contracts & Procurement Related Information

Disclosure Form B must be completed for each bid submitted by the bidding entity. *Note: Checking the NOT APPLICABLE STATEMENT on Form A does not allow the bidder to ignore Form B. Form B must be completed, checked, and dated or the bidder may be considered nonresponsive and the bid will not be accepted.*

The Bidder shall identify, by checking Yes or No on Form B, whether it has any pending contracts (including leases), bids, proposals, or other ongoing procurement relationship with any other (non-IDOT) State of Illinois agency. If "No" is checked, the bidder only needs to complete the check box on the bottom of Form B. If "Yes" is checked, the bidder must do one of the following:

Option I: If the bidder did not submit an Affidavit of Availability to obtain authorization to bid, the bidder must list all non-IDOT State of Illinois agency pending contracts, leases, bids, proposals, and other ongoing procurement relationships. These items may be listed on Form B or on an attached sheet(s). Do not include IDOT contracts. Contracts with cities, counties, villages, etc. are not considered State of Illinois agency contracts and are not to be included. Contracts with other State of Illinois agencies such as the Department of Natural Resources or the Capital Development Board must be included. Bidders who submit Affidavits of Availability are suggested to use Option II.

Option II: If the bidder is required and has submitted an Affidavit of Availability in order to obtain authorization to bid, the bidder may write or type "See Affidavit of Availability" which indicates that the Affidavit of Availability is incorporated by reference and includes all non-IDOT State of Illinois agency pending contracts, leases, bids, proposals, and other ongoing procurement relationships. For any contracts that are not covered by the Affidavit of Availability, the bidder must identify them on Form B or on an attached sheet(s). These might be such things as leases.

RETURN WITH BID

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form A
Financial Information & Potential Conflicts of Interest Disclosure

Contractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

Disclosure of the information contained in this Form is required by Section 50-35 of the Code (30 ILCS 500). Vendors desiring to enter into a contract with the State of Illinois must disclose the financial information and potential conflict of interest information as specified in this Disclosure Form. This information shall become part of the publicly available contract file. This Form A must be completed for bids in excess of $50,000, and for all open-ended contracts. **A publicly traded company may submit a 10K disclosure (or equivalent if applicable) in satisfaction of the requirements set forth in Form A. See Disclosure Form Instructions.**

The current annual salary of the Governor is $177,412.00.

DISCLOSURE OF FINANCIAL INFORMATION

1. **Disclosure of Financial Information.** The individual named below has an interest in the BIDDER (or its parent) in terms of ownership or distributive income share in excess of 5%, or an interest which has a value of more than 60% of the annual salary of the Governor. **(Make copies of this form as necessary and attach a separate Disclosure Form A for each individual meeting these requirements)**

FOR INDIVIDUAL (type or print information)

NAME: _____

ADDRESS _____

_____

Type of ownership/distributable income share:

stock _____ sole proprietorship _____ Partnership _____ other: (explain on separate sheet):

% or $ value of ownership/distributable income share: _____

2. Disclosure of Potential Conflicts of Interest. Check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If the answer to any question is "Yes", please attach additional pages and describe.

(a) State employment, currently or in the previous 3 years, including contractual employment of services.
Yes ___No __

If your answer is yes, please answer each of the following questions.

1. Are you currently an officer or employee of either the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ___No __

2. Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor provide the name the State agency for which you are employed and your annual salary. _____
_____

3. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 100% of the annual salary of the Governor? Yes ___ No __

4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15% in aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor? Yes ___ No __

(b) State employment of spouse, father, mother, son, or daughter, including contractual employment for services in the previous 2 years.

Yes ___No __

If your answer is yes, please answer each of the following questions.

1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ___No __

2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, provide the name of the spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary. _____
_____

3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 71/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess 100% of the annual salary of the Governor? Yes ___ No __

4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or any minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income from your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor?

Yes ___ No __

(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years. Yes ___No __

(d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___No __

(e) Appointive office; the holding of any appointive government office of the State of Illinois, the United State of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statues of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years. Yes ___No __

(f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___No __

(g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government. Yes ___No __

(h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___No __

(i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.
Yes ___ No __

(j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.
Yes ___ No __

---

3. Communication Disclosure.

Disclose the name and address of each lobbyist and other agent of the bidder or offeror who is not identified in Section 2 of this form, who is has communicated, is communicating, or may communicate with any State officer or employee concerning the bid or offer. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the process and throughout the term of the contract. If no person is identified, enter "None" on the line below:

Name and address of person(s): _____

_____

_____

_____

RETURN WITH BID

4. Debarment Disclosure. For each of the persons identified under Sections 2 and 3 of this form, disclose whether any of the following has occurred within the previous 10 years: debarment from contracting with any governmental entity; professional licensure discipline; bankruptcies; adverse civil judgments and administrative findings; and criminal felony convictions. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the procurement process and term of the contract. If no person is identified, enter "None" on the line below:

Name of person(s): _____

Nature of disclosure: _____
_____
_____
_____

APPLICABLE STATEMENT

This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Under penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of my knowledge.

Completed by: ☐ _____ _____
Signature of Individual or Authorized Representative Date

NOT APPLICABLE STATEMENT

Under penalty of perjury, I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A.

This Disclosure Form A is submitted on behalf of the CONTRACTOR listed on the previous page.

☐ _____ _____
Signature of Authorized Representative Date

The bidder has a continuing obligation to supplement these disclosures under Sec. 50-35 of the Code.

RETURN WITH BID

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B
Other Contracts & Financial Related Information Disclosure

Contractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

Disclosure of the information contained in this Form is required by Section 50-35 of the Code (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for all bids.

DISCLOSURE OF OTHER CONTRACTS AND PROCUREMENT RELATED INFORMATION

1. Identifying Other Contracts & Procurement Related Information. The BIDDER shall identify whether it has any pending contracts (including leases), bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency: Yes ___ No __
If "No" is checked, the bidder only needs to complete the signature box on this page.

2. If "Yes" is checked. Identify each such relationship by showing State of Illinois agency name and other descriptive information such as bid or project number (attach additional pages as necessary). SEE DISCLOSURE FORM INSTRUCTIONS:

THE FOLLOWING STATEMENT MUST BE CHECKED

☐ _____ _____
Signature of Authorized Representative Date

OWNERSHIP CERTIFICATION

Please certify that the following statement is true if the individuals for all submitted Form A disclosures do not total 100% of ownership.

Any remaining ownership interest is held by individuals receiving less than $106,447.20 of the bidding entity's or parent entity's distributive income or holding less than a 5% ownership interest.

☐ Yes ☐ No ☐ N/A (Form A disclosure(s) established 100% ownership)

RETURN WITH BID

SPECIAL NOTICE TO CONTRACTORS

The following requirements of the Illinois Department of Human Rights Act are applicable to bidders on all construction contracts advertised by the Illinois Department of Transportation:

CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION

(a) All bidders on construction contracts shall complete and submit, along with and as part of their bids, a Bidder's Employee Utilization Form (Form BC-1256) setting forth a projection and breakdown of the total workforce intended to be hired and/or allocated to such contract work by the bidder including a projection of minority and female employee utilization in all job classifications on the contract project.

(b) The Department of Transportation shall review the Employee Utilization Form, and workforce projections contained therein, of the contract awardee to determine if such projections reflect an underutilization of minority persons and/or women in any job classification in accordance with the Equal Employment Opportunity Clause and Title 44, Illinois Administrative Code, Section 750.120. If it is determined that the contract awardee's projections reflect an underutilization of minority persons and/or women in any job classification, it shall be advised in writing of the manner in which it is underutilizing and such awardee shall be considered to be in breach of the contract unless, prior to commencement of work on the contract project, it submits revised satisfactory projections or an acceptable written affirmative action plan to correct such underutilization including a specific timetable geared to the completion stages of the contract.

(c) The Department of Transportation shall provide to the Department of Human Rights a copy of the contract awardee's Employee Utilization Form, a copy of any required written affirmative action plan, and any written correspondence related thereto. The Department of Human Rights may review and revise any action taken by the Department of Transportation with respect to these requirements.

RETURN WITH BID

Illinois Department of Transportation

Contract No. 61A85
COOK County
Section 13-00084-00-BT (Northlake)
Project M-4003(403)
Route ADDISON CREEK TRAIL
District 1 Construction Funds

PART I. IDENTIFICATION

Dept. of Human Rights # _____ Duration of Project: _____

Name of Bidder: _____

PART II. WORKFORCE PROJECTION

A. The undersigned bidder has analyzed minority group and female populations, unemployment rates and availability of workers for the location in which this contract work is to be performed, and for the locations from which the bidder recruits employees, and hereby submits the following workforce projection including a projection for minority and female employee utilization in all job categories in the workforce to be allocated to this contract:

TABLE A

TOTAL Workforce Projection for Contract													TABLE B: CURRENT EMPLOYEES TO BE ASSIGNED TO CONTRACT			
			MINORITY EMPLOYEES						TRAINEES				TOTAL EMPLOYEES		MINORITY EMPLOYEES	
JOB CATEGORIES	TOTAL EMPLOYEES		BLACK		HISPANIC		*OTHER MINOR.		APPREN-TICES		ON THE JOB TRAINEES					
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
OFFICIALS (MANAGERS)																
SUPERVISORS																
FOREMEN																
CLERICAL																
EQUIPMENT OPERATORS																
MECHANICS																
TRUCK DRIVERS																
IRONWORKERS																
CARPENTERS																
CEMENT MASONS																
ELECTRICIANS																
PIPEFITTERS, PLUMBERS																
PAINTERS																
LABORERS, SEMI-SKILLED																
LABORERS, UNSKILLED																
TOTAL																

TABLE C

TOTAL Training Projection for Contract								
EMPLOYEES IN TRAINING	TOTAL EMPLOYEES		BLACK		HISPANIC		*OTHER MINOR.	
	M	F	M	F	M	F	M	F
APPRENTICES								
ON THE JOB TRAINEES								

*Other minorities are defined as Asians (A) or Native Americans (N).
Please specify race of each employee shown in Other Minorities column.

FOR DEPARTMENT USE ONLY

BC 1256 (Rev. 12/11/07)

Note: See instructions on page 2

RETURN WITH BID

Contract No. 61A85
COOK County
Section 13-00084-00-BT (Northlake)
Project M-4003(403)
Route ADDISON CREEK TRAIL
District 1 Construction Funds

PART II. WORKFORCE PROJECTION - continued

B. Included in "Total Employees" under Table A is the total number of **new hires** that would be employed in the event the undersigned bidder is awarded this contract.

The undersigned bidder projects that: (number) _____ new hires would be recruited from the area in which the contract project is located; and/or (number) _____ new hires would be recruited from the area in which the bidder's principal office or base of operation is located.

C. Included in "Total Employees" under Table A is a projection of numbers of persons to be employed directly by the undersigned bidder as well as a projection of numbers of persons to be employed by subcontractors.

The undersigned bidder estimates that (number) _____ persons will be directly employed by the prime contractor and that (number) _____ persons will be employed by subcontractors.

PART III. AFFIRMATIVE ACTION PLAN

A. The undersigned bidder understands and agrees that in the event the foregoing minority and female employee utilization projection included under **PART II** is determined to be an underutilization of minority persons or women in any job category, and in the event that the undersigned bidder is awarded this contract, he/she will, prior to commencement of work, develop and submit a written Affirmative Action Plan including a specific timetable (geared to the completion stages of the contract) whereby deficiencies in minority and/or female employee utilization are corrected. Such Affirmative Action Plan will be subject to approval by the contracting agency and the **Illinois Department of Human Rights**.

B. The undersigned bidder understands and agrees that the minority and female employee utilization projection submitted herein, and the goals and timetable included under an Affirmative Action Plan if required, are deemed to be part of the contract specifications.

Company _____ Telephone Number _____

_____

Address _____

NOTICE REGARDING SIGNATURE

The Bidder's signature on the Proposal Signature Sheet will constitute the signing of this form. The following signature block needs to be completed only if revisions are required.

Signature: ☐ _____ Title: _____ Date: _____

Instructions: All tables must include subcontractor personnel in addition to prime contractor personnel.

Table A - Include both the number of employees that would be hired to perform the contract work and the total number currently employed (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "Total Employees" column should include all employees including all minorities, apprentices and on-the-job trainees to be employed on the contract work.

Table B - Include all employees currently employed that will be allocated to the contract work including any apprentices and on-the-job trainees currently employed.

Table C - Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.

BC-1256 (Rev. 12/11/07)

RETURN WITH BID

ADDITIONAL FEDERAL REQUIREMENTS

In addition to the Required Contract Provisions for Federal-Aid Construction Contracts (FHWA 1273), all bidders make the following certifications.

A. By the execution of this proposal, the signing bidder certifies that the bidding entity has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with the submitted bid. This statement made by the undersigned bidder is true and correct under penalty of perjury under the laws of the United States.

B. CERTIFICATION, EQUAL EMPLOYMENT OPPORTUNITY:

1. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause. YES _____ NO _____

2. If answer to #1 is yes, have you filed with the Joint Reporting Committee, the Director of OFCC, any Federal agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements of those organizations? YES _____ NO _____

RETURN WITH BID

Contract No. 61A85
COOK County
Section 13-00084-00-BT (Northlake)
Project M-4003(403)
Route ADDISON CREEK TRAIL
District 1 Construction Funds

PROPOSAL SIGNATURE SHEET

The undersigned bidder hereby makes and submits this bid on the subject Proposal, thereby assuring the Department that all requirements of the Invitation for Bids and rules of the Department have been met, that there is no misunderstanding of the requirements of paragraph 3 of this Proposal, and that the contract will be executed in accordance with the rules of the Department if an award is made on this bid.

(IF AN INDIVIDUAL)

Firm Name _____

Signature of Owner _____

Business Address _____

_____

(IF A CO-PARTNERSHIP)

Firm Name _____

By _____

Business Address _____

_____

Name and Address of All Members of the Firm:

_____ _____

(IF A CORPORATION)

Corporate Name _____

By _____
Signature of Authorized Representative

_____
Typed or printed name and title of Authorized Representative

Attest _____
Signature

(IF A JOINT VENTURE, USE THIS SECTION FOR THE MANAGING PARTY AND THE SECOND PARTY SHOULD SIGN BELOW)

Business Address _____

(IF A JOINT VENTURE)

Corporate Name _____

By _____
Signature of Authorized Representative

_____
Typed or printed name and title of Authorized Representative

Attest _____
Signature

Business Address _____

_____

If more than two parties are in the joint venture, please attach an additional signature sheet.

Illinois Department of Transportation

Return with Bid

Division of Highways
Annual Proposal Bid Bond

This Annual Proposal Bid Bond shall become effective at 12:01 AM (CDST) on _____ and shall be valid until _____ 11:59 PM (CDST).

KNOW ALL PERSONS BY THESE PRESENTS, That We _____

as PRINCIPAL, and _____

as SURETY, and held jointly, severally and firmly bound unto the STATE OF ILLINOIS in the penal sum of 5 percent of the total bid price, or for the amount specified in the bid proposal under "Proposal Guaranty" in effect on the date of the Invitation for Bids, whichever is the lesser sum, well and truly to be paid unto said STATE OF ILLINOIS, for the payment of which we bind ourselves, our heirs, executors, administrators, successors and assigns.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that whereas, the PRINCIPAL may submit bid proposal(s) to the STATE OF ILLINOIS, acting through the Department of Transportation, for various improvements published in the Transportation Bulletin during the effective term indicated above.

NOW, THEREFORE, if the Department shall accept the bid proposal(s) of the PRINCIPAL; and if the PRINCIPAL shall, within the time and as specified in the bidding and contract documents; and if, after award by the Department, the PRINCIPAL shall enter into a contract in accordance with the terms of the bidding and contract documents including evidence of the required insurance coverages and providing such bond as specified with good and sufficient surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof; or if, in the event of the failure of the PRINCIPAL to enter into such contract and to give the specified bond, the PRINCIPAL pays to the Department the difference not to exceed the penalty hereof between the amount specified in the bid proposal and such larger amount for which the Department may contract with another party to perform the work covered by said bid proposal, then this obligation shall be null and void, otherwise, it shall remain in full force and effect.

IN THE EVENT the Department determines the PRINCIPAL has failed to comply with any requirement as set forth in the preceding paragraph, then Surety shall pay the penal sum to the Department within fifteen (15) days of written demand therefor. If Surety does not make full payment within such period of time, the Department may bring an action to collect the amount owed. Surety is liable to the Department for all its expenses, including attorney's fees, incurred in any litigation in which it prevails either in whole or in part.

In TESTIMONY WHEREOF, the said PRINCIPAL has caused this instrument to be signed by its officer
_____ day of _____ A.D., _____.

_____
(Company Name)

By _____
(Signature and Title)

Notary for PRINCIPAL

STATE OF _____
COUNTY OF _____

Signed and attested before me on _____ (date)

by _____
(Name of Notary Public)

(Seal)

_____
(Signature of Notary Public)

_____
(Date Commission Expires)

In TESTIMONY WHEREOF, the said SURETY has caused this instrument to be signed by its officer
_____ day of _____ A.D., _____.

_____
(Company Name)

By _____
(Signature of Attorney-in-Fact)

Notary for SURETY

STATE OF _____
COUNTY OF _____

Signed and attested before me on _____ (date)

by _____
(Name of Notary Public)

(Seal)

_____
(Signature of Notary Public)

_____
(Date Commission Expires)

In lieu of completing the above section of the Annual Proposal Bid Bond form, the Principal may file an Electronic Bid Bond. By signing the proposal(s) the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the State of Illinois under the conditions of the bid bond as shown above.

Electronic Bid Bond ID #	Company/Bidder Name	Signature and Title

This bond may be terminated, at Surety's request, upon giving not less than thirty (30) days prior written notice of the cancellation/termination of the bond. Said written notice shall be issued to the Illinois Department of Transportation, Chief Contracts Official, 2300 South Dirksen Parkway, Springfield, Illinois, 62764, and shall be served in person, by receipted courier delivery or certified or registered mail, return receipt requested. Said notice period shall commence on the first calendar day following the Department's receipt of written cancellation/termination notice. Surety shall remain firmly bound to all obligations herein for proposals submitted prior to the cancellation/termination. Surety shall be released and discharged from any obligation(s) for proposals submitted for any letting or date after the effective date of cancellation/termination.

Illinois Department of Transportation

Return with Bid

Division of Highways
Proposal Bid Bond

Item No. _____

Letting Date _____

KNOW ALL PERSONS BY THESE PRESENTS, That We _____

as PRINCIPAL, and _____

as SURETY, and held jointly, severally and firmly bound unto the STATE OF ILLINOIS in the penal sum of 5 percent of the total bid price, or for the amount specified in the bid proposal under "Proposal Guaranty" in effect on the date of the Invitation for Bids, whichever is the lesser sum, well and truly to be paid unto said STATE OF ILLINOIS, for the payment of which we bind ourselves, our heirs, executors, administrators, successors and assigns.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that whereas, the PRINCIPAL has submitted a bid proposal to the STATE OF ILLINOIS, acting through the Department of Transportation, for the improvement designated by the Transportation Bulletin Item Number and Letting Date indicated above.

NOW, THEREFORE, if the Department shall accept the bid proposal of the PRINCIPAL; and if the PRINCIPAL shall, within the time and as specified in the bidding and contract documents; and if, after award by the Department, the PRINCIPAL shall enter into a contract in accordance with the terms of the bidding and contract documents including evidence of the required insurance coverages and providing such bond as specified with good and sufficient surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof; or if, in the event of the failure of the PRINCIPAL to enter into such contract and to give the specified bond, the PRINCIPAL pays to the Department the difference not to exceed the penalty hereof between the amount specified in the bid proposal and such larger amount for which the Department may contract with another party to perform the work covered by said bid proposal, then this obligation shall be null and void, otherwise, it shall remain in full force and effect.

IN THE EVENT the Department determines the PRINCIPAL has failed to comply with any requirement as set forth in the preceding paragraph, then Surety shall pay the penal sum to the Department within fifteen (15) days of written demand therefor. If Surety does not make full payment within such period of time, the Department may bring an action to collect the amount owed. Surety is liable to the Department for all its expenses, including attorney's fees, incurred in any litigation in which it prevails either in whole or in part.

In TESTIMONY WHEREOF, the said PRINCIPAL has caused this instrument to be signed by its officer
_____ day of _____ A.D., _____.

_____
(Company Name)

By _____
(Signature and Title)

Notary for PRINCIPAL

STATE OF _____
COUNTY OF _____

Signed and attested before me on _____ (date)
by _____
(Name of Notary Public)

(Seal)

_____
(Signature of Notary Public)

_____
(Date Commission Expires)

In TESTIMONY WHEREOF, the said SURETY has caused this instrument to be signed by its officer
_____ day of _____ A.D., _____.

_____
(Company Name)

By _____
(Signature of Attorney-in-Fact)

Notary for SURETY

STATE OF _____
COUNTY OF _____

Signed and attested before me on _____ (date)
by _____
(Name of Notary Public)

(Seal)

_____
(Signature of Notary Public)

_____
(Date Commission Expires)

In lieu of completing the above section of the Proposal Bid Bond form, the Principal may file an Electronic Bid Bond. By signing the proposal the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the State of Illinois under the conditions of the bid bond as shown above.

Electronic Bid Bond ID #	Company/Bidder Name	Signature and Title

Illinois Department of Transportation

DBE Utilization Plan

(1) Policy

It is public policy that disadvantaged businesses as defined in 49 CFR Part 26 and the Special Provision shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with Federal or State funds. Consequently the requirements of 49 CFR Part 26 apply to this contract.

(2) Obligation

The contractor agrees to ensure that disadvantaged businesses as defined in 49 CFR Part 26 and the Special Provision have the maximum opportunity to participate in the performance of contracts or subcontracts financed in whole or in part with Federal or State funds. The contractor shall take all necessary and reasonable steps in accordance with 49 CFR Part 26 and the Special Provision to ensure that said businesses have the maximum opportunity to compete for and perform under this contract. The contractor shall not discriminate on the basis of race, color, national origin or sex in the award and performance of contracts.

(3) Project and Bid Identification

Complete the following information concerning the project and bid:

Route _____ Total Bid _____

Section _____ Contract DBE Goal _____ (Percent) _____ (Dollar Amount)

Project _____

County _____

Letting Date _____

Contract No. _____

Letting Item No. _____

(4) Assurance

I, acting in my capacity as an officer of the undersigned bidder (or bidders if a joint venture), hereby assure the Department that on this project my company : (check one)

☐ Meets or exceeds contract award goals and has provided documented participation as follows:

Disadvantaged Business Participation _____ percent

Attached are the signed participation statements, forms SBE 2025, required by the Special Provision evidencing availability and use of each business participating in this plan and assuring that each business will perform a commercially useful function in the work of the contract.

☐ Failed to meet contract award goals and has included good faith effort documentation to meet the goals and that my company has provided participation as follows:

Disadvantaged Business Participation _____ percent

The contract goals should be accordingly modified or waived. Attached is all information required by the Special Provision in support of this request including good faith effort. Also attached are the signed participation statements, forms SBE 2025, required by the Special Provision evidencing availability and use of each business participating in this plan and assuring that each business will perform a commercially useful function in the work of the contract.

_____
Company

By _____

Title _____

Date _____

The "as read" Low Bidder is required to comply with the Special Provision.

Submit only one utilization plan for each project. The utilization plan shall be submitted in accordance with the special provision.

Bureau of Small Business Enterprises
2300 South Dirksen Parkway
Springfield, Illinois 62764

Local Let Projects
Submit forms to the
Local Agency

The Department of Transportation is requesting disclosure of information that is necessary to accomplish the purpose as outlined under State and Federal law. Disclosure of this information is **REQUIRED**. Failure to provide any information will result in the contract not being awarded. This form has been approved by the State Forms Manager Center.

Illinois Department of Transportation

DBE Participation Statement

Subcontractor Registration Number _____ Letting _____

Participation Statement Item No. _____

(1) Instructions Contract No. _____

This form must be completed for each disadvantaged business participating in the Utilization Plan. This form shall be submitted in accordance with the special provision and will be attached to the Utilization Plan form. If additional space is needed complete an additional form for the firm.

(2) Work:

Please indicate: J/V _____ Manufacturer _____ Supplier (60%) _____ Subcontractor _____ Trucking _____

Pay Item No.	Description	Quantity	Unit Price	Total
			Total	

(3) Partial Payment Items (For any of the above items which are partial pay items)
Description must be sufficient to determine a Commercially Useful Function, specifically describe the work and subcontract dollar amount:

(4) Commitment
When a DBE is to be a second-tier subcontractor, or if the first-tier DBE subcontractor is going to be subcontracting a portion of its subcontract, it must be clearly indicated on the DBE Participation Statement, and the details of the transaction fully explained.

In the event a DBE subcontractor second-tiers a portion of its subcontract to one or more subcontractors during the work of a contract, the prime must submit a DBE Participation Statement, with the details of the transaction(s) fully explained.

The undersigned certify that the information included herein is true and correct, and that the DBE firm listed below has agreed to perform a commercially useful function in the work of the contract item(s) listed above and to execute a contract with the prime contractor or 1st Tier subcontractor. The undersigned further understand that no changes to this statement may be made without prior approval from the Department's Bureau of Small Business Enterprises and that complete and accurate information regarding actual work performed on this project and the payment therefore must be provided to the Department.

_____
Signature for Contractor __ 1st Tier __ 2nd Tier

Title _____

Date _____

Contact Person _____

Phone _____

Firm Name _____

Address _____

City/State/Zip _____

_____
Signature for DBE Firm __ 1st Tier __ 2nd Tier

Title _____

Date _____

Contact Person _____

Phone _____

Firm Name _____

Address _____

City/State/Zip _____

E _____

WC _____

The Department of Transportation is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under the state and federal law. Disclosure of this information is **REQUIRED**. Failure to provide any information will result in the contract not being awarded. This form has been approved by the State Forms Management Center.

PROPOSAL ENVELOPE

Illinois Department of Transportation

PROPOSALS

for construction work advertised for bids by the
Illinois Department of Transportation

Item No.	Item No.	Item No.

Submitted By:

Name:
Address:
Phone No.

Bidders should use an IDOT proposal envelope or affix this form to the front of a 10” x 13” envelope for the submittal of bids. If proposals are mailed, they should be enclosed in a second or outer envelope addressed to:

Engineer of Design and Environment - Room 326
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, Illinois 62764

NOTICE

Individual bids, including Bid Bond and/or supplemental information if required, should be securely stapled.

CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

NOTICE

None of the following material needs to be returned with the bid package unless the special provisions require documentation and/or other information to be submitted.

Contract No. 61A85
COOK County
Section 13-00084-00-BT (Northlake)
Project M-4003(403)
Route ADDISON CREEK TRAIL
District 1 Construction Funds

Illinois Department of Transportation

SUBCONTRACTOR DOCUMENTATION

Public Acts 96-0795, 96-0920, and 97-0895 enacted substantial changes to the provisions of the Code (30 ILCS 500). Among the changes are provisions affecting subcontractors. The Contractor awarded this contract will be required as a material condition of the contract to implement and enforce the contract requirements applicable to subcontractors that entered into a contractual agreement with a total value of $50,000 or more with a person or entity who has a contract subject to the Code and approved in accordance with article 108.01 of the Standard Specifications for Road and Bridge Construction.

If the Contractor seeks approval of subcontractors to perform a portion of the work, and approval is granted by the Department, the Contractor shall provide a copy of the subcontract to the Illinois Department of Transportation's CPO upon request within 15 calendar days after execution of the subcontract.

Financial disclosures required pursuant to Sec. 50-35 of the Code must be submitted for all applicable subcontractors. The subcontract shall contain the certifications required to be made by subcontractors pursuant to Article 50 of the Code. This Notice to Bidders includes a document incorporating all required subcontractor certifications and disclosures for use by the Contractor in compliance with this mandate. The document is entitled State Required Ethical Standards Governing Subcontractors.

RETURN WITH SUBCONTRACT

STATE ETHICAL STANDARDS GOVERNING SUBCONTRACTORS

Article 50 of the Code establishes the duty of all State CPOs, SPOs, and their designees to maximize the value of the expenditure of public moneys in procuring goods, services, and contracts for the State of Illinois and to act in a manner that maintains the integrity and public trust of State government. In discharging this duty, they are charged by law to use all available information, reasonable efforts, and reasonable actions to protect, safeguard, and maintain the procurement process of the State of Illinois.

The certifications hereinafter made by the subcontractor are each a material representation of fact upon which reliance is placed should the Department approve the subcontractor. The CPO may terminate or void the contract approval if it is later determined that the bidder or subcontractor rendered a false or erroneous certification. If a false certification is made by a subcontractor the contractor's submitted bid and the executed contract may not be declared void unless the contractor refuses to terminate the subcontract upon the State's request after a finding that the subcontractor's certification was false.

Section 50-2 of the Code provides that every person that has entered into a multi-year contract and every subcontractor with a multi-year subcontract shall certify, by July 1 of each fiscal year covered by the contract after the initial fiscal year, to the responsible CPO whether it continues to satisfy the requirements of Article 50 pertaining to the eligibility for a contract award. If a contractor or subcontractor is not able to truthfully certify that it continues to meet all requirements, it shall provide with its certification a detailed explanation of the circumstances leading to the change in certification status. A contractor or subcontractor that makes a false statement material to any given certification required under Article 50 is, in addition to any other penalties or consequences prescribed by law, subject to liability under the Whistleblower Reward and Protection Act for submission of a false claim.

A. Bribery

Section 50-5. Bribery.

(a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:

(1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or

(2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.

(b) Businesses. No business shall be barred from contracting with any unit of State or local government, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:

(1) the business has been finally adjudicated not guilty; or

(2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract to which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 2012.

(c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.

(d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50-5.

B. Felons

Section 50-10. Felons.

(a) Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any State agency, or enter into a subcontract, from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.

(b) Certification. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code shall contain a certification by the bidder or contractor or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any of the certifications required by this Section are false.

RETURN WITH SUBCONTRACT

C. Debt Delinquency

Section 50-11 and 50-12. Debt Delinquency.

The contractor or bidder or subcontractor, respectively, certifies that it, or any affiliate, is not barred from being awarded a contract or subcontract under the Code. Section 50-11 prohibits a person from entering into a contract with a State agency, or entering into a subcontract, if it knows or should know that it, or any affiliate, is delinquent in the payment of any debt to the State as defined by the Debt Collection Board. Section 50-12 prohibits a person from entering into a contract with a State agency, or entering into a subcontract, if it, or any affiliate, has failed to collect and remit Illinois Use Tax on all sales of tangible personal property into the State of Illinois in accordance with the provisions of the Illinois Use Tax Act. The bidder or contractor or subcontractor, respectively, further acknowledges that the CPO may declare the related contract void if this certification is false or if the bidder, contractor, or subcontractor, or any affiliate, is determined to be delinquent in the payment of any debt to the State during the term of the contract.

D. Prohibited Bidders, Contractors and Subcontractors

Section 50-10.5 and 50-60(c). Prohibited bidders, contractors and subcontractors.

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-10.5 that no officer, director, partner or other managerial agent of the contracting business has been convicted of a felony under the Sarbanes-Oxley Act of 2002 or a Class 3 or Class 2 felony under the Illinois Securities Law of 1953 or if in violation of Subsection (c) for a period of five years from the date of conviction. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code shall contain a certification by the bidder, contractor, or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO shall declare the related contract void if any of the certifications completed pursuant to this Section are false.

E. Section 42 of the Environmental Protection Act

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-14 that the bidder, contractor, or subcontractor, is not barred from being awarded a contract or entering into a subcontract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency, or entering into any subcontract, that is subject to the Code by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The bidder or contractor or subcontractor, respectively, acknowledges that the CPO may declare the contract void if this certification is false.

The undersigned, on behalf of the subcontracting company, has read and understands the above certifications and makes the certifications as required by law.

_____
Name of Subcontracting Company

_____ _____
Authorized Officer Date

RETURN WITH SUBCONTRACT

SUBCONTRACTOR DISCLOSURES

I. DISCLOSURES

A. The disclosures hereinafter made by the subcontractor are each a material representation of fact upon which reliance is placed. The subcontractor further certifies that the Department has received the disclosure forms for each subcontract.

The CPO may void the bid, contract, or subcontract, respectively, if it is later determined that the bidder or subcontractor rendered a false or erroneous disclosure. A contractor or subcontractor may be suspended or debarred for violations of the Code. Furthermore, the CPO may void the contract.

B. Financial Interests and Conflicts of Interest

1. Section 50-35 of the Code provides that all subcontracts with a total value of $50,000 or more, from subcontractors identified in Section 20-120 of the Code, shall be accompanied by disclosure of the financial interests of the subcontractor. This disclosed information for the subcontractor, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act, filed with the Procurement Policy Board, and shall be incorporated as a material term of the Prime Contractor's contract. Furthermore, pursuant to this Section, the Procurement Policy Board may recommend to allow or void a contract or subcontract based on a potential conflict of interest.

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the subcontracting entity or its parent entity, whichever is less, unless the subcontractor is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a subcontractor is a privately held entity that is exempt from Federal 10K reporting, but has more than 100 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any individual or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each individual making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each individual making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.
The current annual salary of the Governor is $177,412.00.

In addition, all disclosures shall indicate any other current or pending contracts, subcontracts, proposals, leases, or other ongoing procurement relationships the subcontracting entity has with any other unit of state government and shall clearly identify the unit and the contract, subcontract, proposal, lease, or other relationship.

2. Disclosure Forms. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. A separate Disclosure Form A must be submitted with the bid for each individual meeting the above requirements. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies and a total ownership certification. **The forms must be included with each bid.**

C. Disclosure Form Instructions

Form A Instructions for Financial Information & Potential Conflicts of Interest

If the subcontractor is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a subcontractor is a privately held entity that is exempt from Federal 10K reporting, but has more than 100 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any individual or entity holding any ownership share that is in excess of 5%. If a subcontractor is not subject to Federal 10K reporting, the subcontractor must determine if any individuals are required by law to complete a financial disclosure form. To do this, the subcontractor should answer each of the following questions. A "YES" answer indicates Form A must be completed. If the answer to each of the following questions is "NO", then the NOT APPLICABLE STATEMENT on the second page of Form A must be signed and dated by an individual that is authorized to execute contracts for the subcontracting company. Note: These questions are for assistance only and are not required to be completed.

1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES ___ NO___
2. Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than 60% of the annual salary of the Governor? YES ___ NO___
3. Does anyone in your organization receive more than 60% of the annual salary of the Governor of the subcontracting entity's or parent entity's distributive income? YES ___ NO __

   (Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.)
4. Does anyone in your organization receive greater than 5% of the subcontracting entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES ___ NO __

   (Note: Only one set of forms needs to be completed per individual per subcontract even if a specific individual would require a yes answer to more than one question.)

A "YES" answer to any of these questions requires the completion of Form A. The subcontractor must determine each individual in the subcontracting entity or the subcontracting entity's parent company that would cause the questions to be answered "Yes". Each form must be signed and dated by an individual that is authorized to execute contracts for your organization. The individual signing can be, but does not have to be, the individual for which the form is being completed. The subcontractor is responsible for the accuracy of any information provided.

If the answer to each of the above questions is "NO", then the NOT APPLICABLE STATEMENT on page 2 of Form A must be signed and dated by an individual that is authorized to execute contracts for your company.

RETURN WITH SUBCONTRACT

Form B: Instructions for Identifying Other Contracts & Procurement Related Information

Disclosure Form B must be completed for each subcontract submitted by the subcontracting entity. *Note: Checking the NOT APPLICABLE STATEMENT on Form A does not allow the subcontractor to ignore Form B. Form B must be completed, checked, and dated or the subcontract will not be approved.*

The Subcontractor shall identify, by checking Yes or No on Form B, whether it has any pending contracts, subcontracts, leases, bids, proposals, or other ongoing procurement relationship with any other (non-IDOT) State of Illinois agency. If "No" is checked, the subcontractor only needs to complete the check box on the bottom of Form B. If "Yes" is checked, the subcontractor must list all non-IDOT State of Illinois agency pending contracts, subcontracts, leases, bids, proposals, and other ongoing procurement relationships. These items may be listed on Form B or on an attached sheet(s). Contracts with cities, counties, villages, etc. are not considered State of Illinois agency contracts and are not to be included. Contracts or subcontracts with other State of Illinois agencies such as the Department of Natural Resources or the Capital Development Board must be included.

RETURN WITH SUBCONTRACT

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form A
Subcontractor: Financial Information & Potential Conflicts of Interest Disclosure

Subcontractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

Disclosure of the information contained in this Form is required by Section 50-35 of the Code (30 ILCS 500). Subcontractors desiring to enter into a subcontract of a State of Illinois contract must disclose the financial information and potential conflict of interest information as specified in this Disclosure Form. This information shall become part of the publicly available contract file. This Form A must be completed for subcontracts with a total value of $50,000 or more, from subcontractors identified in Section 20-120 of the Code, and for all open-ended contracts. **A publicly traded company may submit a 10K disclosure (or equivalent if applicable) in satisfaction of the requirements set forth in Form A. See Disclosure Form Instructions.**

The current annual salary of the Governor is $177,412.00.

DISCLOSURE OF FINANCIAL INFORMATION

1. Disclosure of Financial Information. The individual named below has an interest in the SUBCONTRACTOR (or its parent) in terms of ownership or distributive income share in excess of 5%, or an interest which has a value of more than 60% of the annual salary of the Governor. **(Make copies of this form as necessary and attach a separate Disclosure Form A for each individual meeting these requirements)**

FOR INDIVIDUAL (type or print information)

NAME: _____

ADDRESS _____

_____

Type of ownership/distributable income share:

stock _____ sole proprietorship _____ Partnership _____ other: (explain on separate sheet):

% or $ value of ownership/distributable income share: _____

2. Disclosure of Potential Conflicts of Interest. Check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If the answer to any question is "Yes", please attach additional pages and describe.

(a) State employment, currently or in the previous 3 years, including contractual employment of services.
Yes ___No __

If your answer is yes, please answer each of the following questions.

1. Are you currently an officer or employee of either the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ___No __

2. Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, provide the name the State agency for which you are employed and your annual salary. _____
_____

3. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 100% of the annual salary of the Governor?
Yes ___No __

4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor? Yes ___No __

(b) State employment of spouse, father, mother, son, or daughter, including contractual employment services in the previous 2 years.
Yes ___No __

If your answer is yes, please answer each of the following questions.

1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ___No __

2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, provide the name of your spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary. _____
_____

3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 71/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of of 100% of the annual salary of the Governor? Yes ___No __

4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor?
Yes ___No __

(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years. Yes ___No __

(d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___No __

(e) Appointive office; the holding of any appointive government office of the State of Illinois, the United States of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years. Yes ___No __

(f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___No __

(g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government.
Yes ___No __

(h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___No __

(i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.
Yes ___ No __

(j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.
Yes ___ No __

---

3 Communication Disclosure.

Disclose the name and address of each lobbyist and other agent of the bidder or offeror who is not identified in Section 2 of this form, who is has communicated, is communicating, or may communicate with any State officer or employee concerning the bid or offer. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the process and throughout the term of the contract. If no person is identified, enter "None" on the line below:

Name and address of person(s): _____

_____

_____

_____

RETURN WITH SUBCONTRACT

4. Debarment Disclosure. For each of the persons identified under Sections 2 and 3 of this form, disclose whether any of the following has occurred within the previous 10 years: debarment from contracting with any governmental entity; professional licensure discipline; bankruptcies; adverse civil judgments and administrative findings; and criminal felony convictions. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the procurement process and term of the contract. If no person is identified, enter "None" on the line below:

Name of person(s): _____

Nature of disclosure: _____

_____

_____

_____

APPLICABLE STATEMENT

This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Under penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of my knowledge.

Completed by: ☐ _____ _____

Signature of Individual or Authorized Officer — Date

NOT APPLICABLE STATEMENT

Under penalty of perjury, I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A.

This Disclosure Form A is submitted on behalf of the SUBCONTRACTOR listed on the previous page.

☐ _____ _____

Signature of Authorized Officer — Date

RETURN WITH SUBCONTRACT

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B
Subcontractor: Other Contracts & Financial Related Information Disclosure

Subcontractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

Disclosure of the information contained in this Form is required by Section 50-35 of the Code (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for subcontracts with a total value of $50,000 or more, from subcontractors identified in Section 20-120 of the Code, and for all open-ended contracts.

DISCLOSURE OF OTHER CONTRACTS, SUBCONTRACTS, AND PROCUREMENT RELATED INFORMATION

1. Identifying Other Contracts & Procurement Related Information. The SUBCONTRACTOR shall identify whether it has any pending contracts, subcontracts, including leases, bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency: Yes ___ No __
If "No" is checked, the subcontractor only needs to complete the signature box on this page.

2. If "Yes" is checked. Identify each such relationship by showing State of Illinois agency name and other descriptive information such as bid or project number (attach additional pages as necessary). SEE DISCLOSURE FORM INSTRUCTIONS:

THE FOLLOWING STATEMENT MUST BE CHECKED

☐ _____ _____
Signature of Authorized Officer Date

OWNERSHIP CERTIFICATION

Please certify that the following statement is true if the individuals for all submitted Form A disclosures do not total 100% of ownership

Any remaining ownership interest is held by individuals receiving less than $106,447.20 of the bidding entity's or parent entity's distributive income or holding less than a 5% ownership interest.

☐ Yes ☐ No ☐ N/A (Form A disclosure(s) established 100% ownership)

Illinois Department of Transportation

NOTICE TO BIDDERS

1. **TIME AND PLACE OF OPENING BIDS.** Sealed proposals for the improvement described herein will be received by the Department of Transportation. Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). Paper-based bids are to be submitted to the Chief Procurement Officer for the Department of Transportation in care of the Chief Contracts Official at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 a.mJanuary 30, 2015. All bids will be gathered, sorted, publicly opened and read in the auditorium at the Department of Transportation's Harry R. Hanley Building shortly after 10:00 a.m.

2. **DESCRIPTION OF WORK**. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

   Contract No. 61A85
   COOK County
   Section 13-00084-00-BT (Northlake)
   Project M-4003(403)
   Route ADDISON CREEK TRAIL
   District 1 Construction Funds

Construction of a pedestrian path in the Village of Northlake. Path will be constructed in Grant Park from Whitehall Ave. to Golfview Dr. and adjacent to the King Arthur Residential Development from Rhodes Ave. to Fullerton Avenue.

3. **INSTRUCTIONS TO BIDDERS**. (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 101.09 of the Standard Specifications for Road and Bridge Construction, become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.

   (b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.

4. **AWARD CRITERIA AND REJECTION OF BIDS**. This contract will be awarded to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to readvertise the proposed improvement, and to waive technicalities.

By Order of the
Illinois Department of Transportation

Erica J. Borggren,
Acting Secretary

CONTRACT 61A85

INDEX
FOR
SUPPLEMENTAL SPECIFICATIONS
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2015

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 1-1-12) (Revised 1-1-15)

SUPPLEMENTAL SPECIFICATIONS

RECURRING SPECIAL PROVISIONS

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

LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

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

Table of Contents

INDEX OF SPECIAL PROVISIONS

INDEX LOCAL ROADS AND STREETS SPECIAL PROVISIONS

LR #	Pg #		Special Provision Title	Effective	Revised
LR SD12		☐	Slab Movement Detection Device	Nov. 11, 1984	Jan. 1, 2007
LR SD13		☐	Required Cold Milled Surface Texture	Nov. 1, 1987	Jan. 1, 2007
LR SD406		☐	**RESCINDED**		
LR 102-2		☐	Bidding Requirements and Conditions for Contract Proposals	Jan. 1, 2001	Jan. 1, 2014
LR 105	130	☒	Cooperation with Utilities	Jan. 1, 1999	Jan. 1, 2007
LR 107-2		☐	Railroad Protective Liability Insurance for Local Lettings	Mar. 1, 2005	Jan. 1, 2006
LR 107-4	133	☒	Insurance	Feb. 1, 2007	Aug. 1, 2007
LR 107-7		☐	Wages of Employees on Public Works	Jan. 1, 1999	Jan. 1, 2014
LR 108		☐	Combination Bids	Jan. 1, 1994	Mar. 1, 2005
LR 109		☐	Equipment Rental Rates	Jan. 1, 2012	
LR 212		☐	Shaping Roadway	Aug. 1, 1969	Jan. 1, 2002
LR 355-1		☐	Bituminous Stabilized Base Course, Road Mix or Traveling Plant Mix	Oct. 1, 1973	Jan. 1, 2007
LR 355-2		☐	Bituminous Stabilized Base Course, Plant Mix	Feb. 20, 1963	Jan. 1, 2007
LR 400-1		☐	Bituminous Treated Earth Surface	Jan. 1, 2007	Apr. 1, 2012
LR 400-2		☐	Bituminous Surface Plant Mix (Class B)	Jan. 1, 2008	
LR 400-3		☐	Hot In-Place Recycling (HIR) – Surface Recycling	Jan. 1, 2012	
LR 400-4		☐	Full-Depth Reclamation (FDR) with Emulsified Asphalt	Apr. 1, 2012	Jun. 1, 2012
LR 400-5		☐	Cold In-Place Recycling (CIR) With Emulsified Asphalt	Apr. 1, 2012	Jun. 1, 2012
LR 400-6		☐	Cold In Place Recycling (CIR) with Foamed Asphalt	June 1, 2012	
LR 400-7		☐	Full-Depth Reclamation (FDR) with Foamed Asphalt	June 1, 2012	
LR 402		☐	Salt Stabilized Surface Course	Feb. 20, 1963	Jan. 1, 2007
LR 403-1		☐	Surface Profile Milling of Existing, Recycled or Reclaimed Flexible Pavement	Apr. 1, 2012	Jun. 1, 2012
LR 403-2		☐	Bituminous Hot Mix Sand Seal Coat	Aug. 1, 1969	Jan. 1, 2007
LR 406		☐	Filling HMA Core Holes with Non-shrink Grout	Jan. 1, 2008	
LR 420		☐	PCC Pavement (Special)	May 12, 1964	Jan. 2, 2007
LR 442		☐	Bituminous Patching Mixtures for Maintenance Use	Jan. 1, 2004	Jun. 1, 2007
LR 451		☐	Crack Filling Bituminous Pavement with Fiber-Asphalt	Oct. 1, 1991	Jan. 1, 2007
LR 503-1		☐	Furnishing Class SI Concrete	Oct. 1, 1973	Jan. 1, 2002
LR 503-2		☐	Furnishing Class SI Concrete (Short Load)	Jan. 1, 1989	Jan. 1, 2002
LR 542		☐	Pipe Culverts, Type _____ (Furnished)	Sep. 1, 1964	Jan. 1, 2007
LR 663		☐	Calcium Chloride Applied	Jun. 1, 1958	Jan. 1, 2007
LR 702		☐	Construction and Maintenance Signs	Jan. 1, 2004	Jun. 1, 2007
LR 1000-1		☐	Cold In-Place Recycling (CIR) and Full Depth Reclamation (FDR) with Emulsified Asphalt Mix Design Procedures	Apr. 1, 2012	Jun. 1, 2012
LR 1000-2		☐	Cold In-Place Recycling (CIR) and Full Depth Reclamation (FDR) with Foamed Asphalt Mix Design Procedures	June 1, 2012	
LR 1004		☐	Coarse Aggregate for Bituminous Surface Treatment	Jan. 1, 2002	Jan. 1, 2007
LR 1030		☐	Growth Curve	Mar. 1, 2008	Jan. 1, 2010
LR 1032-1		☐	Emulsified Asphalts	Jan. 1, 2007	Feb. 7, 2008
LR 1102		☐	Road Mix or Traveling Plan Mix Equipment	Jan. 1, 2007	

BDE SPECIAL PROVISIONS

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

	File Name	Pg.		Special Provision Title	Effective	Revised
	80240			Above Grade Inlet Protection	July 1, 2009	Jan. 1, 2012
	80099			Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2014
	80274			Aggregate Subgrade Improvement	April 1, 2012	Jan. 1, 2013
	80192			Automated Flagger Assistance Device	Jan. 1, 2008	
	80173			Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2013
	80241			Bridge Demolition Debris	July 1, 2009	
	5026I			Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	5048I			Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	5049I			Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	5053I			Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
*	80310			Coated Galvanized Steel Conduit	Jan. 1, 2013	Jan. 1, 2015
*	80341	134	X	Coilable Nonmetallic Conduit	Aug. 1, 2014	Jan. 1, 2015
	80198			Completion Date (via calendar days)	April 1, 2008	
	80199			Completion Date (via calendar days) Plus Working Days	April 1, 2008	
	80293			Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	April 1, 2014
	80294			Concrete Box Culverts with Skews ≤ 30 Degrees Regardless of Design Fill and Skews > 30 Degrees with Design Fills > 5 Feet	April 1, 2012	April 1, 2014
	80311			Concrete End Sections for Pipe Culverts	Jan. 1, 2013	
	80334			Concrete Gutter, Curb, Median, and Paved Ditch	April 1, 2014	Aug. 1, 2014
	80277			Concrete Mix Design – Department Provided	Jan. 1, 2012	Jan. 1, 2014
	80261	135	X	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
	80335	138	X	Contract Claims	April 1, 2014	
*	80029	139	X	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Jan. 2, 2015
	80265	149	X	Friction Aggregate	Jan. 1, 2011	Nov. 1, 2014
	80229			Fuel Cost Adjustment	April 1, 2009	July 1, 2009
	80329			Glare Screen	Jan. 1, 2014	
	80304			Grooving for Recessed Pavement Markings	Nov. 1, 2012	Aug. 1, 2014
	80246	153	X	Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	April 1, 2012
	80322			Hot-Mix Asphalt – Mixture Design Composition and Volumetric Requirements	Nov. 1, 2013	Nov. 1, 2014
	80323			Hot-Mix Asphalt – Mixture Design Verification and Production	Nov. 1, 2013	Nov. 1, 2014
	80347			Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits – Jobsite Sampling	Nov. 1, 2014	
	80348	155	X	Hot-Mix Asphalt – Prime Coat	Nov. 1, 2014	
	80315			Insertion Lining of Culverts	Jan. 1, 2013	Nov. 1, 2013
*	80351			Light Tower	Jan. 1, 2015	
	80336			Longitudinal Joint and Crack Patching	April 1, 2014	
	80324	160	X	LRFD Pipe Culvert Burial Tables	Nov. 1, 2013	Nov. 1, 2014
	80325			LRFD Storm Sewer Burial Tables	Nov. 1, 2013	Nov. 1, 2014
	80045			Material Transfer Device	June 15, 1999	Aug. 1, 2014
*	80342			Mechanical Side Tie Bar Inserter	Aug. 1, 2014	Jan. 1, 2015
	80165			Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
	80337			Paved Shoulder Removal	April 1, 2014	
	80349			Pavement Marking Blackout Tape	Nov. 1, 2014	
	80298			Pavement Marking Tape Type IV	April 1, 2012	
	80254			Pavement Patching	Jan. 1, 2010	
*	80352	180	X	Pavement Striping - Symbols	Jan. 1, 2015	
*	80353			Portland Cement Concrete Inlay or Overlay	Jan. 1, 2015	

File Name	Pg.		Special Provision Title	Effective	Revised
80343	181	X	Precast Concrete Handhole	Aug. 1, 2014	
80300			Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	
80328	182	X	Progress Payments	Nov. 2, 2013	
3426I			Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157			Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
* 80306			Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	Jan. 2, 2015
80350	183	X	Retroreflective Sheeting for Highway Signs	Nov. 1, 2014	
80327			Reinforcement Bars	Nov. 1, 2013	
80344	185	X	Rigid Metal Conduit	Aug. 1, 2014	
* 80354	186	X	Sidewalk, Corner, or Crosswalk Closure	Jan. 1, 2015	
80340			Speed Display Trailer	April 2, 2014	
80127			Steel Cost Adjustment	April 2, 2004	April 1, 2009
80317			Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	
* 80355			Temporary Concrete Barrier	Jan. 1, 2015	
80301			Tracking the Use of Pesticides	Aug. 1, 2012	
* 80356			Traffic Barrier Terminals Type 6 or 6B	Jan. 1, 2015	
20338			Training Special Provisions	Oct. 15, 1975	
80318			Traversable Pipe Grate	Jan. 1, 2013	April 1, 2014
80345			Underpass Luminaire	Aug. 1, 2014	
* 80357			Urban Half Road Closure with Mountable Median	Jan. 1, 2015	
80346			Waterway Obstruction Warning Luminaire	Aug. 1, 2014	
80288	187	X	Warm Mix Asphalt	Jan. 1, 2012	Nov. 1, 2014
80302	189	X	Weekly DBE Trucking Reports	June 2, 2012	
80289			Wet Reflective Thermoplastic Pavement Marking	Jan. 1, 2012	
80071	190	X	Working Days	Jan. 1, 2002	

The following special provisions are in the 2015 Supplemental Specifications and Recurring Special Provisions:

File Name	Special Provision Title	New Location	Effective	Revised
80292	Coarse Aggregate in Bridge Approach Slabs/Footings	Articles 1004.01(b) and 1004.02(f)	April 1, 2012	April 1, 2013
80303	Granular Materials	Articles 1003.04, 1003.04(c), and 1004.05(c)	Nov. 1, 2012	
80330	Pavement Marking for Bike Symbol	Article 780.14	Jan. 1, 2014	
80331	Payrolls and Payroll Records	Recurring CS #1 and #5	Jan. 1, 2014	
80332	Portland Cement Concrete – Curing of Abutments and Piers	Article 1020.13	Jan. 1, 2014	
80326	Portland Cement Concrete Equipment	Article 1103.03(a)(5)	Nov. 1, 2013	
80281	Quality Control/Quality Assurance of Concrete Mixtures	Recurring CS #31	Jan. 1, 2012	Jan. 1, 2014
80283	Removal and Disposal of Regulated Substances	Articles 669.01, 669.08, 669.09, 669.14, and 669.16	Jan. 1, 2012	Nov. 2, 2012
80319	Removal and Disposal of Surplus Materials	Article 202.03	Nov. 2, 2012	
80307	Seeding	Article 250.07	Nov. 1, 2012	
80339	Stabilized Subbase	Article 312.06	April 1, 2014	
80333	Traffic Control Setup and Removal Freeway/Expressway	Articles 701.18(l) and 701.19(a)	Jan. 1, 2014	

The following special provisions require additional information from the designer. The additional information needs to be included in a separate document attached to this check sheet. The Project Development and Implementation section will then include the information in the applicable special provision. The Special Provisions are:

- Bridge Demolition Debris
- Building Removal-Case I
- Building Removal-Case II
- Building Removal-Case III
- Building Removal-Case IV
- Completion Date
- Completion Date Plus Working Days
- DBE Participation
- Material Transfer Device
- Railroad Protective Liability Insurance
- Training Special Provisions
- Working Days

STATE OF ILLINOIS
SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", adopted January 1, 2012 (hereinafter referred to as the "Standard Specifications"); the latest edition of the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways" and the "Manual of Test Procedure of Materials" in effect on the date of invitation for bids; and the "Supplemental Specifications and Recurring Special Provisions", adopted January 1, 2014, indicated on the Check Sheet included herein; all of which apply to and govern the construction of Addison Creek Trail Bike Path Extension Project, Section Number 13-00084-00-BT, Project Number M-4003(403) in Northlake, Cook County.

These Special Provisions included herein apply to and govern the proposed improvement designated and in case of conflict with any part or parts of said specifications, said Special Provisions shall take precedent and shall govern Contract Number 61A85.

LOCATION OF PROJECT

The project is located in the following off-street properties: Grant Park which is bounded by Wolf Road on the east, Golfview Drive on the south, and Whitehall Drive on the north; and the electrical transmission tower right-of-way owned and operated by ComEd which is bounded by the U.P.R.R. on the west, the King Arthur residential development and the Addison Creek Detention basin on the east, and Addison Creek on the north. All improvements are located in the City of Northlake, Cook County. A total of 4,839 linear feet (0.92 miles) (gross and net length) will be improved.

DESCRIPTION OF IMPROVEMENT

The work consists of non-special waste disposal, aggregate base course, hot-mix asphalt bike path, pipe culvert and minor drainage improvements, curb and gutter removal and replacement, pedestrian lighting, signage, erosion and sediment control, landscape restoration, and all collateral work necessary to complete the project as shown on the plans and as described herein.

STATUS OF UTILITIES TO BE ADJUSTED

Effective: January 30, 1987
Revised: January 24, 2013

Utilities companies involved in this project have provided the following estimated durations:

Name of Utility	Type	Location	Estimated Duration of Time for the Completion of Relocation or Adjustments
AT&T (Distribution) 1000 Commerce Dr., Floor 1 Oak Brook, IL 60523 Steve Larson Phone: 630-573-5450	Telephone	Underground cable located off of Golfview Drive.	No Adjustments.
Comcast 688 Industrial Drive Elmhurst, IL 60126 Martha Gieras Phone: 630-600-6352	Cable TV	Existing underground cable crossing near Station 18+00 (approx. 30" deep)	No Adjustments.
Commonwealth Edison 1N423 Swift Road Lombard, IL 60148 Joe Stacho Phone: 630-424-5704	Electricity	Aerial facilities and power poles located throughout the project limits.	No Adjustments.
Nicor Gas 1844 Ferry Road Naperville, IL 60563 Constance Lane Phone: 630-388-3830	Natural Gas	No facilities within the Grant Park limits. Existing underground facilities near the King Arthur complex.	No Adjustments.

The above represents the best information available to the Department and is included for the convenience of the bidder. The applicable portions of Articles 105.07 and 107.31 of the Standard Specifications shall apply.

In accordance with 605 ILCS 5/9-113 of the Illinois Compiled Statutes, utility companies have 90 days to complete the relocation of their facilities after receipt of written notice from the Department. The 90-day written notice will be sent to the utility companies after the following occurs:

1) Proposed right of way is clear for contract award.
2) Final plans have been sent to and received by the utility company.
3) Utility permit is received by the Department and the Department is ready to issue said permit.
4) If a permit has not been submitted, a 15 day letter is sent to the utility company notifying them they have 15 days to provide their permit application. After allowing 15 days for submission of the permit the 90 day notice is sent to the utility company.
5) Any time within the 90 day relocation period the utility company may request a waiver for additional time to complete their relocation. The Department has 10 days to review and respond to a waiver request.

TRAFFIC CONTROL PLAN (DISTRICT 1)

Effective: September 30, 1985 Revised: January 1, 2007

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

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

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

STANDARDS: 701006-05, 701301-04, 701501-06, 701701-09, 701801-05, 701901-03

DETAILS: Traffic Control and Protection for Side roads, Intersections and Driveways (TC-10); District One Typical Pavement Marking (TC-13)

SPECIAL PROVISIONS: Maintenance of Roadways, Work Zone Traffic Control, Flaggers in Work Zones, and Public Convenience and Safety

MAINTENANCE OF ROADWAYS (DISTRICT 1)

Effective: September 30, 1985 Revised: November 1, 1996

Beginning on the date that the CONTRACTOR begins work on this project, he 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 this work will be provided by the CONTRACTOR as required by the ENGINEER.

If items of work have not been provided for 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.

FIRE HYDRANT TO BE MOVED

Description. This work shall consist of relocating an existing fire hydrant, including auxiliary valves, as indicated on the plans or required by the ENGINEER.

Method of Measurement and Basis of Payment. This work will be paid for at the contract unit price each for FIRE HYDRANTS TO BE MOVED, which price shall be payment in full for all labor, equipment, and material necessary to complete the work as specified herein.

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (ABUTTING EXISTING PAVEMENT)

Description. This work shall consist of the construction of new concrete curb and gutter including all necessary excavation, embankment and subbase granular material as shown in the detail on the plans and in accordance with Sections 606, 202, 205 and 311 of the Standard Specifications and as specified herein.

Construction Requirements. In addition to the requirements of Article 606.06 of the Standard Specifications the CONTRACTOR shall excavate all material necessary to build the proposed curb and gutter and proposed subbase in accordance with Section 202 of the Standard Specifications. Excavated material will not be permitted to be stockpiled behind the curb. The proposed subbase shall be Subbase Granular Material, Type B of the thickness shown on the plans in accordance with Section 311 of the Standard Specifications. Backfill behind the proposed back of curb shall be in accordance with Section 205 of the Standard Specifications. Any existing pavement removed adjacent to the new curb and gutter shall be replaced with Class SI concrete.

Expansion joints shall be placed at a maximum spacing of 60 feet.

Contraction joints shall be placed at a maximum spacing of 20 feet.

All framing shall be set to final grade of the pour. No angle irons will be allowed.

The following items are to be considered incidental to the curb and gutter as shown on the detail:

- Gap between existing pavement and proposed Curb and Gutter shall be filled with Class SI Concrete (High Early)-7"
- Excavation to 6" behind the proposed Back of Curb.
- Suitable backfill materials behind new curb and gutter, CA-6
- Proposed ¾" performed expansion joint.
- 4" earth excavation for the construction of the line item Subbase Granular Material, Type B 4".
- Subbase Granular Materials, Type B 4"
- Longitudinal bars, if encountered in the existing curb or curb and gutter, are not to be placed. Cutting and removing longitudinal bars shall be included.
- Drill and grout 2 #6 epoxy coated dowel bars to the existing curb and gutter.
- Pavement removal adjacent to the curb and gutter.

Method of Measurement and Basis of Payment. Combination concrete curb and gutter and all excavation, subbase material, Class SI concrete, and backfill necessary to construct the work as shown on the plans and as specified herein shall be measured and paid for at the contract unit price per foot for COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (ABUTTING EXISTING PAVEMENT).

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

Revise Article 669.01 of the Standard Specifications to read:

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

Revise Article 669.08 of the Standard Specifications to read:

"669.08 Contaminated Soil and/or Groundwater Monitoring. The Contractor shall hire a qualified environmental firm to monitor the area containing the regulated substances. The affected area shall be monitored with a photoionization detector (PID) utilizing a lamp of 10.6eV or greater or a flame ionization detector (FID). Any field screen reading on the PID or FID in excess of background levels indicates the potential presence of contaminated material requiring handling as a non-special waste, special waste, or hazardous waste. No excavated soils can be taken to a clean construction and demolition debris (CCDD) facility or an uncontaminated soil fill operation with detectable PID or FID meter readings that are above background. The PID or FID meter shall be calibrated on-site and background level readings taken and recorded daily. All testing shall be done by a qualified engineer/technician. Such testing and monitoring shall be included in the work. The Contractor shall identify the exact limits of removal of non-special waste, special waste, or hazardous waste. All limits shall be approved by the Engineer prior to excavation. The Contractor shall take all necessary precautions.

Based upon the land use history of the subject property and/or PID or FID readings indicating contamination, a soil or groundwater sample shall be taken from the same location and submitted to an approved laboratory. Soil or groundwater samples shall be analyzed for the contaminants of concern, including pH, based on the property's land use history or the parameters listed in the maximum allowable concentration (MAC) for chemical constituents in uncontaminated soil established pursuant to Subpart F of 35 Illinois Administrative Code 1100.605. The analytical results shall serve to document the level of soil contamination. Soil and groundwater samples may be required at the discretion of the Engineer to verify the level of soil and groundwater contamination.

Samples shall be grab samples (not combined with other locations). The samples shall be taken with decontaminated or disposable instruments. The samples shall be placed in sealed containers and transported in an insulated container to the laboratory. The container shall maintain a temperature of 39 °F (4 °C). All samples shall be clearly labeled. The labels shall indicate the sample number, date sampled, location and elevation, and any other observations.

The laboratory shall use analytical methods which are able to meet the lowest appropriate practical quantitation limits (PQL) or estimated quantitation limit (EQL) specified in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", EPA Publication No. SW-846 and "Methods for the Determination of Organic Compounds in Drinking Water", EPA, EMSL, EPA-600/4-88/039. For parameters where the specified cleanup objective is below the acceptable detection limit (ADL), the ADL shall serve as the cleanup objective. For other parameters the ADL shall be equal to or below the specified cleanup objective."

Replace the first two paragraphs of Article 669.09 of the Standard Specifications with the following:

"669.09 Contaminated Soil and/or Groundwater Management and Disposal. The management and disposal of contaminated soil and/or groundwater shall be according to the following:

(a) Soil Analytical Results Exceed Most Stringent MAC. When the soil analytical results indicate that detected levels exceed the most stringent maximum allowable concentration (MAC) for chemical constituents in uncontaminated soil established pursuant to Subpart F of 35 Illinois Administrative Code 1100.605, the soil shall be managed as follows:

(1) When analytical results indicate inorganic chemical constituents exceed the most stringent MAC but they are still considered within area background levels by the Engineer, the excavated soil can be utilized within the construction limits as fill, when suitable. Such soil excavated for storm sewers can be placed back into the excavated trench as backfill, when suitable, unless trench backfill is specified. If the soils cannot be utilized within the construction limits, they shall be managed and disposed of off-site as a non-special waste, special waste, or hazardous waste as applicable.

(2) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for a Metropolitan Statistical Area (MSA) County, the excavated soil can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an uncontaminated soil fill operation within an MSA County provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.

(3) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, or the MAC within the Chicago corporate limits, the excavated soil can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an uncontaminated soil fill operation within an MSA County excluding Chicago or within the Chicago corporate limits provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.

(4) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, the excavated soil can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an uncontaminated soil fill operation within an MSA County excluding Chicago provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.

(5) When the Engineer determines soil cannot be managed according to Articles 669.09(a)(1) through (a)(4) above, the soil shall be managed and disposed of off-site as a non-special waste, special waste, or hazardous waste as applicable.

(b) Soil Analytical Results Do Not Exceed Most Stringent MAC. When the soil analytical results indicate that detected levels do not exceed the most stringent MAC, the excavated soil can be utilized within the construction limits or managed and disposed of off-site as "uncontaminated soil" according to Article 202.03. However the excavated soil cannot be taken to a CCDD facility or an uncontaminated soil fill operation for the following reason.

(1) The pH of the soil is less than 6.25 or greater than 9.0.

(2) The soil exhibited elevated photoionization detector (PID) utilizing a lamp of 10.6eV or greater or a flame ionization detector (FID) readings.

(c) Soil Analytical Results Exceed Most Stringent MAC but Do Not Exceed TACO Residential. When the soil analytical results indicate that detected levels exceed the most stringent MAC but do not exceed TACO Tier 1 Soil Remediation Objectives for Residential Properties pursuant to 35 IAC 742 Appendix B Table A, the excavated soil can be utilized within the right-of-way or managed and disposed of off-site as "uncontaminated soil" according to Article 202.03. However the excavated soil cannot be taken to a CCDD facility or an uncontaminated soil fill operation.

(d) Groundwater. When groundwater analytical results indicate the detected levels are above Appendix B, Table E of 35 Illinois Administrative Code 742, the most stringent Tier 1 Groundwater Remediation Objectives for Groundwater Component of the Groundwater Ingestion Route for Class 1 groundwater, the groundwater shall be managed off-site as a special waste.

All groundwater encountered within lateral trenches may be managed within the trench and allowed to infiltrate back into the ground. If the groundwater cannot be managed within the trench it must be removed as a special or hazardous waste. The Contractor is prohibited from managing groundwater within the trench by discharging it through any existing or new storm sewer. The Contractor shall install backfill plugs within the area of groundwater contamination.

One backfill plug shall be placed down gradient to the area of groundwater contamination. Backfill plugs shall be installed at intervals not to exceed 50 ft (15 m). Backfill plugs are to be 4 ft (1.2 m) long, measured parallel to the trench, full trench width and depth. Backfill plugs shall not have any fine aggregate bedding or backfill, but shall be entirely cohesive soil or any class of concrete. The Contractor shall provide test data that the material has a permeability of less than 10^{-7} cm/sec according to ASTM D 5084, Method A or per another test method approved by the Engineer."

Revise Article 669.14 of the Standard Specifications to read:

"669.14 Final Environmental Construction Report. At the end of the project, the Contractor will prepare and submit three copies of the Environmental Construction Report on the activities conducted during the life of the project, one copy shall be submitted to the Resident Engineer, one copy shall be submitted to the District's Environmental Studies Unit, and one copy shall be submitted with an electronic copy in Adode.pdf format to the Geologic and Waste Assessment Unit, Bureau of Design and Environment, IDOT, 2300 South Dirksen

Parkway, Springfield, Illinois 62764. The technical report shall include all pertinent information regarding the project including, but not limited to:

(a) Measures taken to identify, monitor, handle, and dispose of soil or groundwater containing regulated substances, to prevent further migration of regulated substances, and to protect workers,

(b) Cost of identifying, monitoring, handling, and disposing of soil or groundwater containing regulated substances, the cost of preventing further migration of regulated substances, and the cost for worker protection from the regulated substances. All cost should be in the format of the contract pay items listed in the contract plans (identified by the preliminary environmental site assessment (PESA) site number),

(c) Plan sheets showing the areas containing the regulated substances,

(d) Field sampling and testing results used to identify the nature and extent of the regulated substances,

(e) Waste manifests (identified by the preliminary environmental site assessment (PESA) site number) for special or hazardous waste disposal, and

(f) Landfill tickets (identified by the preliminary environmental site assessment (PESA) site number) for non-special waste disposal."

Revise the second paragraph of Article 669.16 of the Standard Specifications to read:

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

Qualifications. The term environmental firm shall mean an environmental firm with at least five (5) documented leaking underground storage tank (LUST) cleanups or that is pre-qualified in hazardous waste by the Department. Documentation includes but not limited to verifying remediation and special waste operations for sites contaminated with gasoline, diesel, or waste oil in accordance with all Federal, State, or local regulatory requirements and shall be provided to the Engineer for approval. The environmental firm selected shall not be a former or current consultant or have any ties with any of the properties contained within and/or adjacent to this construction project.

General. This Special Provision will likely require the Contractor to subcontract for the execution of certain activities.

All contaminated materials shall be managed as either "uncontaminated soil" or non-special waste. This work shall include monitoring and potential sampling, analytical testing, and management of a material contaminated by regulated substances. The Environmental Firm shall continuously monitor all soil excavation for worker protection and soil contamination. Soil samples or analysis without the approval of the Engineer will be at no additional cost to the Department.

The Contractor shall manage any excavated soils and sediment within the following areas:

- Station 10+00 to Station 25+00 – Grant Park Path
- Station 70+00 to Station 72+50 – Grant Park Path
- Station 30+00 to Station 62+50 – King Arthur Path

All material excavated within these project limits which is to be disposed of shall be delivered to one of the following pre-approved landfill sites:

- Veolia ES Zion Landfill (Advance Resources), 701 Greenbay Road, Zion, IL 60099
- Waste Management of Illinois Countryside Landfill, 31725 N. Route 83, Grayslake, IL 60030
- Waste Management of Illinois Laraway RDF, 21101 W. Laraway Road, Elwood, IL 60481

FLOOD LIGHTING UNIT

Description. This work shall consist of furnishing and installing 30' direct bury wood pole with an LED flood light on a pipe bracket mounted to the top of pole where shown on drawings. This work includes furnishing and installing wood pole, pipe bracket, floodlight, and conduit/cable/wiring from adjacent ornamental pole approximately 6 feet away, and fuses/fuse holders in base of ornamental pole. As shown on plans.

Materials. All materials shall be in accordance with the contract plan drawings and Sections 10656, 1066, 1067, and 1069 1088 of the Standard Specifications.

Construction Requirements. All work shall be installed in accordance with the contract drawings and Sections 810, 811, 816, 817, 821, and 830 of the Standard Specifications.

The Contractor shall be responsible for coordinating the proposed bolt circle dia., anchor bolt size, and handhole orientation for the proposed light poles installed.

Work to be performed under this pay item is indicated in contract plan drawings and shall be in conformance with NEC, IDOT and local ordinances.

Measurement and Payment. The work shall be paid for at the contract unit price each for FLOOD LIGHTING UNIT, which shall be payment in full for all work listed herein.

ORNAMENTAL LIGHT UNIT, COMPLETE

Description. This work shall consist of furnishing and installing a 14' aluminum light pole complete with LED post top luminaire, pole wiring, fuses/fuse holders where shown on the contract drawings.

Materials. All materials shall be in accordance with the contract plan drawings and Sections 1065, 1066, 1067, and 1069 of the Standard Specifications.

Construction Requirements. All work shall be installed in accordance with Sections 821 and 830 of the Standard Specifications.

The Contractor shall be responsible for coordinating the proposed bolt circle dia., anchor bolt size, and handhole orientation for the proposed light poles installed.

Work to be performed under this pay item is indicated in contract plan drawings and shall be in conformance with NEC, IDOT and local ordinances.

Measurement and Payment. The work shall be paid for at the contract unit price each for ORNAMENTAL LIGHT UNIT, COMPLETE which shall be payment in full for all work listed herein.

TOPSOIL FURNISH AND PLACE, SPECIAL

Description. This work shall consist of furnishing and placing topsoil in accordance with Section 211 of the STANDARD SPECIFICATIONS.

Construction Requirements. The CONTRACTOR shall be required to furnish and place topsoil in all areas adjacent to the bike path and as shown on the plans and in areas deemed necessary by the ENGINEER. The topsoil shall be placed to a minimum depth of six inches (6"). It shall be the CONTRACTOR'S responsibility to ensure proper drainage from the landscaped areas to maintain current drainage pattern. This topsoil shall be approved by the ENGINEER prior to its use.

Topsoil shall not be placed until the area to be covered has been shaped, trimmed and finished according to Section 212. All irregularities or depressions in the surface due to weathering or other causes shall be filled or smoothed out before the topsoil is placed. If the existing surface has become hardened or crusted, it shall be disked or raked or otherwise broken up so as to provide a bond with the layer of topsoil to be applied.

The ENGINEER will verify that the proper topsoil depth has been applied. After verification of proper depth, the CONTRACTOR shall completely incorporate the placed material into the existing surface to a minimum depth of 150 mm (6 in.) below finished grade by disking or tilling.

The surface of the topsoil shall be free from clods, stones, sticks and debris and shall conform to the lines, grades and the minimum thickness shown on the plans. If required by the ENGINEER, one rolling of the entire surface shall be made.

Upon completion of the work, all areas shall be cleared of equipment, debris, and excess material. Surplus or waste material resulting from construction operations shall be disposed of by the CONTRACTOR according to Article 202.03.

Method of Measurement. Topsoil Furnish and Place, Special will be measured in cubic yards.

Basis of Payment. Topsoil Furnished and Place, Special will be paid for at the contract unit price per cubic yard for TOPSOIL FURNISH AND PLACE, SPECIAL, which price shall be payment in full for all labor, equipment, and material to complete the work as specified herein.

STABILIZED CONSTRUCTION ENTRANCE

Description. This work shall consist of furnishing, installation, maintenance and removal of stabilized pad of aggregate underlain with filter fabric as shown on the plans or directed by the Engineer.

Materials. Materials shall conform to the following:

Aggregate size: IDOT Coarse Aggregate Graduation: CA-I, CA-2 CA-3, or CA-4.

Filter Fabric shall consist of synthetic polymers composed of at least 85 percent by weight polypropylene, polyesters, polyamides, polyethylene, polyolefins or polyvinylidene-chlorides. The geotextile shall be free of any chemical treatment or coating that significantly reduces its porosity. Fibers shall contain stabilizers and/or inhibitors to enhance resistance to ultraviolet lights.

Construction Requirements. The course aggregate shall be a thickness of 6 inches or more. The stone entrance should not be filled until the area has been inspected and approved by the Engineer.

The rock shall be dumped and spread into place in approximately horizontal layers not more than 3 feet in thickness. It shall be placed in a manner to produce a reasonable homogeneous stable fill that contains no segregated pockets or larger or small fragments or large unfilled space caused by bridging of larger fragments. No compaction will be required beyond that resulting from the placing and spreading operations.

The minimum width and length shall be 25 and 10 feet, respectively.

All surface water flowing or diverted toward the construction entrance shall be piped across the entrance. Any pipe used for this will be considered incidental to the STABILIZED CONSTRUCTION ENTRANCE.

The entrance shall remain in place and be maintained until the disturbed area is stabilized. Any sediment spilled onto public right-of-ways must be removed immediately.

Measurement and Payment. The work shall be paid for at the contract unit price per square yard for STABILIZED CONSTRUCTION ENTRANCE, which price shall be payment in full for all material, labor and any other items required to complete the work.

FENCE REMOVAL

Description. This item consists of removing existing chain link and wooden fences within limits of the proposed construction and where directed by the Engineer. Fences shall be disassembled and the materials neatly stacked on the fence owner's property prior to disposal. Existing posts shall be pulled, and any remaining hole backfilled with earth. Where posts have been set in concrete, they shall be disposed of off-site. Posts which were not set in concrete shall be stacked on the Owner's property with the other fencing materials.

It shall be the Contractor's responsibility to determine the size and type of fences indicated in the plans to be removed.

Method of Measurement. This work will be measured in place in lineal feet. Furnishing posts will not be measured separately for payment.

Basis of Payment. This work will be paid for at the contract unit price per lineal foot for FENCE REMOVAL, which price shall include all labor, materials and equipment necessary to complete the work as specified herein.

MAINTENANCE OF LIGHTING SYSTEM

Description: 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.

At least one week prior to the beginning of construction of the proposed street lighting system, the contractor shall conduct an inspection of the existing lighting units with a representative of the agency responsible for maintenance. The inspection shall reveal defective lighting items such as cable, mast arms, luminaries, poles, and all other appurtenances that combine for a complete operating unit. The CONTRACTOR shall not be responsible for these items. The CONTRACTOR shall be held responsible for all items remaining defective at the completion of the contract that were not noted in the initial inspection report. Failure to coordinate or perform the initial inspection does not relieve the contractor from this responsibility.

The CONTRACTOR shall become responsible for the maintenance of the existing lighting units on a date mutually agreed upon between the CONTRACTOR and the maintaining agency representative but no later than the beginning of any construction within the limits of this project. If any mobilization or any type of work begins on this project, the CONTRACTOR shall assume complete maintenance at that point and assume all deficiencies at their own expense. This maintenance shall remain in effect until written notice of final acceptance of the proposed lighting system is issued by the ENGINEER. Only after this requirement has been satisfied may the contractor begin work on any existing lighting systems.

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 prior to this contract. 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.

Existing Lighting Systems Requiring Maintenance.

Golfview Drive Lighting System – Full Maintenance: Hillside Avenue east for approximately 400 feet (5 post top LED light poles).

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 a given controller and the controller is not part of the contract work, the Contractor needs only to maintain the affected circuits. The affected circuits shall be isolated by means of in-line waterproof fuse holders as specified elsewhere and as approved by the Engineer.

Full Maintenance. If the number of circuits affected by the contract is greater than 40% of the total number of circuits in a given 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 (including sign lights).

Maintenance of Proposed Lighting Systems:

Proposed Lighting Systems. Proposed lighting systems shall be defined as any lighting system or part of a lighting system which is to be constructed under this contract. 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, or other means. The potential cost of replacing or repairing any malfunctioning or damaged equipment shall be included in the bid price of this item and will not be paid for separately.

Lighting System Maintenance Operations:

The Contractor's responsibility shall include the maintenance of all lighting units (including sign lighting), cable runs and lighting controls. In the case of a pole knockdown or sign light damage caused by normal vehicular traffic, the Contractor shall promptly clear the lighting unit and circuit discontinuity and restore the system to service.

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	n/a	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	n/a
Circuit out – Cable trouble	1 hour	24 hours	21 Calendar days

Outage of 3 or more successive lights	1 hour	4 hours	n/a
INCIDENT OR PROBLEM	**SERVICE RESPONSE TIME**	**SERVICE RESTORATION TIME**	**PERMANENT REPAIR TIME**
Outage of 75% of lights on one tower	1 hour	4 hours	n/a
Outage of light nearest RR crossing approach, Islands and gores	1 hour	4 hours	n/a
Outage (single or multiple) found on night outage survey or reported to EMC	n/a	n/a	7 Calendar days
Navigation light outage	n/a	n/a	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 Village reserves the right to assign any work not completed within this timeframe to their Electrical Maintenance Contractor. All costs associated to repair this uncompleted work shall be deducted from the cost of the Contract.

Damage caused for any reason 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. 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.

Measurement and Basis of Payment: 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 for. Payment shall not be made retroactively for months in which lighting systems were not operational. This work shall be paid

for at the contract unit price per calendar month for MAINTENANCE OF LIGHTING SYSTEM which shall be payment in full for all work as described herein.

ADJUSTMENTS AND RECONSTRUCTIONS (D1)

Effective: March 15, 2011

Revise the first paragraph of Article 602.04 to read:

"**602.04 Concrete.** Cast-in-place concrete for structures shall be constructed of Class SI concrete according to the applicable portions of Section 503. Cast-in-place concrete for pavement patching around adjustments and reconstructions shall be constructed of Class PP-1 concrete, unless otherwise noted in the plans, according to the applicable portions of Section 1020."

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

"Castings shall be set to the finished pavement elevation so that no subsequent adjustment will be necessary, and the space around the casting shall be filled with Class PP-1 concrete, unless otherwise noted in the plans, to the elevation of the surface of the base course or binder course. HMA surface or binder course material shall not be allowed. The pavement may be opened to traffic according to Article 701.17(e)(3)b."

Revise Article 603.05 to read:

"**603.05 Replacement of Existing Flexible Pavement.** After the castings have been adjusted, the surrounding space shall be filled with Class PP-1 concrete, unless otherwise noted in the plans, to the elevation of the surface of the base course or binder course. HMA surface or binder course material shall not be allowed. The pavement may be opened to traffic according to Article 701.17(e)(3)b."

Revise Article 603.06 to read:

"**603.06 Replacement of Existing Rigid Pavement.** After the castings have been adjusted, the pavement and HMA that was removed, shall be replaced with Class PP-1 concrete, unless otherwise noted in the plans, not less than 9 in. (225 mm) thick. The pavement may be opened to traffic according to Article 701.17(e)(3)b.

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

Revise the first sentence of Article 603.07 to read:

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

AGGREGATE SUBGRADE IMPROVEMENT (D-1)

Effective: February 22, 2012
Revised: November 1, 2014

Add the following Section to the Standard Specifications:

"SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT

303.01 Description. This work shall consist of constructing an aggregate subgrade improvement.

303.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate	1004
(b) Reclaimed Asphalt Pavement (RAP) (Notes 1, 2 and 3)	1031

Note 1. Crushed RAP, from either full depth or single lift removal, may be mechanically blended with aggregate gradations CS 01 or CS 02 but shall not exceed 40 percent of the total product. The top size of the Coarse RAP shall be less than 4 in. (100 mm) and well graded.

Note 2. RAP having 100 percent passing the 1 1/2 in. (37.5 mm) sieve and being well graded, may be used as capping aggregate in the top 3 in. (75 mm) when aggregate gradations CS 01 or CS 02 are used in lower lifts. When RAP is blended with any of the coarse aggregates, the blending shall be done with mechanically calibrated feeders.

Note 3. The RAP used for aggregate subgrade improvement shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".

303.03 Equipment. The vibratory machine shall be according to Article 1101.01, or as approved by the Engineer.

303.04 Soil Preparation. The stability of the soil shall be according to the Department's Subgrade Stability Manual for the aggregate thickness specified.

303.05 Placing Aggregate. The maximum nominal lift thickness of aggregate gradations CS 01 or CS 02 shall be 24 in. (600 mm).

303.06 Capping Aggregate. The top surface of the aggregate subgrade shall consist of a minimum 3 in. (75 mm) of aggregate gradations CA 06 or CA 10. When Reclaimed Asphalt Pavement (RAP) is used, it shall be crushed and screened where 100 percent is passing the 1 1/2 in. (37.5 mm) sieve and being well graded. RAP that has been fractionated to size will not be permitted for use in capping. Capping aggregate will not be required when the aggregate subgrade improvement is used as a cubic yard pay item for undercut applications. When RAP is blended with any of the coarse aggregates, the blending shall be done with mechanically calibrated feeders.

303.07 Compaction. All aggregate lifts shall be compacted to the satisfaction of the Engineer. If the moisture content of the material is such that compaction cannot be obtained, sufficient water shall be added so that satisfactory compaction can be obtained.

303.08 Finishing and Maintenance of Aggregate Subgrade Improvement. The aggregate subgrade improvement shall be finished to the lines, grades, and cross sections shown on the plans, or as directed by the Engineer. The aggregate subgrade improvement shall be maintained in a smooth and compacted condition.

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

303.10 Basis of Payment. This work will be paid for at the contract unit price per cubic yard (cubic meter) for AGGREGATE SUBGRADE IMPROVEMENT or at the contract unit price per square yard (square meter) for AGGREGATE SUBGRADE IMPROVEMENT, of the thickness specified.

Add the following to Section 1004 of the Standard Specifications:

"**1004.06 Coarse Aggregate for Aggregate Subgrade Improvement.** The aggregate shall be according to Article 1004.01 and the following.

(a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete.

(b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials.

(c) Gradation.

(1) The coarse aggregate gradation for total subgrade thicknesses of 12 in. (300 mm) or greater shall be CS 01 or CS 02.

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

Grad No.	COARSE AGGREGATE SUBGRADE GRADATIONS (Metric) Sieve Size and Percent Passing				
	200 mm	150 mm	100 mm	50 mm	4.75 mm
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20
CS 02		100	80 ± 10	25 ± 15	

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

COURSE AGGREGATE FOR BACKFILL, TRENCH BACKFILL AND BEDDING (D-1)

Effective: November 1, 2011
Revised: November 1, 2013

This work shall be according to Section 1004.05 of the Standard Specifications except for the following:

Reclaimed Asphalt Pavement (RAP) maybe blended with gravel, crushed gravel, crushed stone crushed concrete, crushed slag, chats, crushed sand stone or wet bottom boiler slag. The RAP used shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications". The RAP shall be uniformly graded and shall pass the 1.0 in. (25 mm) screen. When RAP is blended with any of the coarse aggregate listed above, the blending shall be done mechanically with calibrated feeders. The feeders shall have an accuracy of $\pm$ 2.0 percent of the actual quantity of material delivered. The final blended product shall not contain more than 40 percent by weight RAP.

The coarse aggregate listed above shall meet CA 6 and CA 10 gradations prior to being blended with the processed and uniformly graded RAP. Gradation deleterious count shall not exceed 10% of total RAP and 5% of other by total weight.

ELECTRIC SERVICE INSTALLATION (DISTRICT 1)

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) (DISTRICT 1)

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 $2,500.00

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.

Designers Note: The estimate of cost of service connections for bidding purposes shall be provided by the Designer or Design Consultant.

GENERAL ELECTRICAL REQUIREMENTS (DISTRICT 1)

Effective: January 1, 2012

Add the following to Article 801 of the Standard Specifications:

"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 lighting and/or 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 seven (7) 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 lighting and/or traffic control systems which may be affected by the work

Marking of Existing Cable Systems. The party responsible for maintenance of any existing lighting and/or traffic control 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 304.8 mm (one (1) foot) 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."

Add the following to the 1st paragraph of Article 801.05(a) of the Standard Specifications:

"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."

Revise the second sentence of the 5th paragraph of Article 801.05(a) of the Standard Specifications to read:

"The Engineer will stamp the submittals indicating their status as 'Approved', 'Approved as Noted', 'Disapproved', or 'Information Only'.

Revise the 6th paragraph of Article 801.05(a) of the Standard Specifications to read:

"Resubmittals. All submitted items reviewed and marked 'Approved as Noted', or 'Disapproved' are to be resubmitted in their entirety with a disposition of previous comments to verify contract compliance at no additional cost to the state unless otherwise indicated within the submittal comments."

Revise Article 801.11(a) of the Standard Specifications to read:

"Lighting Operation and Maintenance Responsibility. The scope of work shall include the assumption of responsibility for the continuing operation and maintenance the of 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

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."

Add the following to Section 801 of the Standard Specifications:

"Lighting Cable Identification. Each wire installed shall be identified with its complete circuit number at each termination, splice, junction box or other location where the wire is accessible."

"Lighting Cable Fuse Installation. Standard fuse holders shall be used on non-frangible (non-breakaway) light pole installations and quick-disconnect fuse holders shall be used on frangible (breakaway) light pole installations. Wires shall be carefully stripped only as far as needed for connection to the device. Over-stripping shall be avoided. An oxide inhibiting lubricant shall be applied to the wire for minimum connection resistance before the terminals are crimped-on. Crimping shall be performed in accordance with the fuse holder manufacturer's recommendations. The exposed metal connecting portion of the assembly shall be taped with two half-lapped wraps of electrical tape and then covered by the specified insulating boot. The fuse holder shall be installed such that the fuse side is connected to the pole wire (load side) and the receptacle side of the holder is connected to the line side."

Revise the 2nd paragraph of Article 801.16 of the Standard Specifications to read:

"When the work is complete, and seven days before the request for a final inspection, the full-size set of contract drawings. Stamped "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 on CDROM as well as hardcopy for review and approval. In addition to the record drawings, copies of the final catalog cuts which have been Approved or Approved as Noted shall be submitted in PDF format along with the record drawings. The PDF files shall clearly indicate either by filename or PDF table of contents the respective pay item number. Specific part or model numbers of items which have been selected shall be clearly visible."

Add the following to Article 801.16 of the Standard Specifications:

"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:

- Last light pole on each circuit
- Handholes
- Conduit roadway crossings
- Controllers
- Control Buildings
- Structures with electrical connections, i.e. DMS, lighted signs.
- Electric Service locations
- CCTV Camera installations
- Fiber Optic Splice Locations

Datum to be used shall be North American 1983.

Data shall be provided electronically and in print form. 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. Description of item
2. Designation or approximate station if the item is undesignated
3. Latitude
4. Longitude

Examples:

Equipment Description	Equipment Designation	Latitude	Longitude
CCTV Camera pole	ST42	41.580493	-87.793378
FO mainline splice handhole	HHL-ST31	41.558532	-87.792571
Handhole	HH at STA 234+35	41.765532	-87.543571
Electric Service	Elec Srv	41.602248	-87.794053
Conduit crossing	SB IL83 to EB I290 ramp SIDE A	41.584593	-87.793378
Conduit crossing	SB IL83 to EB I290 ramp SIDE B	41.584600	-87.793432
Light Pole	DA03	41.558532	-87.792571
Lighting Controller	X	41.651848	-87.762053
Sign Structure	FGD	41.580493	-87.793378
Video Collection Point	VCP-IK	41.558532	-87.789771
Fiber splice connection	Toll Plaza34	41.606928	-87.794053

Prior to the collection of data, the contractor shall provide a sample data collection of at least six data points of known locations to be reviewed and verified by the Engineer to be accurate within 100 feet. Upon verification, data collection can begin. Data collection can be made as construction progresses, or can be collected after all items are installed. If the data is unacceptable the contractor shall make corrections to the data collection equipment and or process and submit the data for review and approval as specified.

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 a 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."

GROUND TIRE RUBBER (GTR) MODIFIED ASPHALT BINDER (D-1)

Effective: June 26, 2006
Revised: January 1, 2013

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

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

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

Note 1. GTR shall be produced from processing automobile and/or light truck tires by the ambient grinding method. GTR shall not exceed 1/16 in. (2 mm) in any dimension and shall contain no free metal particles or other materials. A mineral powder (such as talc) meeting the requirements of AASHTO M 17 may be added, up to a maximum of four percent by weight of GTR to reduce sticking and caking of the GTR particles. When tested in accordance with Illinois modified AASHTO T 27, *a* 50 g sample of the GTR shall conform to the following gradation requirements:

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

Add the following to the end of Note 1. of article 1030.03 of the Standard Specifications:

"A dedicated storage tank for the Ground Tire Rubber (GTR) modified asphalt binder shall be provided. This tank must be capable of providing continuous mechanical mixing

throughout by continuous agitation and recirculation of the asphalt binder to provide a uniform mixture. The tank shall be heated and capable of maintaining the temperature of the asphalt binder at 300 °F to 350 °F (149 °C to 177 °C). The asphalt binder metering systems of dryer drum plants shall be calibrated with the actual GTR modified asphalt binder material with an accuracy of ± 0.40 percent."

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

"(c) RAP Materials (Note 3) .....1031"

Add the following note to 1030.02 of the Standard Specifications:

Note 3. When using reclaimed asphalt pavement and/or reclaimed asphalt shingles, the maximum asphalt binder replacement percentage shall be according to the most recent special provision for recycled materials.

HOT MIX ASPHALT – QUANTITY CORRECTION (BMPR)

Effective: October 1, 2014
Revised: October 2, 2014

Revise the fifth paragraph of Article 406.13(b) of the Standard Specifications to read as follows:

"HMA and Stone Matrix Asphalt (SMA) mixture in excess of 103 percent of the quantity shown on the plans or the plan quantity as specified by the Engineer will not be measured for payment. The "adjusted quantity to be placed" and the "adjusted pay quantity" for HMA and SMA mixtures will be calculated as follows.

Adjusted Quantity To Be Placed = C x quantity shown on the plans or the plan quantity as specified by the Engineer

where: C = English: $C = \frac{G_{mb} \times 46.8}{U}$ Metric: $C = \frac{G_{mb} \times 24.99}{U}$

and where: G_{mb} = average bulk specific gravity from approved mix design
U = unit weight of HMA shown on the plans in lb/sq yd/in. (kg/sq m/25 mm), used to estimate plan quantity
46.8 = English constant
24.99 = metric constant

Adjusted Pay Quantity (not to exceed 103 percent of the quantity shown on the plans or the plan quantity as specified by the Engineer) = B x HMA tons actually placed

where: $B = \frac{1}{C}$

If project circumstances warrant a new mix design, the above equations shall be used to calculate the adjusted plan quantity and adjusted pay quantity for each mix design using its respective average bulk specific gravity."

HMA MIXTURE DESIGN REQUIREMENTS (D-1)

Effective: January 1, 2013
Revised: November 1, 2014

1) Design Composition and Volumetric Requirements

Revise the last sentence of the first paragraph of Article 312.05 of the Standard Specifications to read:

"The minimum compacted thickness of each lift shall be according to Article 406.06(d)."

Delete the minimum compacted lift thickness table in Article 312.05 of the Standard Specifications.

Revise the second paragraph of Article 355.02 of the Standard Specifications to read:

"The mixture composition used shall be IL-19.0."

Revise Article 355.05(a) of the Standard Specifications to read:
"(a) The top lift thickness shall be 2 1/4 in. (60 mm) for mixture composition IL-19.0."

Revise the Leveling Binder table and second paragraph of Article 406.05(c) of the Standard Specifications to read:

"Leveling Binder	
Nominal, Compacted, Leveling Binder Thickness, in. (mm)	Mixture Composition
≤ 1 1/4 (32)	IL-4.75, IL-9.5, or IL-9.5L
> 1 1/4 to 2 (32 to 50)	IL-9.5 or IL-9.5L

The density requirements of Article 406.07(c) shall apply for leveling binder, machine method, when the nominal compacted thickness is: 3/4 in. (19 mm) or greater for IL-4.75 mixtures; and 1 1/4 in. (32 mm) or greater for IL-9.5 and IL-9.5L mixtures."

Revise the table in Article 406.06(d) of the Standard Specifications to read:

"MINIMUM COMPACTED LIFT THICKNESS	
Mixture Composition	Thickness, in. (mm)
IL-4.75	3/4 (19)
SMA-9.5, IL-9.5, IL-9.5L	1 1/2 (38)
SMA-12.5	2 (50)
IL-19.0, IL-19.0L	2 1/4 (57)"

Revise the ninth paragraph of Article 406.14 of the Standard Specifications to read:
"Test strip mixture will be evaluated at the contract unit price according to the following."

Revise Article 406.14(a) of the Standard Specifications to read:

"(a) If the HMA placed during the initial test strip is determined to be acceptable the mixture will be paid for at the contract unit price."

Revise Article 406.14(b) of the Standard Specifications to read:

"(b) If the HMA placed during the initial test strip (1) is determined to be unacceptable to remain in place by the Engineer, and (2) was not produced within 2.0 to 6.0 percent air voids or within the individual control limits of the JMF according to the Department's test results, the mixture will not be paid for and shall be removed at the Contractor's expense. An additional test strip shall be constructed and the mixture will be paid for in full, if produced within 2.0 to 6.0 percent air voids and within the individual control limits of the JMF."

Revise Article 406.14(c) of the Standard Specifications to read:

"(c) If the HMA placed during the initial test strip (1) is determined to be unacceptable to remain in place by the Engineer, and (2) was produced within 2.0 to 6.0 percent air voids and within the individual control limits of the JMF according to the Department's test results, the mixture shall be removed. Removal will be paid according to Article 109.04. This initial mixture will be paid for at the contract unit price. An additional test strip shall be constructed and the mixture will be paid for in full, if produced within 2.0 to 6.0 percent air voids and within the individual control limits of the JMF."

Delete Article 406.14(d) of the Standard Specifications.

Delete Article 406.14(e) of the Standard Specifications.

Delete the last sentence of Article 407.06(c) of the Standard Specifications.

Revise Note 2. of Article 442.02 of the Standard Specifications to read:

"Note 2. The mixture composition of the HMA used shall be IL-19.0 binder, designed with the same Ndesign as that specified for the mainline pavement."

Delete the second paragraph of Article 482.02 of the Standard Specifications.

Revise the first sentence of the sixth paragraph of Article 482.05 of the Standard Specifications to read:

"When the mainline HMA binder and surface course mixture option is used on resurfacing projects, shoulder resurfacing widths of 6 ft (1.8 m) or less may be placed simultaneously with the adjacent traffic lane for both the binder and surface courses."

Revise the second sentence of the fourth paragraph of Article 601.04 of the Standard Specifications to read:

"The top 5 in. (125 mm) of the trench shall be backfilled with an IL-19.0L Low ESAL mixture meeting the requirements of Section 1030 and compacted to a density of not less than 90 percent of the theoretical density."

Revise the second sentence of the fifth paragraph of Article 601.04 of the Standard Specifications to read:

"The top 8 in. (200 mm) of the trench shall be backfilled with an IL-19.0L Low ESAL mixture meeting the requirements of Section 1030 and compacted to a density of not less than 90 percent of the theoretical density."

Revise Article 1003.03(c) of the Standard Specifications to read:

"(c) Gradation. The fine aggregate gradation for all HMA shall be FA 1, FA 2, FA 20, FA 21, or FA 22. The fine aggregate gradation for SMA shall be FA/FM 20.

For mixture IL-4.75 and surface mixtures with an Ndesign = 90, at least 50 percent of the required fine aggregate fraction shall consist of either stone sand, slag sand, or steel slag meeting the FA 20 gradation.

For mixture IL-19.0, Ndesign = 90 the fine aggregate fraction shall consist of at least 67 percent manufactured sand meeting FA 20 or FA 22 gradation. For mixture IL-19.0, Ndesign = 50 or 70 the fine aggregate fraction shall consist of at least 50 percent manufactured sand meeting FA 20 or FA 22 gradation. The manufactured sand shall be stone sand, slag sand, steel slag sand, or combinations thereof.

Gradation FA 1, FA 2, or FA 3 shall be used when required for prime coat aggregate application for HMA."

Delete the last sentence of the first paragraph of Article 1004.03(b) of the Standard Specifications.

Revise the table in Article 1004.03(c) of the Standard Specifications to read:

"Use	Size/Application	Gradation No.
Class A-1, 2, & 3	3/8 in. (10 mm) Seal	CA 16
Class A-1	1/2 in. (13 mm) Seal	CA 15
Class A-2 & 3	Cover	CA 14
HMA High ESAL	IL-19.0 IL-9.5	CA 11 1/ CA 16, CA 13 3/
HMA Low ESAL	IL-19.0L IL-9.5L Stabilized Subbase or Shoulders	CA 11 1/ CA 16
SMA 2/	1/2 in. (12.5mm) Binder & Surface IL 9.5 Surface	CA13 3/, CA14 or CA16 CA16, CA 13 3/

1/ CA 16 or CA 13 may be blended with the gradations listed.
2/ The coarse aggregates used shall be capable of being combined with stone sand, slag sand, or steel slag sand meeting the FA/FM 20 gradation and mineral filler to meet the approved mix design and the mix requirements noted herein.
3/ CA 13 shall be 100 percent passing the 1/2 in. (12.5mm) sieve.

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

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

Revise the nomenclature table in Article 1030.01 of the Standard Specifications to read:

"High ESAL	IL-19.0 binder; IL-9.5 surface; IL-4.75; SMA-12.5, SMA-9.5
Low ESAL	IL-19.0L binder; IL-9.5L surface; Stabilized Subbase (HMA) 1/; HMA Shoulders 2/

1/ Uses 19.0L binder mix.

2/ Uses 19.0L for lower lifts and 9.5L for surface lift."

Revise Article 1030.02 of the Standard Specifications and Supplemental Specifications to read:

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

Item..... Article/Section

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

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

Note 2. The asphalt binder shall be an SBS PG 76-28 when the SMA is used on a full-depth asphalt pavement and SBS PG 76-22 when used as an overlay, except where modified herein. The asphalt binder shall be an Elvaloy or SBS PG 76-22 for IL-4.75, except where modified herein. The elastic recovery shall be a minimum of 80.

Note 3. A stabilizing additive such as cellulose or mineral fiber shall be added to the SMA mixture according to Illinois Modified AASHTO M 325. The stabilizing additive shall meet the Fiber Quality Requirements listed in Illinois Modified AASHTO M 325. Prior to approval and use of fibers, the Contractor shall submit a notarized certification by the producer of these materials stating they meet these requirements. Reclaimed Asphalt Shingles (RAS) may be used in Stone Matrix Asphalt (SMA) mixtures designed with an SBA polymer modifier as a fiber additive if the mix design with RAS included meets AASHTO T305 requirements. The RAS shall be from a certified source that produces either Type I or Type 2. Material shall meet requirements noted herein and the actual dosage rate will be determined by the Engineer.

Note 4. Warm mix additives or foaming processes shall be selected from the current Bureau of Materials and Physical Research Approved List, "Warm Mix Asphalt Technologies"."

Revise Article 1030.04(a)(1) of the Standard Specifications and the Supplemental Specifications to read:

"(1) High ESAL Mixtures. The Job Mix Formula (JMF) shall fall within the following limits.

High ESAL, MIXTURE COMPOSITION (% PASSING) [1/]										
Sieve Size	IL-19.0 mm		SMA [4/] IL-12.5 mm		SMA [4/] IL-9.5 mm		IL-9.5 mm		IL-4.75 mm	
	min	max	min	max	min	max	min	max	min	max

1 1/2 in (37.5 mm)										
1 in. (25 mm)		100								
3/4 in. (19 mm)	90	100		100						
1/2 in. (12.5 mm)	75	89	80	100		100		100		100
3/8 in. (9.5 mm)				65	90	100	90	100		100
#4 (4.75 mm)	40	60	20	30	36	50	34	69	90	100
#8 (2.36 mm)	20	42	16	24 5/	16	32 5/	34 6/	52 2/	70	90
#16 (1.18 mm)	15	30					10	32	50	65
#30 (600 µm)			12	16	12	18				
#50 (300 µm)	6	15					4	15	15	30
#100 (150 µm)	4	9					3	10	10	18
#200 (75 µm)	3	6	7.0	9.0 3/	7.5	9.5 3/	4	6	7	9 3/
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		1.0		1.0

1/ Based on percent of total aggregate weight.

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

3/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer.

4/ The maximum percent passing the #635 (20 µm) sieve shall be ≤ 3 percent.

5/ 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.

6/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted below 34 percent.

Delete Article 1030.04(a)(3) of the Standard Specifications.

Delete Article 1030.04(a)(4) of the Standard Specifications.

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

"(1) High ESAL Mixtures. The target value for the air voids of the HMA shall be 4.0 percent and for IL-4.75 it shall be 3.5 percent at the design number of gyrations.

The VMA and VFA of the HMA design shall be based on the nominal maximum size of the aggregate in the mix, and shall conform to the following requirements.

VOLUMETRIC REQUIREMENTS High ESAL				
	Voids in the Mineral Aggregate (VMA), % minimum			Voids Filled with Asphalt Binder (VFA), %
Ndesign	IL-19.0	IL-9.5	IL-4.75 1/	
50	13.5	15.0	18.5	65 – 78 2/
70				65 - 75
90				

1/ Maximum Draindown for IL-4.75 shall be 0.3 percent

2/ VFA for IL-4.75 shall be 72-85 percent"

Revise the table in Article 1030.04(b)(2) of the Standard Specifications to read:

"VOLUMETRIC REQUIREMENTS Low ESAL				
Mixture Composition	Design Compactive Effort	Design Air Voids Target %	VMA (Voids in the Mineral Aggregate), % min.	VFA (Voids Filled with Asphalt Binder), %
IL-9.5L	N_{DES} =30	4.0	15.0	65-78
IL-19.0L	N_{DES} =30	4.0	13.5	N/A"

Replace Article 1030.04(b)(3) of the Standard Specifications with the following:

"(3) SMA Mixtures.

Volumetric Requirements SMA 1/			
Ndesign	Design Air Voids Target %	Voids in the Mineral Aggregate (VMA), % min.	Voids Filled with Asphalt (VFA), %
80 4/	3.5	17.0 2/	75 - 83
		16.0 3/	

1/ Maximum draindown shall be 0.3 percent. The draindown shall be determined at the JMF asphalt binder content at the mixing temperature plus 30 °F.

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

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

4/ Blending of different types of aggregate will not be permitted.
For surface course, the coarse aggregate can be crushed steel slag, crystalline crushed stone or crushed sandstone. For binder course, coarse aggregate shall be crushed stone (dolomite), crushed gravel, crystalline crushed stone, or crushed sandstone.

Delete Article 1030.04(b)(4) of the Standard Specifications.

Delete Article 1030.04(b)(5) from the Supplemental Specifications.

Delete last sentence of the second paragraph of Article 1102.01(a) (13) a.

Add to second paragraph in Article 1102.01 (a) (13) a.:

"As an option, collected bag-house dust may be used in lieu of manufactured mineral filler, provided; 1) there is enough available for the production of the SMA mix for the entire project and 2) a mix design was prepared with collected bag-house dust."
Revise the table in Article 1030.05(d)(2)a. of the Standard Specifications to read:

"Parameter	Frequency of Tests High ESAL Mixture Low ESAL Mixture	Test Method See Manual of Test Procedures for Materials
Aggregate Gradation % passing sieves: 1/2 in. (12.5 mm), No. 4 (4.75 mm), No. 8 (2.36 mm), No. 30 (600 µm) No. 200 (75 µm)	1 washed ignition oven test on the mix per half day of production Note 3.	Illinois Procedure
Asphalt Binder Content by Ignition Oven Note 1.	1 per half day of production	Illinois-Modified AASHTO T 308
VMA Note 2.	Day's production ≥ 1200 tons: 1 per half day of production	Illinois-Modified AASHTO R 35
	Day's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	

"Parameter	Frequency of Tests High ESAL Mixture Low ESAL Mixture	Test Method See Manual of Test Procedures for Materials
Air Voids Bulk Specific Gravity of Gyratory Sample Note 4.	Day's production ≥ 1200 tons: 1 per half day of production	Illinois-Modified AASHTO T 312
	Day's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	
Maximum Specific Gravity of Mixture	Day's production ≥ 1200 tons: 1 per half day of production	Illinois-Modified AASHTO T 209
	Day's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	

Note 1. The Engineer may waive the ignition oven requirement for asphalt binder content if the aggregates to be used are known to have ignition asphalt binder content calibration factors which exceed 1.5 percent. If the ignition oven requirement is waived, other Department approved methods shall be used to determine the asphalt binder content.

Note 2. The G_{sb} used in the voids in the mineral aggregate (VMA) calculation shall be the same average G_{sb} value listed in the mix design.

Note 3. The Engineer reserves the right to require additional hot bin gradations for batch plants if control problems are evident.

Note 4. The WMA compaction temperature for mixture volumetric testing shall be 270 ± 5 °F (132 ± 3 °C) for quality control testing. The WMA compaction temperature for quality assurance testing will be 270 ± 5 °F (132 ± 3 °C) if the mixture is not allowed to cool to room temperature. If the mixture is allowed to cool to room temperature, it shall be reheated to standard HMA compaction temperatures."

Revise the table in Article 1030.05(d)(2)b. of the Standard Specifications to read:

"Parameter	High ESAL Mixture Low ESAL Mixture
Ratio Dust/Asphalt Binder	0.6 to 1.2
Moisture	0.3 %"

Revise the Article 1030.05(d)(4) of the Supplemental Specifications to read:

"(4) Control Limits. Target values shall be determined by applying adjustment factors to the AJMF where applicable. The target values shall be plotted on the control charts within the following control limits.

"CONTROL LIMITS						
Parameter	High ESAL		SMA		IL-4.75	
	Individual Test	Moving Avg. of 4	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 %		
No. 4 (4.75 mm)	± 5 %	± 4 %	± 5 %	± 4 %		
No. 8 (2.36 mm)	± 5 %	± 3 %	± 4 %	± 2 %		
No. 16 (1.18 mm)			± 4 %	± 2 %	± 4 %	± 3 %
No. 30 (600 µm)	± 4 %	± 2.5 %	± 4 %	± 2.5 %		
Total Dust Content No. 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 %
Voids	± 1.2 %	± 1.0 %	± 1.2 %	± 1.0 %	± 1.2 %	± 1.0 %
VMA	-0.7 % 2/	-0.5 % 2/	-0.7 % 2/	-0.5 % 2/	-0.7 % 2/	-0.5 % 2/

1/ Based on washed ignition oven

2/ Allowable limit below minimum design VMA requirement

DENSITY CONTROL LIMITS		
Mixture Composition	Parameter	Individual Test
IL-4.75	Ndesign = 50	93.0 - 97.4 % 1/
IL-9.5	Ndesign = 90	92.0 - 96.0 %
IL-9.5,IL-9.5L	Ndesign < 90	92.5 - 97.4 %
IL-19.0	Ndesign = 90	93.0 - 96.0 %
IL-19.0, IL-19.0L	Ndesign < 90	93.0 2/- 97.4 %
SMA	Ndesign = 80	93.5 - 97.4 %

1/ Density shall be determined by cores or by correlated, approved thin lift nuclear gauge.

2/ 92.0 % when placed as first lift on an unimproved subgrade."

Revise the table in Article 1030.05(d)(5) of the Supplemental Specifications to read:

"CONTROL CHART REQUIREMENTS	High ESAL, Low ESAL, SMA & IL-4.75
Gradation 1/ 3/	% Passing Sieves: 1/2 in. (12.5 mm) 2/ No. 4 (4.75 mm) No. 8 (2.36 mm) No. 30 (600 µm)
Total Dust Content 1/	No. 200 (75 µm)
	Asphalt Binder Content
	Bulk Specific Gravity
	Maximum Specific Gravity of Mixture
	Voids
	Density
	VMA

1/ Based on washed ignition oven.

2/ Does not apply to IL-4.75.

3/ SMA also requires the 3/8 in. (9.5 mm) sieve."

Delete Article 1030.05(d)(6)a.1.(b.) of the Standard Specifications.

Delete Article 1030.06(b) of the Standard Specifications.

Delete Article 1102.01(e) of the Standard Specifications.

2) Design Verification and Production

Description. The following states the requirements for Hamburg Wheel and Tensile Strength testing for High ESAL, IL-4.75, and Stone Matrix Asphalt (SMA) hot-mix asphalt (HMA) mixes during mix design verification and production.

Mix Design Testing. Add the following below the referenced AASHTO standards in Article 1030.04 of the Standard Specifications:

AASHTO T 324 Hamburg Wheel Test

AASHTO T 283 Tensile Strength Test

Add the following to Article 1030.04 of the Standard Specifications:

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

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

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

Illinois Modified AASHTO T 324 Requirements [1/]

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

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

Note: For SMA Designs (N-80) the maximum rut depth is 6.0 mm at 20,000 repetitions.
For IL 4.75mm Designs (N-50) the maximum rut depth is 9.0mm at 15,000 repetitions.

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

Production Testing. Revise Article 1030.06(a) of the Standard Specifications to read:

"(a) High ESAL, IL-4.75, WMA, and SMA Mixtures. For each contract, a 300 ton (275 metric tons) test strip, except for SMA mixtures it will be 400 ton (363 metric ton), will be required at the beginning of HMA production for each mixture with a quantity of 3000 tons (2750 metric tons) or more according to the Manual of Test Procedures for Materials "Hot Mix Asphalt Test Strip Procedures".

Before start-up, target values shall be determined by applying gradation correction factors to the JMF when applicable. These correction factors shall be determined from previous experience. The target values, when approved by the Engineer, shall be used to control HMA production. Plant settings and control charts shall be set according to target values.

Before constructing the test strip, target values shall be determined by applying gradation correction factors to the JMF when applicable. After any JMF adjustment, the JMF shall become the Adjusted Job Mix Formula (AJMF). Upon completion of the first acceptable test strip, the JMF shall become the AJMF regardless of whether or not the JMF has been adjusted. If an adjustment/plant change is made, the Engineer may require a new test strip to be constructed. If the HMA placed during the initial test strip is determined to be unacceptable to remain in place by the Engineer, it shall be removed and replaced.

The limitations between the JMF and AJMF are as follows.

Parameter	Adjustment
1/2 in. (12.5 mm)	± 5.0 %
No. 4 (4.75 mm)	± 4.0 %
No. 8 (2.36 mm)	± 3.0 %
No. 30 (600 µm)	*
No. 200 (75 µm)	*
Asphalt Binder Content	± 0.3 %

* In no case shall the target for the amount passing be greater than the JMF.

Any adjustments outside the above limitations will require a new mix design.

Mixture sampled to represent the test strip shall include additional material sufficient for the Department to conduct Hamburg Wheel testing according to Illinois Modified AASHTO T324 (approximately 60 lb (27 kg) total).

The Contractor shall immediately cease production upon notification by the Engineer of failing Hamburg Wheel test. All prior produced material may be paved out provided all other mixture criteria is being met. No additional mixture shall be produced until the Engineer receives passing Hamburg Wheel tests.

The Department may conduct additional Hamburg Wheel tests on production material as determined by the Engineer."

Revise the title of Article 1030.06(b) of the Standard Specifications to read:

"(b) Low ESAL Mixtures."

Add the following to Article 1030.06 of the Standard Specifications:

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

The Contractor shall immediately cease production upon notification by the Engineer of failing Hamburg Wheel test. All prior produced material may be paved out provided all other mixture criteria are being met. No additional mixture shall be produced until the Engineer receives passing Hamburg Wheel tests.

Method of Measurement:

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

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

Basis of Payment.

Replace the seventh paragraph of Article 406.14 of the Standard Specifications with the following:

"For all mixes designed and verified under the Hamburg Wheel criteria, the cost of furnishing and introducing anti-stripping additives in the HMA will not be paid for separately, but shall be considered as included in the contract unit price of the HMA item involved.

No additional compensation will be awarded to the Contractor because of reduced production rates associated with the addition of the anti-stripping additive."

RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (D-1)

Effective: November 1, 2012
Revise: January 2, 2015

Revise Section 1031 of the Standard Specifications to read:

"SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES

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

(a) Reclaimed Asphalt Pavement (RAP). RAP is the material resulting from cold milling or crushing an existing hot-mix asphalt (HMA) pavement. RAP will be considered processed FRAP after completion of both crushing and screening to size. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.

(b) Reclaimed Asphalt Shingles (RAS). Reclaimed asphalt shingles (RAS). RAS is from the processing and grinding of preconsumer or post-consumer shingles. RAS shall be a clean and uniform material with a maximum of 0.5 percent unacceptable material, as defined in Bureau of Materials and Physical Research Policy Memorandum "Reclaimed Asphalt Shingle (RAS) Sources", by weight of RAS. All RAS used shall come from a Bureau of Materials and Physical Research approved processing facility where it shall be ground and processed to 100 percent passing the 3/8 in. (9.5 mm) sieve and 90 percent passing the #4 (4.75 mm) sieve . RAS shall meet the testing requirements specified herein. In addition, RAS shall meet the following Type 1 or Type 2 requirements.

(1) Type 1. Type 1 RAS shall be processed, preconsumer asphalt shingles salvaged from the manufacture of residential asphalt roofing shingles.

(2) Type 2. Type 2 RAS shall be processed post-consumer shingles only, salvaged from residential, or four unit or less dwellings not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP).

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

(a) RAP Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. Additional processed RAP (FRAP) shall be stockpiled in a separate working pile, as designated in the QC Plan, and only added to the sealed stockpile when test results for the working pile are complete and are found to meet tolerances specified herein for the original sealed FRAP stockpile. Stockpiles shall be sufficiently separated to prevent intermingling at the base. All stockpiles (including

unprocessed RAP and FRAP) shall be identified by signs indicating the type as listed below (i.e. "Non- Quality, FRAP -#4 or Type 2 RAS", etc...).

(1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. All FRAP shall be processed prior to testing and sized into fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP in the coarse fraction shall pass the maximum sieve size specified for the mix the FRAP will be used in.

(2) Restricted FRAP (B quality) stockpiles shall consist of RAP from Class I, Superpave (High ESAL), or HMA (High ESAL). If approved by the Engineer, the aggregate from a maximum 3.0 inch single combined pass of surface/binder milling will be classified as B quality. All millings from this application will be processed into FRAP as described previously.

(3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed (FRAP) prior to testing. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.

(4) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from HMA shoulders, bituminous stabilized subbases or Superpave (Low ESAL)/HMA (Low ESAL) IL-19.0L binder mixture. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.

(5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

RAP or FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, plant cleanout etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.

(b) RAS Stockpiles. Type 1 and Type 2 RAS shall be stockpiled separately and shall be sufficiently separated to prevent intermingling at the base. Each stockpile shall be signed indicating what type of RAS is present.

However, a RAS source may submit a written request to the Department for approval to blend mechanically a specified ratio of type 1 RAS with type 2 RAS. The source will not be permitted to change the ratio of the blend without the Department prior written approval. The Engineer's written approval will be required, to mechanically blend RAS with any fine aggregate produced under the AGCS, up to an equal weight of RAS, to improve workability. The fine aggregate shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The fine aggregate shall be one that is approved for use in the HMA mixture and accounted for in the mix design and during HMA production.

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

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

(a) FRAP Testing. When used in HMA, the FRAP shall be sampled and tested either during processing or after stockpiling. It shall also be sampled during HMA production.

(1) During Stockpiling. For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).

(2) Incoming Material. For testing as incoming material, washed extraction samples shall be run at a minimum frequency of one sample per 2000 tons (1800 metric tons) or once per week, whichever comes first.

(3) After Stockpiling. For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP/FRAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

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

(b) RAS Testing. RAS shall be sampled and tested during stockpiling according to Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources". The Contractor shall also sample as incoming material at the HMA plant.

(1) During Stockpiling. Washed extraction and testing for unacceptable materials shall be run at the minimum frequency of one sample per 200 tons (180 metric tons) for the first 1000 tons (900 metric tons) and one sample per 1000 tons (900 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once a ≤ 1000 ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS shall be in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.

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

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

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

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

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

Parameter	FRAP
No. 4 (4.75 mm)	± 6 %
No. 8 (2.36 mm)	± 5 %
No. 30 (600 μm)	± 5 %
No. 200 (75 μm)	± 2.0 %
Asphalt Binder	± 0.3 %
G_{mm}	± 0.03 [1/]

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

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

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

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

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

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

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

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

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

The Engineer will notify the Contractor of observed deficiencies.

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

Test Parameter	Acceptable Limits of Precision	
% Passing:[1/]	FRAP	RAS
1 / 2 in.	5.0%	
No. 4	5.0%	
No. 8	3.0%	4.0%
No. 30	2.0%	3.0%
No. 200	2.2%	2.5%
Asphalt Binder Content	0.3%	1.0%
G_{mm}	0.030	

1/ Based on washed extraction.

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

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

1031.05 Quality Designation of Aggregate in RAP and FRAP.

(a) RAP. The aggregate quality of the RAP for homogenous, conglomerate, and conglomerate "D" quality stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.

(1) RAP from Class I, Superpave/HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.

(2) RAP from Superpave/HMA (Low ESAL) IL-19.0L binder mixture is designated as Class D quality coarse aggregate.

(3) RAP from Class I, Superpave/HMA (High ESAL) binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate.

(4) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.

(b) FRAP. If the Engineer has documentation of the quality of the FRAP aggregate, the Contractor shall use the assigned quality provided by the Engineer.

If the quality is not known, the quality shall be determined as follows. Fractionated RAP stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5,000 tons (4,500 metric tons). The Contractor shall obtain a representative sample witnessed by the Engineer. The sample shall be a minimum of 50 lb (25 kg). The sample shall be extracted according to Illinois Modified AASHTO T 164 by a consultant prequalified by the Department for the specified testing. The consultant shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample to the BMPR Aggregate Lab for MicroDeval Testing, according to Illinois Modified AASHTO T 327. A maximum loss of 15.0 percent will be applied for all HMA applications. The fine aggregate portion of the fractionated RAP shall not be used in any HMA mixtures that require a minimum of "B" quality aggregate or better, until the coarse aggregate fraction has been determined to be acceptable thru a MicroDeval Testing.

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

(a) FRAP. The use of FRAP in HMA shall be as follows.

(1) Coarse Aggregate Size (after extraction). The coarse aggregate in all FRAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.

(2) Steel Slag Stockpiles. FRAP stockpiles containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in HMA (High ESAL and Low ESAL) mixtures regardless of lift or mix type.

(3) Use in HMA Surface Mixtures (High and Low ESAL). FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall have coarse aggregate that is Class B quality or better. FRAP shall be considered equivalent to limestone for frictional considerations unless produced/screened to minus 3/8 inch.

(4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP in which the coarse aggregate is Class C quality or better.

(5) Use in Shoulders and Subbase. FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, Restricted FRAP, conglomerate, or conglomerate DQ.

(b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.

(c) FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with FRAP in HMA mixtures up to a maximum of 5.0% by weight of the total mix.

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

Max Asphalt Binder Replacement for FRAP with RAS Combination

HMA Mixtures [1/ 2/]	Maximum % ABR		
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified [3/]
30L	50	40	10
50	40	35	10
70	40	30	10
90	40	30	10[4/]
4.75 mm N-50			30
SMA N-80			20

1/ For HMA "All Other" (shoulder and stabilized subbase) N-30, the percent asphalt binder replacement shall not exceed 50% of the total asphalt binder in the mixture.

2/ When the binder replacement exceeds 15 percent for all mixes, except for SMA and IL-4.75, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent binder replacement using a virgin asphalt binder grade of PG64-22 will be reduced to a PG58-28). When constructing full depth HMA and the ABR is less than 15 percent, the required virgin asphalt binder grade shall be PG64-28.

3/ When the ABR for SMA or IL-4.75 is 15 percent or less, the required virgin asphalt binder shall be SBS PG76-22 and the elastic recovery shall be a minimum of 80. When the ABR for SMA or IL-4.75 exceeds 15%, the virgin asphalt binder grade shall be SBS PG70-28 and the elastic recovery shall be a minimum of 80.

4/ For polymerized surface mix used for overlays, with up to 10 percent ABR, an SBS PG70-22 will be required. However if used in full depth HMA, an SBS PG70-28 will be required.

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

(a) FRAP and/or RAS. FRAP and /or RAS mix designs shall be submitted for verification. If additional FRAP or RAS stockpiles are tested and found to be within tolerance, as defined under "Evaluation of Tests" herein, and meet all requirements herein, the additional FRAP or RAS stockpiles may be used in the original design at the percent previously verified.

(b) RAS. Type 1 and Type 2 RAS are not interchangeable in a mix design. A RAS stone bulk specific gravity (Gsb) of 2.300 shall be used for mix design purposes.

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

To remove or reduce agglomerated material, a scalping screen, gator, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAS and FRAP feed system to remove or reduce oversized material. If material passing the sizing device adversely affects the mix production or quality of the mix, the sizing device shall be set at a size specified by the Engineer.

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

(a) RAS. RAS shall be incorporated into the HMA mixture either by a separate weight depletion system or by using the RAP weigh belt. Either feed system shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes. The portion of RAS shall be controlled accurately to within ± 0.5 percent of the amount of RAS utilized. When using the weight depletion system, flow indicators or sensing devices shall be provided and interlocked with the plant controls such that the mixture production is halted when RAS flow is interrupted.

(b) HMA Plant Requirements. HMA plants utilizing FRAP and/or RAS shall be capable of automatically recording and printing the following information.

(1) Dryer Drum Plants.

a. Date, month, year, and time to the nearest minute for each print.

b. HMA mix number assigned by the Department.

c. Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).

d. Accumulated dry weight of RAS and FRAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).

e. Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.

f. Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.

g. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.

h. Aggregate RAS and FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAS and FRAP are printed in wet condition.)

i. When producing mixtures with FRAP and/or RAS, a positive dust control system shall be utilized.

j. Accumulated mixture tonnage.

k. Dust Removed (accumulated to the nearest 0.1 ton)

(2) Batch Plants.

a. Date, month, year, and time to the nearest minute for each print.

b. HMA mix number assigned by the Department.

c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).

d. Mineral filler weight to the nearest pound (kilogram).

f. RAS and FRAP weight to the nearest pound (kilogram).

g. Virgin asphalt binder weight to the nearest pound (kilogram).

h. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.

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

1031.09 RAP in Aggregate Surface Course and Aggregate Shoulders. The use of

RAP or FRAP in aggregate surface course and aggregate shoulders shall be as follows.

(a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Non-Quality" and "FRAP". The testing requirements of Article 1031.03 shall not apply. RAP used to construct aggregate surface course and aggregate shoulders shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications"

(b) Gradation. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded, FRAP, or single sized will not be accepted for use as Aggregate Surface Course and Aggregate Shoulders."

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

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

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

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

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

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

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

UNDERGROUND RACEWAYS (DISTRICT 1)

Effective: January 1, 2012

Revise Article 810.04 of the Standard Specifications to read:

"Installation. All underground conduit 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 or 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."

Add the following to Article 810.04(c) of the Standard Specifications:

"Coilable non-metallic conduit shall be machine straightened to remove the longitudinal curvature caused by coiling the conduit onto reels prior to installing in trench, encasing in concrete or embedding in structure. The straightening shall not deform the cross-section of the conduit such that any two measured outside diameters, each from any location and at any orientation around the longitudinal axis along the conduit differ by more than 6 mm (0.25")." The longitudinal axis of the straightened conduit shall not deviate by more than 20 mm per meter (0.25" per foot" from a straight line. The HDPE and straightening mechanism manufacturer operating temperatures shall be followed.

UNIT DUCT (DISTRICT 1)
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

WIRE AND CABLE (DISTRICT 1)
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:

Aerial Electric Cable Properties

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."

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TABLE I

Summary of Soil Analytical Results - Soil Characterization Sampling

Volatile Organic Compounds (VOCs)

CLIENT: Christopher B. Burke Engineering, Ltd.
SITE: Grant Park Bike Path Project: 44 W. Golfview Drive Northlake, IL
PROJECT NUMBER: TI14325

SAMPLE DATE: June 26, 2014
LABORATORY: Prairie Analytical Systems, Inc.
MATRIX: Soil

Analytical Method: EPA Method 5035A/8260B

Contaminant of Concern	Maximum Allowable Concentration (MAC) within a Metropolitan Statistical Area (MSA)		Sample ID	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6		
			Sample Date	6/26/2014	6/26/2014	6/26/2014	6/26/2014	6/26/2014	6/26/2014		
			Depth	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'		
	Value	Objective	Soil Type	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay		
Acetone	25	MAC				<0.0707	0.363				
Benzene	0.03	MAC		<0.00474	<0.00557	<0.00707	<0.00672				
Bromodichloromethane	0.6	MAC				<0.00707	<0.00672				
Bromoform	0.8	MAC				<0.00707	<0.00672				
Bromomethane	0.2	MAC				<0.0141	<0.0134				
2-Butanone	17	MAC				<0.0141	0.0331				
Carbon disulfide	9	MAC				<0.0141	<0.0134				
Carbon tetrachloride	0.07	MAC				<0.00707	<0.00672				
Chlorobenzene	1	MAC				<0.00707	<0.00672				
Chloroethane	NE	NE				<0.0141	<0.0134				
Chloroform	0.3	MAC				<0.00707	<0.00672				
Chloromethane	NE	NE				<0.0141	<0.0134				
Dibromochloromethane	0.4	MAC				<0.00707	<0.00672				
1,1-Dichloroethane	23	MAC				<0.00707	<0.00672				
1,2-Dichloroethane	0.02	MAC				<0.00707	<0.00672				
1,1-Dichloroethylene	0.06	MAC				<0.00707	<0.00672				
cis-1,2-Dichloroethylene	0.4	MAC				<0.00707	<0.00672				
trans-1,2-Dichloroethylene	0.7	MAC				<0.00707	<0.00672				
1,2-Dichloropropane	0.03	MAC				<0.00707	<0.00672				
cis-1,3-Dichloropropene	0.005	MAC				<0.00424	<0.00403				
trans-1,3-Dichloropropene	0.005	MAC				<0.00424	<0.00403				
Ethylbenzene	13	MAC		<0.00474	<0.00557	<0.00707	<0.00672				
2-Hexanone	NE	NE				<0.00707	<0.00672				
Methyl tertiary-butyl ether	0.32	MAC				<0.00707	<0.00672				
4-Methyl-2-pentanone	NE	NE				<0.00707	<0.00672				
Methylene chloride	0.02	MAC				<0.00707	<0.00672				
Styrene	4	MAC				<0.00707	<0.00672				
1,1,2,2-Tetrachloroethane	NE	NE				<0.00283	<0.00269				
Tetrachloroethylene	0.06	MAC				<0.00707	<0.00672				
Toluene	12	MAC		<0.00474	<0.00557	<0.00707	<0.00672				
1,1,1-Trichloroethane	2	MAC				<0.00707	<0.00672				
1,1,2-Trichloroethane	0.02	MAC				<0.00707	<0.00672				
Trichloroethylene	0.06	MAC				<0.00707	<0.00672				
Vinyl Chloride	0.01	MAC				<0.00707	<0.00672				
Xylenes (total)	5.6	MAC		<0.0142	<0.0167	<0.0212	<0.0202				

Notes:

Constituents that are not identified in 35 IAC 1100 Subpart F (MAC Table) are compared to the Metropolitan Statistical Area Background Concentration found in 35 IAC 742 Appendix A, Table H

< = Analyte not detected (i.e. less than RL or MDL)

All data reported in milligrams per kilogram (mg/kg) unless otherwise noted.

NA = This constituent was not analyzed.

NE = No remediation objective established by the IEPA for this constituent.

Bold identifies an exceedence of the referenced objective.

TRUE NORTH CONSULTANTS

TABLE 2

Summary of Soil Analytical Results - Soil Characterization Sampling

Semi-Volatile Organic Compounds (SVOCs)

CLIENT: Christopher B. Burke Engineering, Ltd.
SITE: Grant Park Bike Path Project; 44 W. Golfview Drive Northlake, IL
PROJECT NUMBER: TII4325

SAMPLE DATE: June 26, 2014
LABORATORY: Prairie Analytical Systems, Inc.
MATRIX: Soil

Analytical Method: EPA Method 5035A/8260B

Contaminant of Concern	Maximum Allowable Concentration (MAC) within a Metropolitan Statistical Area (MSA)		Sample ID	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6			
			Sample Date	6/26/2014	6/26/2014	6/26/2014	6/26/2014	6/26/2014	6/26/2014			
			Depth	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'			
	Value	Objective	Soil Type	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay			
Acenaphthene	570	MAC				< 0.415	< 0.416				
Anthracene	12000	MAC				< 0.415	< 0.416				
Benzo(a)anthracene	1.8	MAC				< 0.415	< 0.416				
Benzo(b)fluoranthene	2.1	MAC				0.599	< 0.416				
Benzo(k)fluoranthene	9.0	MAC				0.525	< 0.416				
Benzo(a)pyrene	2.1	MAC				0.51	< 0.416				
Bis(2-chloroethyl)ether	0.66	MAC				< 0.415	< 0.416				
Bis(2-ethylhexyl)phthalate	46	MAC				0.511	< 0.0750				
Butyl benzyl phthalate	930	MAC				< 0.415	< 0.416				
Carbazole	0.6	MAC				< 0.415	< 0.416				
4-Chloroaniline	0.7	MAC				< 0.415	< 0.416				
2-Chlorophenol	1.5	MAC				< 0.415	< 0.416				
Chrysene	88	MAC				< 0.415	< 0.416				
Di-n-butyl phthalate	2300	MAC				< 0.415	< 0.416				
Di-n-octyl phthalate	1600	MAC				< 0.415	< 0.416				
Dibenz[a,h]anthracene	0.42	MAC				< 0.830	< 0.832				
3,3'-Dichlorobenzidine	1.3	MAC				< 0.415	< 0.416				
2,4-Dichlorophenol	0.48	MAC				< 0.415	< 0.416				
Diethyl phthalate	470	MAC				< 0.415	< 0.416				
2,4-Dimethylphenol	9	MAC				< 0.415	< 0.416				
2,4-Dinitrophenol	3.3	MAC				0.729	< 0.416				
2,4-Dinitrotoluene	0.25	MAC				< 0.415	< 0.416				
2,6-Dinitrotoluene	0.26	MAC				< 0.415	< 0.416				
Fluoranthene	3100	MAC				< 0.0748	< 0.0750				
Fluorene	560	MAC				< 2.08	< 2.08				
Hexachlorobenzene	0.4	MAC				< 0.415	< 0.416				
Hexachlorocyclopentadiene	1.1	MAC				< 0.125	< 0.125				
Hexachloroethane	0.5	MAC				< 0.415	< 0.416				
Indeno(1,2,3-cd)pyrene	1.6	MAC				< 0.00623	< 0.00625				
Isophorone	8	MAC				< 0.415	< 0.416				
2-Methylphenol	15	MAC				< 0.415	< 0.416				
Naphthalene	1.8	MAC				< 0.415	< 0.416				
Nitrobenzene	0.26	MAC				< 0.415	< 0.416				
N-Nitroso-di-n-propylamine	0.0018	MAC				< 2.08	< 2.08				
N-Nitrosodiphenylamine	1	MAC				< 0.125	< 0.125				
Pentachlorophenol	0.02	MAC				< 0.125	< 0.125				
Phenol	100	MAC				< 0.125	< 0.125				
Pyrene	2300	MAC				1.32	< 0.416				
1,2,4-Trichlorobenzene	5	MAC				< 0.415	< 0.416				
2,4,5-Trichlorophenol	26	MAC				< 0.125	< 0.125				
2,4,6-Trichlorophenol	0.66	MAC				< 0.415	< 0.416				

Notes:

Constituents that are not identified in 35 IAC 1100 Subpart F (MAC Table) are compared to the Metropolitan Statistical Area Background Concentration found in 35 IAC 742 Appendix A, Table H

< = Analyte not detected (i.e. less than RL or MDL)
All data reported in milligrams per kilogram (mg/kg) unless otherwise noted.
NA = This constituent was not analyzed.
NE = No remediation objective established by the IEPA for this constituent.
Bold identifies an exceedence of the referenced objective.

TRUE NORTH CONSULTANTS

TABLE 3

Summary of Soil Analytical Results - Soil Characterization Sampling

Polynuclear Aromatic Hydrocarbons (PNAs)

CLIENT: Christopher B. Burke Engineering, Ltd.
SITE: Grant Park Bike Path Project: 44 W. Golfview Drive Northlake, IL
PROJECT NUMBER: TII4325

SAMPLE DATE: June 26, 2014
LABORATORY: Prairie Analytical Systems
MATRIX: Soil

Analytical Method: EPA Method 5035A/8260B

Contaminant of Concern	Maximum Allowable Concentration (MAC) within a Metropolitan Statistical Area (MSA)		Sample ID	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6		
			Sample Date	6/26/2014	6/26/2014	6/26/2014	6/26/2014	6/26/2014	6/26/2014		
			Depth	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'		
	Value	Objective	Soil Type	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay		
Acenaphthene	570	MAC		5.28	< 0.607						
Acenaphthylene	85	MAC		< 4.07	< 0.607						
Anthracene	12000	MAC		10.1	< 0.607						
Benzo(a)anthracene	1.8	MAC		**26**	1.75						
Benzo(b)fluoranthene	2.1	MAC		**18.8**	1.16						
Benzo(k)fluoranthene	9	MAC		**15.3**	1.11						
Benzo(g,h,i)perylene	2,300	MAC		9.62	1.05						
Benzo(a)pyrene	2.1	MAC		**18.3**	1.19						
Chrysene	88	MAC		30.5	1.49						
Dibenzo(a,h)anthracene	0.42	MAC		< 0.244	< 0.243						
Fluoranthene	3,100	MAC		49.4	3.33						
Fluorene	560	MAC		8.45	< 0.607						
Indeno(1,2,3-cd)pyrene	1.6	MAC		10.7	1.17						
Naphthalene	1.8	MAC		**12.4**	< 0.607						
Phenanthrene	210	MAC		59.8	2.22						
Pyrene	2,300	MAC		50.6	2.97						

Notes:
Constituents that are not identified in 35 IAC 1100 Subpart F (MAC Table) are compared to the Metropolitan Statistical Area Background Concentration found in 35 IAC 742 Appendix A, Table H
< = Analyte not detected (i.e. less than RL or MDL)
All data reported in milligrams per kilogram (mg/kg) unless otherwise noted.
NA = This constituent was not analyzed.
NE = No remediation objective established by the IEPA for this constituent.
Bold identifies an exceedence of the referenced objective.

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TABLE 4

Summary of Soil Analytical Results - Soil Characterization Sampling

Polychlorinated Biphenyls (PCBs)

CLIENT: Christopher B. Burke Engineering, Ltd.
SITE: Grant Park Bike Path Project: 44 W. Golfview Drive Northlake, IL
PROJECT NUMBER: TII4325

SAMPLE DATE: June 26, 2014
LABORATORY: Prairie Analytical Systems
MATRIX: Soil

Analytical Method: EPA Method 6020

Contaminant of Concern	Maximum Allowable Concentration (MAC) within a Metropolitan Statistical Area (MSA)		Sample ID	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6		
			Sample Date	6/26/2014	6/26/2014	6/26/2014	6/26/2014	6/26/2014	6/26/2014		
			Depth	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'		
	Value	Objective	Soil Type	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay		
Aroclor 1016	1	MAC				< 0.0399	< 0.0403				
Aroclor 1221	1	MAC				< 0.0399	< 0.0403				
Aroclor 1232	1	MAC				< 0.0399	< 0.0403				
Aroclor 1242	1	MAC				< 0.0399	< 0.0403				
Aroclor 1248	1	MAC				< 0.0399	< 0.0403				
Aroclor 1254	1	MAC				< 0.0399	< 0.0403				
Aroclor 1260	1	MAC				< 0.0399	< 0.0403				

Notes:
Constituents that are not identified in 35 IAC 1100 Subpart F (MAC Table) are compared to the Metropolitan Statistical Area Background Concentration found in 35 IAC 742 Appendix A, Table H
< = Analyte not detected (i.e. less than RL or MDL)
All data reported in milligrams per kilogram (mg/kg) unless otherwise noted.
NA = This constituent was not analyzed.
NE = No remediation objective established by the IEPA for this constituent.
Bold identifies an exceedence of the referenced objective.

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TABLE 5

Summary of Soil Analytical Results - Soil Characterization Sampling

Resource Conservation Recovery Act (RCRA) Metals

CLIENT: Christopher B. Burke Engineering, Ltd.
SITE: Grant Park Bike Path Project: 44 W. Golfview Drive Northlake, IL
PROJECT NUMBER: TII4325

SAMPLE DATE: June 26, 2014
LABORATORY: Prairie Analytical Systems
MATRIX: Soil

Analytical Method: EPA Method 6020

Contaminant of Concern	Maximum Allowable Concentration (MAC) within a Metropolitan Statistical Area (MSA)		Sample ID	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6		
			Sample Date	6/26/2014	6/26/2014	6/26/2014	6/26/2014	6/26/2014	6/26/2014		
			pH	7.8	7.8	7.5	6.1	7.5	7.7		
			6.25 < pH < 9.0	Yes	Yes	Yes	No	Yes	Yes		
			Depth	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'		
	Value	Objective	Soil Type	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay		
Arsenic	13	MAC		6.15	**13.6**	9.43	**17.4**				
Barium	1,500	MAC		85.3	125	140	88.6				
Cadmium	5.2	MAC		0.76	1.3	0.898	0.795				
Chromium	21	MAC		**21.6**	**24.9**	**33.3**	**22.2**				
Lead	107	MAC		47.7	**215**	**188**	25.7				
Mercury	0.89	MAC		**1.67**	0.355	0.299	0.0957				
Selenium	1.3	MAC		< 1.19	< 1.21	< 1.22	< 1.24				
Silver	4.4	MAC		< 0.595	< 0.607	< 0.611	< 0.620				

Notes:
Constituents that are not identified in 35 IAC 1100 Subpart F (MAC Table) are compared to the Metropolitan Statistical Area Background Concentration found in 35 IAC 742 Appendix A, Table H
< = Analyte not detected (i.e. less than RL or MDL)
All data reported in milligrams per kilogram (mg/kg) unless otherwise noted.
NA = This constituent was not analyzed.
NE = No remediation objective established by the IEPA for this constituent.
Bold identifies an exceedence of the referenced objective.

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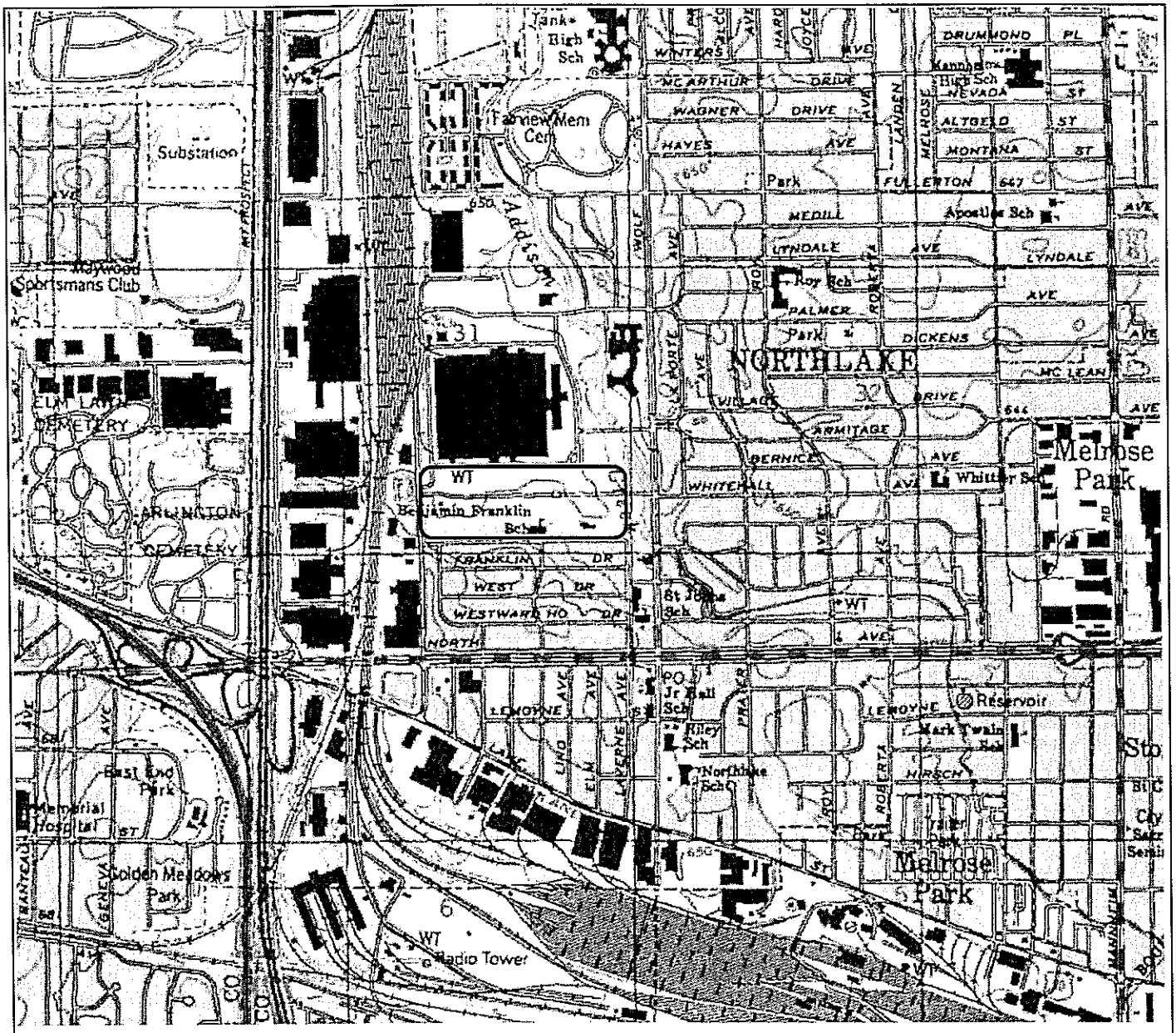
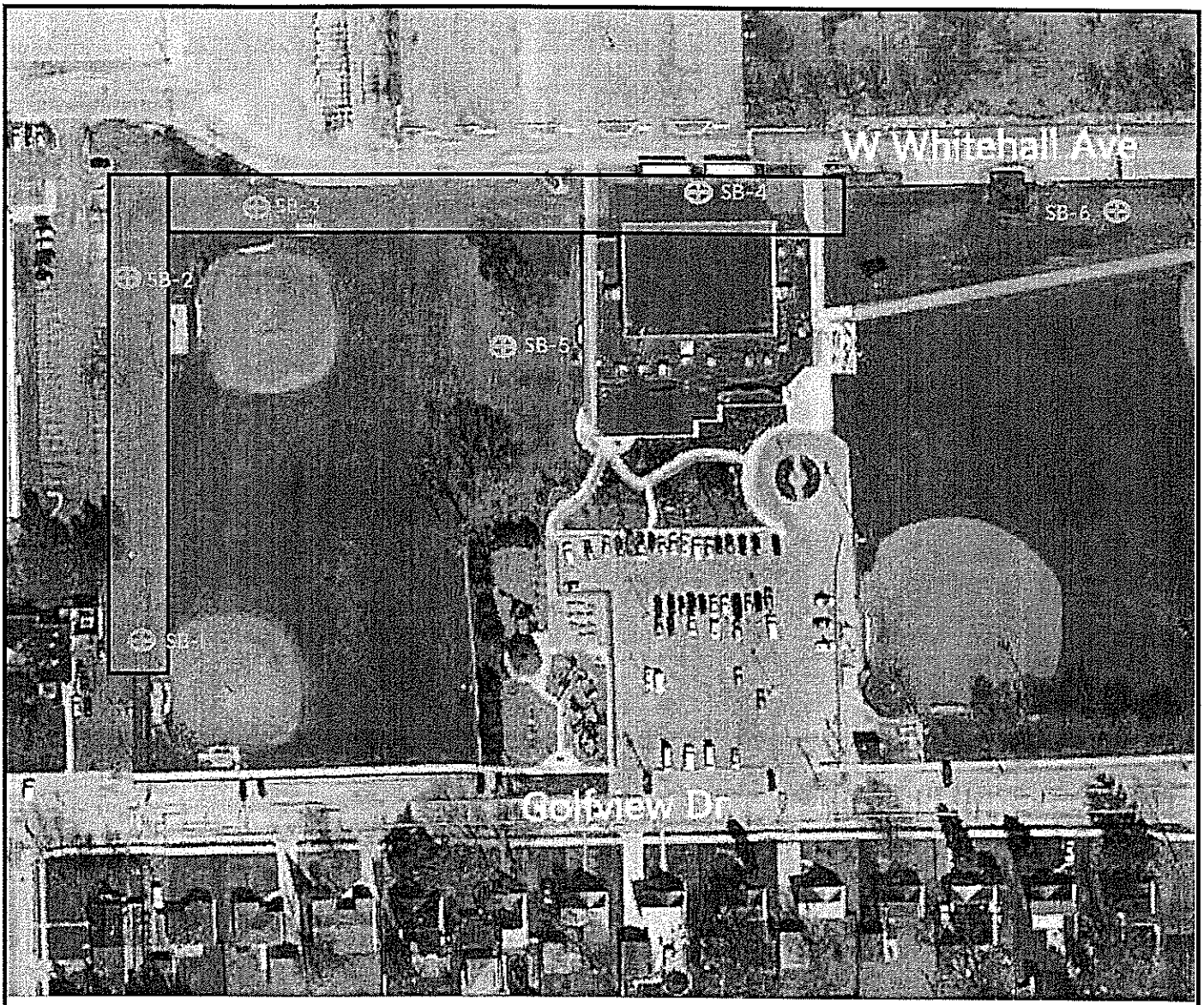


1999 Elmhurst, Illinois — Topographic Map Adapted from MyTopo

Approximate Site Location

TRUENORTH CONSULTANTS 1240 Iroquois Ave, Suite 206 Naperville, Illinois 60563	Site Location: Grant Park 44 W. Golfview Drive Northlake, IL 60164	N Not To Scale	Figure: 1
	Client: Christopher B. Burke Engineering, Ltd. 9575 W. Higgins Road, Suite 600 Rosemont, IL 60018		Project Number: TII4325 Date: 7/7/2014



2014– Aerial Photograph Adapted From Microsoft Bing

Approximate Location of Soil Sample Boring

Approximate Area of Soils with Elevated PID Screening Readings or Exceeding the Most Stringent Tier I SROs, Metropolitan Background Concentrations listed in 35 IAC 742 or Soil pH Outside the Range Specified in 35 IAC 1100.201(g)

TRUE NORTH CONSULTANTS 1240 Iroquois Ave, Suite 206 Naperville, Illinois 60563	Site Location: Grant Park 44 W. Golfview Drive Northlake, IL 60164	N Not To Scale	Figure: 2
	Client: Christopher B. Burke Engineering, Ltd. 9575 W. Higgins Road, Suite 600 Rosemont, IL 60018		Project Number: TII4325
			Date: 7/7/2014

Prairie Analytical Systems, INCORPORATED

Thursday, July 3, 2014

Amber Kowal
True North Consultants
1240 Iroquois Avenue, Suite 210
Naperville, IL 60563
TEL: (630) 717-2880
FAX: (630) 689-5881

RE: Grant Park Bike Path / Northlake, IL PAS WO: 14F0615

Prairie Analytical Systems, Inc. received 6 sample(s) on 6/26/2014 for the analyses presented in the following report.

All applicable quality control procedures met method specific acceptance criteria unless otherwise noted.

If you have any questions, please feel free to contact me at (217) 753-1148.

Respectfully submitted,

Kristen A. Potter
Project Manager

Certifications: NELAP/NELAC - IL #100323

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL **Lab Order:** 14F0615
Client Sample ID: SB-1 **Lab ID:** 14F0615-01
Collection Date: 6/26/14 9:00 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Volatile Organic Compounds by GC-MS									
*Benzene	U	0.00474		mg/Kg dry	1	6/30/14 10:05	6/30/14 18:16	SW 8260B Re	BDP
*Ethylbenzene	U	0.00474		mg/Kg dry	1	6/30/14 10:05	6/30/14 18:16	SW 8260B Re	BDP
*Toluene	U	0.00474		mg/Kg dry	1	6/30/14 10:05	6/30/14 18:16	SW 8260B Re	BDP
*Xylenes (total)	U	0.0142		mg/Kg dry	1	6/30/14 10:05	6/30/14 18:16	SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene		*84 %*		*75-120*		6/30/14 10:05	6/30/14 18:16	SW 8260B Re	BDP
Surrogate: 1,2-Dichloroethane-d4		*116 %*		*75-119*		6/30/14 10:05	6/30/14 18:16	SW 8260B Re	BDP
Surrogate: Toluene-d8		*107 %*		*78-114*		6/30/14 10:05	6/30/14 18:16	SW 8260B Re	BDP
Semi-Volatile Organic Compounds by GC-MS									
***Acenaphthene**	**5.28**	4.07		mg/Kg dry	10	6/30/14 10:29	6/30/14 23:37	SW 8270C	BDP
***Acenaphthylene**	U	4.07		mg/Kg dry	10	6/30/14 10:29	6/30/14 23:37	SW 8270C	BDP
***Anthracene**	**10.1**	4.07		mg/Kg dry	10	6/30/14 10:29	6/30/14 23:37	SW 8270C	BDP
***Benzo(a)anthracene**	**26.0**	4.07		mg/Kg dry	10	6/30/14 10:29	6/30/14 23:37	SW 8270C	BDP
***Benzo(b)fluoranthene**	**18.8**	4.07		mg/Kg dry	10	6/30/14 10:29	6/30/14 23:37	SW 8270C	BDP
***Benzo(k)fluoranthene**	**15.3**	4.07		mg/Kg dry	10	6/30/14 10:29	6/30/14 23:37	SW 8270C	BDP
***Benzo(g,h,i)perylene**	**9.62**	4.07		mg/Kg dry	10	6/30/14 10:29	6/30/14 23:37	SW 8270C	BDP
***Benzo(a)pyrene**	**18.3**	0.733		mg/Kg dry	10	6/30/14 10:29	6/30/14 23:37	SW 8270C	BDP
***Chrysene**	**30.5**	4.07		mg/Kg dry	10	6/30/14 10:29	6/30/14 23:37	SW 8270C	BDP
***Dibenz(a,h)anthracene**	U	0.244		mg/Kg dry	10	6/30/14 10:29	6/30/14 23:37	SW 8270C	BDP
***Fluoranthene**	**49.4**	3.05		mg/Kg dry	50	6/30/14 10:29	6/30/14 15:50	SW 8270C	BDP
***Fluorene**	**8.45**	4.07		mg/Kg dry	10	6/30/14 10:29	6/30/14 23:37	SW 8270C	BDP
***Indeno(1,2,3-cd)pyrene**	**10.7**	4.07		mg/Kg dry	10	6/30/14 10:29	6/30/14 23:37	SW 8270C	BDP
***Naphthalene**	**12.4**	4.07		mg/Kg dry	10	6/30/14 10:29	6/30/14 23:37	SW 8270C	BDP
***Phenanthrene**	**59.8**	3.05		mg/Kg dry	50	6/30/14 10:29	6/30/14 15:50	SW 8270C	BDP
***Pyrene**	**50.6**	3.05		mg/Kg dry	50	6/30/14 10:29	6/30/14 15:50	SW 8270C	BDP
Surrogate: 2-Fluorobiphenyl		*79 %*		*38-122*		6/30/14 10:29	6/30/14 23:37	SW 8270C	BDP
Surrogate: Nitrobenzene-d5		*71 %*		*45-136*		6/30/14 10:29	6/30/14 23:37	SW 8270C	BDP
Surrogate: 4-Terphenyl-d14		*71 %*		*57-122*		6/30/14 10:29	6/30/14 23:37	SW 8270C	BDP
Metals by ICP									
***Arsenic**	**6.15**	0.595		mg/Kg dry	1	6/30/14 9:22	6/30/14 18:40	SW 6010B	CEP
***Barium**	**85.3**	2.97		mg/Kg dry	10	6/30/14 9:22	7/1/14 16:51	SW 6010B	CEP
***Cadmium**	**0.760**	0.297		mg/Kg dry	1	6/30/14 9:22	6/30/14 18:40	SW 6010B	CEP
***Chromium**	**21.6**	0.297		mg/Kg dry	1	6/30/14 9:22	6/30/14 18:40	SW 6010B	CEP
***Lead**	**47.7**	0.297		mg/Kg dry	1	6/30/14 9:22	6/30/14 18:40	SW 6010B	CEP
*Selenium	U	1.19		mg/Kg dry	1	6/30/14 9:22	7/2/14 13:38	SW 6010B	CEP
*Silver	U	0.595		mg/Kg dry	1	6/30/14 9:22	7/2/14 13:38	SW 6010B	CEP
Mercury by CVAA									
***Mercury**	**1.67**	0.241		mg/Kg dry	5	7/2/14 14:57	7/3/14 13:04	SW 7471B	JTC
Conventional Chemistry Parameters									
***pH**	**7.8**	0.010		pH Units	1	6/30/14 11:30	6/30/14 13:57	SW 9045C	RSR
Percent Solids	**79.5**	0.100		%	1	6/27/14 14:39	6/30/14 16:00	ASTM D2974	JLS

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL **Lab Order:** 14F0615
Client Sample ID: SB-2 **Lab ID:** 14F0615-02
Collection Date: 6/26/14 9:15 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Volatile Organic Compounds by GC-MS									
*Benzene	U	0.00557		mg/Kg dry	1	6/30/14 10:05	7/1/14 2:00	SW 8260B Re	BDP
*Ethylbenzene	U	0.00557		mg/Kg dry	1	6/30/14 10:05	7/1/14 2:00	SW 8260B Re	BDP
*Toluene	U	0.00557		mg/Kg dry	1	6/30/14 10:05	7/1/14 2:00	SW 8260B Re	BDP
*Xylenes (total)	U	0.0167		mg/Kg dry	1	6/30/14 10:05	7/1/14 2:00	SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene		*93 %*		*75-120*		6/30/14 10:05	7/1/14 2:00	SW 8260B Re	BDP
Surrogate: 1,2-Dichloroethane-d4		*115 %*		*75-119*		6/30/14 10:05	7/1/14 2:00	SW 8260B Re	BDP
Surrogate: Toluene-d8		*103 %*		*78-114*		6/30/14 10:05	7/1/14 2:00	SW 8260B Re	BDP
Semi-Volatile Organic Compounds by GC-MS									
*Acenaphthene	U	0.607		mg/Kg dry	10	6/30/14 10:29	6/30/14 16:24	SW 8270C	BDP
*Acenaphthylene	U	0.607		mg/Kg dry	10	6/30/14 10:29	6/30/14 16:24	SW 8270C	BDP
*Anthracene	U	0.607		mg/Kg dry	10	6/30/14 10:29	6/30/14 16:24	SW 8270C	BDP
***Benzo(a)anthracene**	**1.75**	0.607		mg/Kg dry	10	6/30/14 10:29	6/30/14 16:24	SW 8270C	BDP
***Benzo(b)fluoranthene**	**1.16**	0.607		mg/Kg dry	10	6/30/14 10:29	6/30/14 16:24	SW 8270C	BDP
***Benzo(k)fluoranthene**	**1.11**	0.607		mg/Kg dry	10	6/30/14 10:29	6/30/14 16:24	SW 8270C	BDP
***Benzo(g,h,i)perylene**	**1.05**	0.607		mg/Kg dry	10	6/30/14 10:29	6/30/14 16:24	SW 8270C	BDP
***Benzo(a)pyrene**	**1.19**	0.607		mg/Kg dry	10	6/30/14 10:29	6/30/14 16:24	SW 8270C	BDP
***Chrysene**	**1.49**	0.607		mg/Kg dry	10	6/30/14 10:29	6/30/14 16:24	SW 8270C	BDP
*Dibenz(a,h)anthracene	U	0.243		mg/Kg dry	10	6/30/14 10:29	6/30/14 16:24	SW 8270C	BDP
***Fluoranthene**	**3.33**	0.607		mg/Kg dry	10	6/30/14 10:29	6/30/14 16:24	SW 8270C	BDP
*Fluorene	U	0.607		mg/Kg dry	10	6/30/14 10:29	6/30/14 16:24	SW 8270C	BDP
***Indeno(1,2,3-cd)pyrene**	**1.17**	0.607		mg/Kg dry	10	6/30/14 10:29	6/30/14 16:24	SW 8270C	BDP
*Naphthalene	U	0.607		mg/Kg dry	10	6/30/14 10:29	6/30/14 16:24	SW 8270C	BDP
***Phenanthrene**	**2.22**	0.607		mg/Kg dry	10	6/30/14 10:29	6/30/14 16:24	SW 8270C	BDP
***Pyrene**	**2.97**	0.607		mg/Kg dry	10	6/30/14 10:29	6/30/14 16:24	SW 8270C	BDP
Surrogate: 2-Fluorobiphenyl		*66 %*		*38-122*		6/30/14 10:29	6/30/14 16:24	SW 8270C	BDP
Surrogate: Nitrobenzene-d5		*53 %*		*45-136*		6/30/14 10:29	6/30/14 16:24	SW 8270C	BDP
Surrogate: 4-Terphenyl-d14		*83 %*		*57-122*		6/30/14 10:29	6/30/14 16:24	SW 8270C	BDP
Metals by ICP									
***Arsenic**	**13.6**	0.607		mg/Kg dry	1	6/30/14 9:22	6/30/14 18:45	SW 6010B	CEP
***Barium**	**125**	3.03		mg/Kg dry	10	6/30/14 9:22	7/1/14 16:56	SW 6010B	CEP
***Cadmium**	**1.30**	0.303		mg/Kg dry	1	6/30/14 9:22	6/30/14 18:45	SW 6010B	CEP
***Chromium**	**24.9**	0.303		mg/Kg dry	1	6/30/14 9:22	6/30/14 18:45	SW 6010B	CEP
***Lead**	**215**	3.03		mg/Kg dry	10	6/30/14 9:22	7/1/14 16:56	SW 6010B	CEP
*Selenium	U	1.21		mg/Kg dry	1	6/30/14 9:22	7/2/14 13:43	SW 6010B	CEP
*Silver	U	0.607		mg/Kg dry	1	6/30/14 9:22	7/2/14 13:43	SW 6010B	CEP
Mercury by CVAA									
***Mercury**	**0.355**	0.0484		mg/Kg dry	1	7/2/14 14:57	7/3/14 12:53	SW 7471B	JTC
Conventional Chemistry Parameters									
***pH**	**7.8**	0.010		pH Units	1	6/30/14 11:30	6/30/14 13:57	SW 9045C	RSR
Percent Solids	**81.7**	0.100		%	1	6/27/14 14:39	6/30/14 16:00	ASTM D2974	JLS

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL **Lab Order:** 14F0615
Client Sample ID: SB-3 **Lab ID:** 14F0615-03
Collection Date: 6/26/14 9:30 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Volatile Organic Compounds by GC-MS									
*Acetone	U	0.0707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*Benzene	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*Bromodichloromethane	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*Bromoform	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*Bromomethane	U	0.0141		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*2-Butanone	U	0.0141		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*Carbon disulfide	U	0.0141		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*Carbon tetrachloride	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*Chlorobenzene	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*Chloroethane	U	0.0141		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*Chloroform	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*Chloromethane	U	0.0141		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*Dibromochloromethane	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*1,1-Dichloroethane	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*1,2-Dichloroethane	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*1,1-Dichloroethene	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*cis-1,2-Dichloroethene	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*trans-1,2-Dichloroethene	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*1,2-Dichloropropane	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*cis-1,3-Dichloropropene	U	0.00424		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*trans-1,3-Dichloropropene	U	0.00424		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*Ethylbenzene	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*2-Hexanone	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*Methyl tert-butyl ether	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*4-Methyl-2-pentanone	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*Methylene chloride	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*Styrene	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*1,1,2,2-Tetrachloroethane	U	0.00283		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*Tetrachloroethene	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*Toluene	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*1,1,1-Trichloroethane	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*1,1,2-Trichloroethane	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*Trichloroethene	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*Vinyl chloride	U	0.00707		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
*Xylenes (total)	U	0.0212		mg/Kg dry	1	6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene		*86 %*		*75-120*		6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
Surrogate: 1,2-Dichloroethane-d4		*100 %*		*75-119*		6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
Surrogate: Toluene-d8		*109 %*		*78-114*		6/30/14 11:59	7/1/14 8:19	SW 8260B Re	BDP
Semi-Volatile Organic Compounds by GC-MS									
*Acenaphthene	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Acenaphthylene	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Anthracene	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
***Benzo(a)anthracene**	**0.599**	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
***Benzo(b)fluoranthene**	**0.525**	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
***Benzo(k)fluoranthene**	**0.510**	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Benzo(g,h,i)perylene	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
***Benzo(a)pyrene**	**0.511**	0.0748		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Bis(2-chloroethoxy)methane	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL
Lab Order: 14F0615
Client Sample ID: SB-3
Lab ID: 14F0615-03
Collection Date: 6/26/14 9:30
Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
*Bis(2-chloroethyl)ether	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Bis(2-chloroisopropyl)ether	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Bis(2-ethylhexyl)phthalate	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*4-Bromophenyl phenyl ether	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Butyl benzyl phthalate	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Carbazole	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*4-Chloro-3-methylphenol	U	0.830		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*4-Chloroaniline	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*2-Chloronaphthalene	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*2-Chlorophenol	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*4-Chlorophenyl phenyl ether	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
***Chrysene**	**0.729**	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Di-n-butyl phthalate	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Di-n-octyl phthalate	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Dibenz(a,h)anthracene	U	0.0748		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Dibenzofuran	U	2.08		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*1,2-Dichlorobenzene	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*1,3-Dichlorobenzene	U	0.125		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*1,4-Dichlorobenzene	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*3,3'-Dichlorobenzidine	U	0.00623		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*2,4-Dichlorophenol	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Diethyl phthalate	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Dimethyl phthalate	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*2,4-Dimethylphenol	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*4,6-Dinitro-2-methylphenol	U	2.08		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*2,4-Dinitrophenol	U	0.125		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*2,4-Dinitrotoluene	U	0.125		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*2,6-Dinitrotoluene	U	0.125		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
***Fluoranthene**	**1.32**	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Fluorene	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Hexachlorobenzene	U	0.125		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Hexachlorobutadiene	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Hexachlorocyclopentadiene	U	0.830		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Hexachloroethane	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Indeno(1,2,3-cd)pyrene	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Isophorone	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*2-Methylnaphthalene	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*2-Methylphenol	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
3 & 4-Methylphenol	U	0.125		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Naphthalene	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*2-Nitroaniline	U	0.125		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*3-Nitroaniline	U	0.00623		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*4-Nitroaniline	U	0.0748		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Nitrobenzene	U	0.0748		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*2-Nitrophenol	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*4-Nitrophenol	U	2.08		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*N-Nitroso-di-n-propylamine	U	0.000743	M	mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*N-Nitrosodiphenylamine	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Pentachlorophenol	U	0.0125		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
***Phenanthrene**	**0.863**	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL **Lab Order:** 14F0615
Client Sample ID: SB-3 **Lab ID:** 14F0615-03
Collection Date: 6/26/14 9:30 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
*Phenol	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*Pyrene	1.18	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*1,2,4-Trichlorobenzene	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*2,4,5-Trichlorophenol	U	0.415		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
*2,4,6-Trichlorophenol	U	0.125		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
Surrogate: 2-Fluorobiphenyl		*83 %*		*40-120*		6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
Surrogate: 2-Fluorophenol		*57 %*		*20-115*		6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
Surrogate: Nitrobenzene-d5		*91 %*		*45-135*		6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
Surrogate: Phenol-d6		*62 %*		*20-100*		6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
Surrogate: 4-Terphenyl-d14		*90 %*		*60-130*		6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
Surrogate: 2,4,6-Tribromophenol		*61 %*		*30-100*		6/30/14 14:22	6/30/14 18:23	SW 8270C	AJD
Polychlorinated Biphenyls by GC-ECD									
*Aroclor 1016	U	0.0399		mg/Kg dry	1	6/27/14 14:52	6/27/14 22:35	SW 8082	AJD
*Aroclor 1221	U	0.0399		mg/Kg dry	1	6/27/14 14:52	6/27/14 22:35	SW 8082	AJD
*Aroclor 1232	U	0.0399		mg/Kg dry	1	6/27/14 14:52	6/27/14 22:35	SW 8082	AJD
*Aroclor 1242	U	0.0399		mg/Kg dry	1	6/27/14 14:52	6/27/14 22:35	SW 8082	AJD
*Aroclor 1248	U	0.0399		mg/Kg dry	1	6/27/14 14:52	6/27/14 22:35	SW 8082	AJD
*Aroclor 1254	U	0.0399		mg/Kg dry	1	6/27/14 14:52	6/27/14 22:35	SW 8082	AJD
*Aroclor 1260	U	0.0399		mg/Kg dry	1	6/27/14 14:52	6/27/14 22:35	SW 8082	AJD
Surrogate: Decachlorobiphenyl		*65 %*		*60-140*		6/27/14 14:52	6/27/14 22:35	SW 8082	AJD
Surrogate: Tetrachloro-m-xylene		*69 %*		*60-140*		6/27/14 14:52	6/27/14 22:35	SW 8082	AJD
Metals by ICP									
***Arsenic**	**9.43**	0.611		mg/Kg dry	1	6/30/14 9:22	6/30/14 18:50	SW 6010B	CEP
***Barium**	**140**	3.05		mg/Kg dry	10	6/30/14 9:22	7/1/14 17:01	SW 6010B	CEP
***Cadmium**	**0.898**	0.305		mg/Kg dry	1	6/30/14 9:22	6/30/14 18:50	SW 6010B	CEP
***Chromium**	**33.3**	0.305		mg/Kg dry	1	6/30/14 9:22	6/30/14 18:50	SW 6010B	CEP
***Lead**	**188**	3.05		mg/Kg dry	10	6/30/14 9:22	7/1/14 17:01	SW 6010B	CEP
*Selenium	U	1.22		mg/Kg dry	1	6/30/14 9:22	7/2/14 13:48	SW 6010B	CEP
*Silver	U	0.611		mg/Kg dry	1	6/30/14 9:22	7/2/14 13:48	SW 6010B	CEP
Mercury by CVAA									
***Mercury**	**0.299**	0.0480		mg/Kg dry	1	7/2/14 14:57	7/3/14 12:57	SW 7471B	JTC
Conventional Chemistry Parameters									
***pH**	**7.5**	0.010		pH Units	1	6/30/14 11:30	6/30/14 13:57	SW 9045C	RSR
Percent Solids	**80.2**	0.100		%	1	6/27/14 14:39	6/30/14 16:00	ASTM D2974	JLS

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL **Lab Order:** 14F0615
Client Sample ID: SB-4 **Lab ID:** 14F0615-04
Collection Date: 6/26/14 9:45 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Volatile Organic Compounds by GC-MS									
***Acetone**	**0.363**	0.0672	C1	mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*Benzene	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*Bromodichloromethane	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*Bromoform	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*Bromomethane	U	0.0134		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
***2-Butanone**	**0.0331**	0.0134		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*Carbon disulfide	U	0.0134		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*Carbon tetrachloride	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*Chlorobenzene	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*Chloroethane	U	0.0134		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*Chloroform	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*Chloromethane	U	0.0134		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*Dibromochloromethane	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*1,1-Dichloroethane	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*1,2-Dichloroethane	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*1,1-Dichloroethene	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*cis-1,2-Dichloroethene	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*trans-1,2-Dichloroethene	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*1,2-Dichloropropane	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*cis-1,3-Dichloropropene	U	0.00403		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*trans-1,3-Dichloropropene	U	0.00403		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*Ethylbenzene	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*2-Hexanone	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*Methyl tert-butyl ether	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*4-Methyl-2-pentanone	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*Methylene chloride	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*Styrene	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*1,1,2,2-Tetrachloroethane	U	0.00269		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*Tetrachloroethene	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*Toluene	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*1,1,1-Trichloroethane	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*1,1,2-Trichloroethane	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*Trichloroethene	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*Vinyl chloride	U	0.00672		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
*Xylenes (total)	U	0.0202		mg/Kg dry	1	6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene		*99 %*		*75-120*		6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
Surrogate: 1,2-Dichloroethane-d4		*116 %*		*75-119*		6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
Surrogate: Toluene-d8		*97 %*		*78-114*		6/30/14 11:59	7/1/14 9:46	SW 8260B Re	BDP
Semi-Volatile Organic Compounds by GC-MS									
*Acenaphthene	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Acenaphthylene	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Anthracene	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Benzo(a)anthracene	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Benzo(b)fluoranthene	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Benzo(k)fluoranthene	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Benzo(g,h,i)perylene	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Benzo(a)pyrene	U	0.0750		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Bis(2-chloroethoxy)methane	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL
Lab Order: 14F0615
Client Sample ID: SB-4
Lab ID: 14F0615-04
Collection Date: 6/26/14 9:45
Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
*Bis(2-chloroethyl)ether	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Bis(2-chloroisopropyl)ether	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Bis(2-ethylhexyl)phthalate	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*4-Bromophenyl phenyl ether	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Butyl benzyl phthalate	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Carbazole	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*4-Chloro-3-methylphenol	U	0.832		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*4-Chloroaniline	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*2-Chloronaphthalene	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*2-Chlorophenol	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*4-Chlorophenyl phenyl ether	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Chrysene	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Di-n-butyl phthalate	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Di-n-octyl phthalate	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Dibenz(a,h)anthracene	U	0.0750		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Dibenzofuran	U	2.08		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*1,2-Dichlorobenzene	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*1,3-Dichlorobenzene	U	0.125		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*1,4-Dichlorobenzene	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*3,3'-Dichlorobenzidine	U	0.00625		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*2,4-Dichlorophenol	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Diethyl phthalate	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Dimethyl phthalate	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*2,4-Dimethylphenol	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*4,6-Dinitro-2-methylphenol	U	2.08		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*2,4-Dinitrophenol	U	0.125		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*2,4-Dinitrotoluene	U	0.125		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*2,6-Dinitrotoluene	U	0.125		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Fluoranthene	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Fluorene	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Hexachlorobenzene	U	0.125		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Hexachlorobutadiene	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Hexachlorocyclopentadiene	U	0.832		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Hexachloroethane	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Indeno(1,2,3-cd)pyrene	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Isophorone	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*2-Methylnaphthalene	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*2-Methylphenol	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
3 & 4-Methylphenol	U	0.125		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Naphthalene	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*2-Nitroaniline	U	0.125		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*3-Nitroaniline	U	0.00625		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*4-Nitroaniline	U	0.0750		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Nitrobenzene	U	0.0750		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*2-Nitrophenol	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*4-Nitrophenol	U	2.08		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*N-Nitroso-di-n-propylamine	U	0.000745	M	mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*N-Nitrosodiphenylamine	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Pentachlorophenol	U	0.0125		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Phenanthrene	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL
Lab Order: 14F0615
Client Sample ID: SB-4
Lab ID: 14F0615-04
Collection Date: 6/26/14 9:45
Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
*Phenol	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*Pyrene	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*1,2,4-Trichlorobenzene	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*2,4,5-Trichlorophenol	U	0.416		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
*2,4,6-Trichlorophenol	U	0.125		mg/Kg dry	1	6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
Surrogate: 2-Fluorobiphenyl		*89 %*		*40-120*		6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
Surrogate: 2-Fluorophenol		*58 %*		*20-115*		6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
Surrogate: Nitrobenzene-d5		*92 %*		*45-135*		6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
Surrogate: Phenol-d6		*66 %*		*20-100*		6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
Surrogate: 4-Terphenyl-d14		*94 %*		*60-130*		6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
Surrogate: 2,4,6-Tribromophenol		*65 %*		*30-100*		6/30/14 14:22	6/30/14 18:57	SW 8270C	AJD
Polychlorinated Biphenyls by GC-ECD									
*Aroclor 1016	U	0.0403		mg/Kg dry	1	6/27/14 14:52	6/27/14 23:09	SW 8082	AJD
*Aroclor 1221	U	0.0403		mg/Kg dry	1	6/27/14 14:52	6/27/14 23:09	SW 8082	AJD
*Aroclor 1232	U	0.0403		mg/Kg dry	1	6/27/14 14:52	6/27/14 23:09	SW 8082	AJD
*Aroclor 1242	U	0.0403		mg/Kg dry	1	6/27/14 14:52	6/27/14 23:09	SW 8082	AJD
*Aroclor 1248	U	0.0403		mg/Kg dry	1	6/27/14 14:52	6/27/14 23:09	SW 8082	AJD
*Aroclor 1254	U	0.0403		mg/Kg dry	1	6/27/14 14:52	6/27/14 23:09	SW 8082	AJD
*Aroclor 1260	U	0.0403		mg/Kg dry	1	6/27/14 14:52	6/27/14 23:09	SW 8082	AJD
Surrogate: Decachlorobiphenyl		*70 %*		*60-140*		6/27/14 14:52	6/27/14 23:09	SW 8082	AJD
Surrogate: Tetrachloro-m-xylene		*61 %*		*60-140*		6/27/14 14:52	6/27/14 23:09	SW 8082	AJD
Metals by ICP									
***Arsenic**	**17.4**	0.620		mg/Kg dry	1	6/30/14 9:22	6/30/14 18:55	SW 6010B	CEP
***Barium**	**88.6**	1.55		mg/Kg dry	5	6/30/14 9:22	6/30/14 19:16	SW 6010B	CEP
***Cadmium**	**0.795**	0.310		mg/Kg dry	1	6/30/14 9:22	6/30/14 18:55	SW 6010B	CEP
***Chromium**	**22.2**	0.310		mg/Kg dry	1	6/30/14 9:22	6/30/14 18:55	SW 6010B	CEP
***Lead**	**25.7**	0.310		mg/Kg dry	1	6/30/14 9:22	6/30/14 18:55	SW 6010B	CEP
*Selenium	U	1.24		mg/Kg dry	1	6/30/14 9:22	7/2/14 13:53	SW 6010B	CEP
*Silver	U	0.620		mg/Kg dry	1	6/30/14 9:22	7/2/14 13:53	SW 6010B	CEP
Mercury by CVAA									
***Mercury**	**0.0957**	0.0473		mg/Kg dry	1	7/2/14 14:57	7/3/14 13:00	SW 7471B	JTC
Conventional Chemistry Parameters									
***pH**	**6.1**	0.010		pH Units	1	6/30/14 11:30	6/30/14 13:57	SW 9045C	RSR
Percent Solids	**80.0**	0.100		%	1	6/27/14 14:39	6/30/14 16:00	ASTM D2974	JLS

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL **Lab Order:** 14F0615
Client Sample ID: SB-5 **Lab ID:** 14F0615-05
Collection Date: 6/26/14 10:00 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Conventional Chemistry Parameters									
***pH**	7.5	0.010		pH Units	1	6/30/14 11:30	6/30/14 13:57	SW 9045C	RSR

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL
Lab Order: 14F0615
Client Sample ID: SB-6
Lab ID: 14F0615-06
Collection Date: 6/26/14 10:15
Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Conventional Chemistry Parameters									
*pH	7.7	0.010		pH Units	1	6/30/14 11:30	6/30/14 13:57	SW 9045C	RSR

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL **Lab Order:** 14F0615

Volatile Organic Compounds by GC-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003448 - SW 5035A VOA										
Blank (X003448-BLK1)				Prepared & Analyzed: 06/30/2014						
Benzene	U	0.00500	mg/Kg wet							
Ethylbenzene	U	0.00500	mg/Kg wet							
Toluene	U	0.00500	mg/Kg wet							
Xylenes (total)	U	0.0150	mg/Kg wet							
Surrogate: 4-Bromofluorobenzene	*0.0480*		*mg/Kg wet*	*0.050000*		*96*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0516*		*mg/Kg wet*	*0.050000*		*103*	*75-119*			
Surrogate: Toluene-d8	*0.0480*		*mg/Kg wet*	*0.050000*		*96*	*78-114*			
LCS (X003448-BS1)				Prepared & Analyzed: 06/30/2014						
Benzene	0.0526	0.00500	mg/Kg wet	0.050000		105	80-130			
Ethylbenzene	0.0484	0.00500	mg/Kg wet	0.050000		97	77-132			
Toluene	0.0488	0.00500	mg/Kg wet	0.050000		98	80-130			
Xylenes (total)	0.151	0.0150	mg/Kg wet	0.15000		101	80-130			
Surrogate: 4-Bromofluorobenzene	*0.0521*		*mg/Kg wet*	*0.050000*		*104*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0481*		*mg/Kg wet*	*0.050000*		*96*	*75-119*			
Surrogate: Toluene-d8	*0.0488*		*mg/Kg wet*	*0.050000*		*98*	*78-114*			
Matrix Spike (X003448-MS1)	**Source: 14F0620-01**			Prepared & Analyzed: 06/30/2014						
Benzene	0.0588	0.00674	mg/Kg dry	0.067370	ND	87	50-140			
Ethylbenzene	0.0544	0.00674	mg/Kg dry	0.067370	ND	81	50-140			
Toluene	0.0563	0.00674	mg/Kg dry	0.067370	ND	84	55-135			
Xylenes (total)	0.167	0.0202	mg/Kg dry	0.20211	ND	83	60-130			
Surrogate: 4-Bromofluorobenzene	*0.0714*		*mg/Kg dry*	*0.067370*		*106*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0565*		*mg/Kg dry*	*0.067370*		*84*	*75-119*			
Surrogate: Toluene-d8	*0.0695*		*mg/Kg dry*	*0.067370*		*103*	*78-114*			
Matrix Spike Dup (X003448-MSD1)	**Source: 14F0620-01**			Prepared & Analyzed: 06/30/2014						
Benzene	0.0781	0.00750	mg/Kg dry	0.074997	ND	104	50-140	28	20	R
Ethylbenzene	0.0787	0.00750	mg/Kg dry	0.074997	ND	105	50-140	36	20	R
Toluene	0.0757	0.00750	mg/Kg dry	0.074997	ND	101	55-135	29	20	R
Xylenes (total)	0.236	0.0225	mg/Kg dry	0.22499	ND	105	60-130	34	20	R
Surrogate: 4-Bromofluorobenzene	*0.0757*		*mg/Kg dry*	*0.074997*		*101*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0630*		*mg/Kg dry*	*0.074997*		*84*	*75-119*			
Surrogate: Toluene-d8	*0.0753*		*mg/Kg dry*	*0.074997*		*100*	*78-114*			

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL **Lab Order:** 14F0615

Volatile Organic Compounds by GC-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003453 - SW 5035A VOA										
Blank (X003453-BLK1)				Prepared: 06/30/2014 Analyzed: 07/01/2014						
Acetone	U	0.0500	mg/Kg wet							
Benzene	U	0.00500	mg/Kg wet							
Bromodichloromethane	U	0.00500	mg/Kg wet							
Bromoform	U	0.00500	mg/Kg wet							
Bromomethane	U	0.0100	mg/Kg wet							
2-Butanone	U	0.0100	mg/Kg wet							
Carbon disulfide	U	0.0100	mg/Kg wet							
Carbon tetrachloride	U	0.00500	mg/Kg wet							
Chlorobenzene	U	0.00500	mg/Kg wet							
Chloroethane	U	0.0100	mg/Kg wet							
Chloroform	U	0.00500	mg/Kg wet							
Chloromethane	U	0.0100	mg/Kg wet							
Dibromochloromethane	U	0.00500	mg/Kg wet							
1,1-Dichloroethane	U	0.00500	mg/Kg wet							
1,2-Dichloroethane	U	0.00500	mg/Kg wet							
1,1-Dichloroethene	U	0.00500	mg/Kg wet							
cis-1,2-Dichloroethene	U	0.00500	mg/Kg wet							
trans-1,2-Dichloroethene	U	0.00500	mg/Kg wet							
1,2-Dichloropropane	U	0.00500	mg/Kg wet							
cis-1,3-Dichloropropene	U	0.00300	mg/Kg wet							
trans-1,3-Dichloropropene	U	0.00300	mg/Kg wet							
Ethylbenzene	U	0.00500	mg/Kg wet							
2-Hexanone	U	0.00500	mg/Kg wet							
Methyl tert-butyl ether	U	0.00500	mg/Kg wet							
4-Methyl-2-pentanone	U	0.00500	mg/Kg wet							
Methylene chloride	U	0.00500	mg/Kg wet							
Styrene	U	0.00500	mg/Kg wet							
1,1,2,2-Tetrachloroethane	U	0.00200	mg/Kg wet							
Tetrachloroethene	U	0.00500	mg/Kg wet							
Toluene	U	0.00500	mg/Kg wet							
1,1,1-Trichloroethane	U	0.00500	mg/Kg wet							
1,1,2-Trichloroethane	U	0.00500	mg/Kg wet							
Trichloroethene	U	0.00500	mg/Kg wet							
Vinyl chloride	U	0.00500	mg/Kg wet							
Xylenes (total)	U	0.0150	mg/Kg wet							
Surrogate: 4-Bromofluorobenzene	*0.0500*		*mg/Kg wet*	*0.050000*		*100*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0471*		*mg/Kg wet*	*0.050000*		*94*	*75-119*			
Surrogate: Toluene-d8	*0.0480*		*mg/Kg wet*	*0.050000*		*96*	*78-114*			

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL **Lab Order:** 14F0615

Volatile Organic Compounds by GC-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003453 - SW 5035A VOA										
LCS (X003453-BS1)				Prepared: 06/30/2014 Analyzed: 07/01/2014						
Benzene	0.0493	0.00500	mg/Kg wet	0.050000		99	80-130			
Chlorobenzene	0.0464	0.00500	mg/Kg wet	0.050000		93	85-120			
1,1-Dichloroethene	0.0547	0.00500	mg/Kg wet	0.050000		109	70-130			
Ethylbenzene	0.0466	0.00500	mg/Kg wet	0.050000		93	77-132			
Toluene	0.0452	0.00500	mg/Kg wet	0.050000		90	80-130			
Trichloroethene	0.0450	0.00500	mg/Kg wet	0.050000		90	75-130			
Xylenes (total)	0.139	0.0150	mg/Kg wet	0.15000		93	80-130			
Surrogate: 4-Bromofluorobenzene	*0.0510*		*mg/Kg wet*	*0.050000*		*102*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0439*		*mg/Kg wet*	*0.050000*		*88*	*75-119*			
Surrogate: Toluene-d8	*0.0476*		*mg/Kg wet*	*0.050000*		*95*	*78-114*			
Matrix Spike (X003453-MS1)		**Source: 14F0615-03**		Prepared: 06/30/2014 Analyzed: 07/01/2014						
Benzene	0.0522	0.00733	mg/Kg dry	0.073346	ND	71	50-140			
Chlorobenzene	0.0315	0.00733	mg/Kg dry	0.073346	ND	43	60-130			S
1,1-Dichloroethene	0.0621	0.00733	mg/Kg dry	0.073346	ND	85	60-130			
Ethylbenzene	0.0396	0.00733	mg/Kg dry	0.073346	ND	54	50-140			
Toluene	0.0463	0.00733	mg/Kg dry	0.073346	ND	63	55-130			
Trichloroethene	0.0486	0.00733	mg/Kg dry	0.073346	0.00461	60	60-130			S
Xylenes (total)	0.114	0.0220	mg/Kg dry	0.22004	ND	52	60-130			S
Surrogate: 4-Bromofluorobenzene	*0.0714*		*mg/Kg dry*	*0.073346*		*97*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0738*		*mg/Kg dry*	*0.073346*		*101*	*75-119*			
Surrogate: Toluene-d8	*0.0810*		*mg/Kg dry*	*0.073346*		*110*	*78-114*			
Matrix Spike Dup (X003453-MSD1)		**Source: 14F0615-03**		Prepared: 06/30/2014 Analyzed: 07/01/2014						
Benzene	0.0356	0.00603	mg/Kg dry	0.060294	ND	59	50-140	38	20	R
Chlorobenzene	0.0195	0.00603	mg/Kg dry	0.060294	ND	32	60-130	47	20	R, S
1,1-Dichloroethene	0.0447	0.00603	mg/Kg dry	0.060294	ND	74	60-130	33	20	R
Ethylbenzene	0.0241	0.00603	mg/Kg dry	0.060294	ND	40	50-140	49	25	R, S
Toluene	0.0271	0.00603	mg/Kg dry	0.060294	ND	45	55-130	52	25	R, S
Trichloroethene	0.0336	0.00603	mg/Kg dry	0.060294	0.00461	48	60-130	36	20	R, S
Xylenes (total)	0.0704	0.0181	mg/Kg dry	0.18088	ND	39	60-130	47	25	R, S
Surrogate: 4-Bromofluorobenzene	*0.0618*		*mg/Kg dry*	*0.060294*		*103*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0627*		*mg/Kg dry*	*0.060294*		*104*	*75-119*			
Surrogate: Toluene-d8	*0.0594*		*mg/Kg dry*	*0.060294*		*99*	*78-114*			

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL **Lab Order:** 14F0615

Semi-Volatile Organic Compounds by GC-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003455 - SW 3550B PNA										
Blank (X003455-BLK1)				Prepared & Analyzed: 06/30/2014						
Acenaphthene	U	0.333	mg/Kg wet							
Acenaphthylene	U	0.333	mg/Kg wet							
Anthracene	U	0.333	mg/Kg wet							
Benzo(a)anthracene	U	0.333	mg/Kg wet							
Benzo(b)fluoranthene	U	0.333	mg/Kg wet							
Benzo(k)fluoranthene	U	0.333	mg/Kg wet							
Benzo(g,h,i)perylene	U	0.333	mg/Kg wet							
Benzo(a)pyrene	U	0.0600	mg/Kg wet							
Chrysene	U	0.333	mg/Kg wet							
Dibenz(a,h)anthracene	U	0.0600	mg/Kg wet							
Fluoranthene	U	0.333	mg/Kg wet							
Fluorene	U	0.333	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	U	0.333	mg/Kg wet							
Naphthalene	U	0.333	mg/Kg wet							
Phenanthrene	U	0.333	mg/Kg wet							
Pyrene	U	0.333	mg/Kg wet							
Surrogate: 2-Fluorobiphenyl	*0.568*		*mg/Kg wet*	*0.66667*		*85*	*38-122*			
Surrogate: Nitrobenzene-d5	*0.755*		*mg/Kg wet*	*0.66667*		*113*	*45-136*			
Surrogate: 4-Terphenyl-d14	*0.593*		*mg/Kg wet*	*0.66667*		*89*	*57-122*			
LCS (X003455-BS1)				Prepared & Analyzed: 06/30/2014						
Acenaphthene	0.662	0.333	mg/Kg wet	0.66667		99	50-135			
Acenaphthylene	0.546	0.333	mg/Kg wet	0.66667		82	51-134			
Anthracene	0.577	0.333	mg/Kg wet	0.66667		86	52-117			
Benzo(a)anthracene	0.749	0.333	mg/Kg wet	0.66667		112	50-126			
Benzo(b)fluoranthene	0.541	0.333	mg/Kg wet	0.66667		81	57-134			
Benzo(k)fluoranthene	0.534	0.333	mg/Kg wet	0.66667		80	59-168			
Benzo(g,h,i)perylene	0.774	0.333	mg/Kg wet	0.66667		116	56-147			
Benzo(a)pyrene	0.474	0.0600	mg/Kg wet	0.66667		71	41-133			
Chrysene	0.611	0.333	mg/Kg wet	0.66667		92	52-127			
Dibenz(a,h)anthracene	0.708	0.0600	mg/Kg wet	0.66667		106	60-170			
Fluoranthene	0.649	0.333	mg/Kg wet	0.66667		97	57-130			
Fluorene	0.706	0.333	mg/Kg wet	0.66667		106	47-154			
Indeno(1,2,3-cd)pyrene	0.699	0.333	mg/Kg wet	0.66667		105	59-132			
Naphthalene	0.561	0.333	mg/Kg wet	0.66667		84	40-135			
Phenanthrene	0.537	0.333	mg/Kg wet	0.66667		81	54-126			
Pyrene	0.637	0.333	mg/Kg wet	0.66667		95	57-132			
Surrogate: 2-Fluorobiphenyl	*0.553*		*mg/Kg wet*	*0.66667*		*83*	*38-122*			
Surrogate: Nitrobenzene-d5	*0.698*		*mg/Kg wet*	*0.66667*		*105*	*45-136*			
Surrogate: 4-Terphenyl-d14	*0.675*		*mg/Kg wet*	*0.66667*		*101*	*57-122*			

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL **Lab Order:** 14F0615

Semi-Volatile Organic Compounds by GC-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003455 - SW 3550B PNA										
Matrix Spike (X003455-MS1)	Source: 14F0615-01			Prepared: 06/30/2014 Analyzed: 07/01/2014						
Acenaphthene	2.81	4.19	mg/Kg dry	0.83788	5.28	NR	50-135			S
Acenaphthylene	0.865	4.19	mg/Kg dry	0.83788	0.478	46	51-134			S
Anthracene	7.50	4.19	mg/Kg dry	0.83788	10.1	NR	52-117			S
Benzo(a)anthracene	21.7	4.19	mg/Kg dry	0.83788	26.0	NR	50-126			S
Benzo(b)fluoranthene	16.9	4.19	mg/Kg dry	0.83788	18.8	NR	57-134			S
Benzo(k)fluoranthene	14.5	4.19	mg/Kg dry	0.83788	15.3	NR	59-168			S
Benzo(g,h,i)perylene	8.53	4.19	mg/Kg dry	0.83788	9.62	NR	56-147			S
Benzo(a)pyrene	15.9	0.754	mg/Kg dry	0.83788	18.3	NR	41-133			S
Chrysene	25.7	4.19	mg/Kg dry	0.83788	30.5	NR	52-127			S
Dibenz(a,h)anthracene	3.29	0.754	mg/Kg dry	0.83788	ND	393	60-170			S
Fluoranthene	39.8	4.19	mg/Kg dry	0.83788	57.8	NR	57-130			S
Fluorene	3.81	4.19	mg/Kg dry	0.83788	8.45	NR	47-154			S
Indeno(1,2,3-cd)pyrene	10.5	4.19	mg/Kg dry	0.83788	10.7	NR	59-132			S
Naphthalene	4.41	4.19	mg/Kg dry	0.83788	12.4	NR	40-135			S
Phenanthrene	38.5	4.19	mg/Kg dry	0.83788	74.4	NR	54-126			S
Pyrene	42.5	4.19	mg/Kg dry	0.83788	60.4	NR	57-132			S
Surrogate: 2-Fluorobiphenyl	*0.649*		*mg/Kg dry*	*0.83788*		*77*	*38-122*			
Surrogate: Nitrobenzene-d5	*0.514*		*mg/Kg dry*	*0.83788*		*61*	*45-136*			
Surrogate: 4-Terphenyl-d14	*0.661*		*mg/Kg dry*	*0.83788*		*79*	*57-122*			
Matrix Spike Dup (X003455-MSD1)	Source: 14F0615-01			Prepared: 06/30/2014 Analyzed: 07/01/2014						
Acenaphthene	3.30	4.08	mg/Kg dry	0.81747	5.28	NR	50-135	16	20	S
Acenaphthylene	0.797	4.08	mg/Kg dry	0.81747	0.478	39	51-134	8	20	S
Anthracene	8.56	4.08	mg/Kg dry	0.81747	10.1	NR	52-117	13	20	S
Benzo(a)anthracene	23.5	4.08	mg/Kg dry	0.81747	26.0	NR	50-126	8	20	S
Benzo(b)fluoranthene	18.1	4.08	mg/Kg dry	0.81747	18.8	NR	57-134	7	20	S
Benzo(k)fluoranthene	15.5	4.08	mg/Kg dry	0.81747	15.3	31	59-168	7	20	S
Benzo(g,h,i)perylene	7.79	4.08	mg/Kg dry	0.81747	9.62	NR	56-147	9	20	S
Benzo(a)pyrene	16.6	0.736	mg/Kg dry	0.81747	18.3	NR	41-133	4	20	S
Chrysene	30.2	4.08	mg/Kg dry	0.81747	30.5	NR	52-127	16	20	S
Dibenz(a,h)anthracene	3.60	0.736	mg/Kg dry	0.81747	ND	441	60-170	9	20	S
Fluoranthene	48.0	4.08	mg/Kg dry	0.81747	57.8	NR	57-130	19	20	S
Fluorene	4.37	4.08	mg/Kg dry	0.81747	8.45	NR	47-154	14	20	S
Indeno(1,2,3-cd)pyrene	10.0	4.08	mg/Kg dry	0.81747	10.7	NR	59-132	5	20	S
Naphthalene	5.85	4.08	mg/Kg dry	0.81747	12.4	NR	40-135	28	20	S
Phenanthrene	46.2	4.08	mg/Kg dry	0.81747	74.4	NR	54-126	18	20	S
Pyrene	50.7	4.08	mg/Kg dry	0.81747	60.4	NR	57-132	18	20	S
Surrogate: 2-Fluorobiphenyl	*0.487*		*mg/Kg dry*	*0.81747*		*60*	*38-122*			
Surrogate: Nitrobenzene-d5	*0.401*		*mg/Kg dry*	*0.81747*		*49*	*45-136*			
Surrogate: 4-Terphenyl-d14	*0.444*		*mg/Kg dry*	*0.81747*		*54*	*57-122*			

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL **Lab Order:** 14F0615

Semi-Volatile Organic Compounds by GC-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003462 - SW 3550B BNA										
Blank (X003462-BLK1)				Prepared & Analyzed: 06/30/2014						
Acenaphthene	U	0.333	mg/Kg wet							
Acenaphthylene	U	0.333	mg/Kg wet							
Anthracene	U	0.333	mg/Kg wet							
Benzo(a)anthracene	U	0.333	mg/Kg wet							
Benzo(b)fluoranthene	U	0.333	mg/Kg wet							
Benzo(k)fluoranthene	U	0.333	mg/Kg wet							
Benzo(g,h,i)perylene	U	0.333	mg/Kg wet							
Benzo(a)pyrene	U	0.0600	mg/Kg wet							
Bis(2-chloroethoxy)methane	U	0.333	mg/Kg wet							
Bis(2-chloroethyl)ether	U	0.333	mg/Kg wet							
Bis(2-chloroisopropyl)ether	U	0.333	mg/Kg wet							
Bis(2-ethylhexyl)phthalate	U	0.333	mg/Kg wet							
4-Bromophenyl phenyl ether	U	0.333	mg/Kg wet							
Butyl benzyl phthalate	U	0.333	mg/Kg wet							
Carbazole	U	0.333	mg/Kg wet							
4-Chloro-3-methylphenol	U	0.666	mg/Kg wet							
4-Chloroaniline	U	0.333	mg/Kg wet							
2-Chloronaphthalene	U	0.333	mg/Kg wet							
2-Chlorophenol	U	0.333	mg/Kg wet							
4-Chlorophenyl phenyl ether	U	0.333	mg/Kg wet							
Chrysene	U	0.333	mg/Kg wet							
Di-n-butyl phthalate	U	0.333	mg/Kg wet							
Di-n-octyl phthalate	U	0.333	mg/Kg wet							
Dibenz(a,h)anthracene	U	0.0600	mg/Kg wet							
Dibenzofuran	U	1.66	mg/Kg wet							
1,2-Dichlorobenzene	U	0.333	mg/Kg wet							
1,3-Dichlorobenzene	U	0.100	mg/Kg wet							
1,4-Dichlorobenzene	U	0.333	mg/Kg wet							
3,3'-Dichlorobenzidine	U	0.00500	mg/Kg wet							
2,4-Dichlorophenol	U	0.333	mg/Kg wet							
Diethyl phthalate	U	0.333	mg/Kg wet							
Dimethyl phthalate	U	0.333	mg/Kg wet							
2,4-Dimethylphenol	U	0.333	mg/Kg wet							
4,6-Dinitro-2-methylphenol	U	1.66	mg/Kg wet							
2,4-Dinitrophenol	U	0.100	mg/Kg wet							
2,4-Dinitrotoluene	U	0.100	mg/Kg wet							
2,6-Dinitrotoluene	U	0.100	mg/Kg wet							
Fluoranthene	U	0.333	mg/Kg wet							
Fluorene	U	0.333	mg/Kg wet							
Hexachlorobenzene	U	0.100	mg/Kg wet							
Hexachlorobutadiene	U	0.333	mg/Kg wet							
Hexachlorocyclopentadiene	U	0.666	mg/Kg wet							
Hexachloroethane	U	0.333	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	U	0.333	mg/Kg wet							

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL **Lab Order:** 14F0615

Semi-Volatile Organic Compounds by GC-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003462 - SW 3550B BNA										
Blank (X003462-BLK1)				Prepared & Analyzed: 06/30/2014						
Isophorone	U	0.333	mg/Kg wet							
2-Methylnaphthalene	U	0.333	mg/Kg wet							
2-Methylphenol	U	0.333	mg/Kg wet							
3 & 4-Methylphenol	U	0.100	mg/Kg wet							
Naphthalene	U	0.333	mg/Kg wet							
2-Nitroaniline	U	0.100	mg/Kg wet							
3-Nitroaniline	U	0.00500	mg/Kg wet							
4-Nitroaniline	U	0.0600	mg/Kg wet							
Nitrobenzene	U	0.0600	mg/Kg wet							
2-Nitrophenol	U	0.333	mg/Kg wet							
4-Nitrophenol	U	1.66	mg/Kg wet							
N-Nitroso-di-n-propylamine	U	0.00100	mg/Kg wet							M
N-Nitrosodiphenylamine	U	0.333	mg/Kg wet							
Pentachlorophenol	U	0.0100	mg/Kg wet							
Phenanthrene	U	0.333	mg/Kg wet							
Phenol	U	0.333	mg/Kg wet							
Pyrene	U	0.333	mg/Kg wet							
1,2,4-Trichlorobenzene	U	0.333	mg/Kg wet							
2,4,5-Trichlorophenol	U	0.333	mg/Kg wet							
2,4,6-Trichlorophenol	U	0.100	mg/Kg wet							
Surrogate: 2-Fluorobiphenyl	*0.625*		*mg/Kg wet*	*0.66667*		*94*	*40-120*			
Surrogate: 2-Fluorophenol	*0.643*		*mg/Kg wet*	*1.0000*		*64*	*20-115*			
Surrogate: Nitrobenzene-d5	*0.673*		*mg/Kg wet*	*0.66667*		*101*	*45-135*			
Surrogate: Phenol-d6	*0.689*		*mg/Kg wet*	*1.0000*		*69*	*20-100*			
Surrogate: 4-Terphenyl-d14	*0.628*		*mg/Kg wet*	*0.66667*		*94*	*60-130*			
Surrogate: 2,4,6-Tribromophenol	*0.660*		*mg/Kg wet*	*1.0000*		*66*	*30-100*			
LCS (X003462-BS1)				Prepared & Analyzed: 06/30/2014						
Acenaphthene	0.635	0.333	mg/Kg wet	0.66667		95	30-140			
4-Chloro-3-methylphenol	1.16	0.666	mg/Kg wet	1.3333		87	30-180			
2-Chlorophenol	1.25	0.333	mg/Kg wet	1.3333		94	35-150			
1,4-Dichlorobenzene	0.481	0.333	mg/Kg wet	0.66667		72	30-105			
2,4-Dinitrotoluene	0.595	0.100	mg/Kg wet	0.66667		89	35-130			
4-Nitrophenol	1.52	1.66	mg/Kg wet	1.3333		114	30-150			
N-Nitroso-di-n-propylamine	0.626	0.00100	mg/Kg wet	0.66667		94	40-130			
Pentachlorophenol	1.34	0.0100	mg/Kg wet	1.3333		101	40-190			
Phenol	1.12	0.333	mg/Kg wet	1.3333		84	30-190			
Pyrene	0.597	0.333	mg/Kg wet	0.66667		90	35-140			
1,2,4-Trichlorobenzene	0.644	0.333	mg/Kg wet	0.66667		97	40-115			
Surrogate: 2-Fluorobiphenyl	*0.630*		*mg/Kg wet*	*0.66667*		*94*	*40-120*			
Surrogate: 2-Fluorophenol	*0.598*		*mg/Kg wet*	*1.0000*		*60*	*20-115*			
Surrogate: Nitrobenzene-d5	*0.631*		*mg/Kg wet*	*0.66667*		*95*	*45-135*			
Surrogate: Phenol-d6	*0.654*		*mg/Kg wet*	*1.0000*		*65*	*20-100*			
Surrogate: 4-Terphenyl-d14	*0.642*		*mg/Kg wet*	*0.66667*		*96*	*60-130*			
Surrogate: 2,4,6-Tribromophenol	*0.677*		*mg/Kg wet*	*1.0000*		*68*	*30-100*			

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL **Lab Order:** 14F0615

Polychlorinated Biphenyls by GC-ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003437 - SW 3550B PCB										
Blank (X003437-BLK1)				Prepared & Analyzed: 06/27/2014						
Aroclor 1016	U	0.0330	mg/Kg wet							
Aroclor 1221	U	0.0330	mg/Kg wet							
Aroclor 1232	U	0.0330	mg/Kg wet							
Aroclor 1242	U	0.0330	mg/Kg wet							
Aroclor 1248	U	0.0330	mg/Kg wet							
Aroclor 1254	U	0.0330	mg/Kg wet							
Aroclor 1260	U	0.0330	mg/Kg wet							
Surrogate: Decachlorobiphenyl	*0.0700*		*mg/Kg wet*	*0.066667*		*105*	*60-140*			
Surrogate: Tetrachloro-m-xylene	*0.0503*		*mg/Kg wet*	*0.066667*		*75*	*60-140*			
LCS (X003437-BS1)				Prepared & Analyzed: 06/27/2014						
Aroclor 1016	0.623	0.0330	mg/Kg wet	0.66667		94	60-130			
Aroclor 1260	0.668	0.0330	mg/Kg wet	0.66667		100	70-130			
Surrogate: Decachlorobiphenyl	*0.0680*		*mg/Kg wet*	*0.066667*		*102*	*60-140*			
Surrogate: Tetrachloro-m-xylene	*0.0518*		*mg/Kg wet*	*0.066667*		*78*	*60-140*			

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL **Lab Order:** 14F0615

Metals by ICP - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003450 - SW 3050B Metals										
Blank (X003450-BLK1)				Prepared & Analyzed: 06/30/2014						
Arsenic	U	0.500	mg/Kg wet							
Barium	U	0.250	mg/Kg wet							
Cadmium	U	0.250	mg/Kg wet							
Chromium	U	0.250	mg/Kg wet							
Lead	U	0.250	mg/Kg wet							
Selenium	U	1.00	mg/Kg wet							
Silver	U	0.500	mg/Kg wet							
LCS (X003450-BS1)				Prepared & Analyzed: 06/30/2014						
Arsenic	24.7	0.500	mg/Kg wet	25.000		99	85-115			
Barium	26.1	0.250	mg/Kg wet	25.000		104	85-115			
Cadmium	24.9	0.250	mg/Kg wet	25.000		100	85-115			
Chromium	25.1	0.250	mg/Kg wet	25.000		100	85-115			
Lead	24.6	0.250	mg/Kg wet	25.000		98	85-115			
Selenium	24.5	1.00	mg/Kg wet	25.000		98	85-115			
Silver	2.46	0.500	mg/Kg wet	2.5000		98	80-120			
Matrix Spike (X003450-MS1)	Source: 14F0615-04			Prepared & Analyzed: 06/30/2014						
Arsenic	43.9	0.622	mg/Kg dry	31.114	17.4	85	75-125			
Cadmium	26.4	0.311	mg/Kg dry	31.114	0.795	82	75-125			
Chromium	49.9	0.311	mg/Kg dry	31.114	22.2	89	75-125			
Lead	51.1	0.311	mg/Kg dry	31.114	25.7	82	75-125			
Selenium	20.8	1.24	mg/Kg dry	31.114	ND	67	75-125			S
Silver	1.97	0.622	mg/Kg dry	3.1114	ND	63	75-125			S
Matrix Spike Dup (X003450-MSD1)	Source: 14F0615-04			Prepared & Analyzed: 06/30/2014						
Arsenic	44.3	0.622	mg/Kg dry	31.114	17.4	87	75-125	0.8	20	
Cadmium	26.5	0.311	mg/Kg dry	31.114	0.795	83	75-125	0.5	20	
Chromium	49.8	0.311	mg/Kg dry	31.114	22.2	89	75-125	0.1	20	
Lead	52.7	0.311	mg/Kg dry	31.114	25.7	87	75-125	3	20	
Selenium	20.4	1.24	mg/Kg dry	31.114	ND	65	75-125	2	20	S
Silver	2.00	0.622	mg/Kg dry	3.1114	ND	64	75-125	1	20	S

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL **Lab Order:** 14F0615

Mercury by CVAA - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003543 - SW 7471B Mercury										
Blank (X003543-BLK1)				Prepared: 07/02/2014 Analyzed: 07/03/2014						
Mercury	U	0.0400	mg/Kg wet							
LCS (X003543-BS1)				Prepared: 07/02/2014 Analyzed: 07/03/2014						
Mercury	0.470	0.0400	mg/Kg wet	0.50000		94	80-120			

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL **Lab Order:** 14F0615

Conventional Chemistry Parameters - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003435 - ASTM D2974 Solids										
Blank (X003435-BLK1)				Prepared: 06/27/2014 Analyzed: 06/30/2014						
Percent Solids	U	0.100	%							
Duplicate (X003435-DUP1)		Source: 14F0549-01		Prepared: 06/27/2014 Analyzed: 06/30/2014						
Percent Solids	71.4	0.100	%		71.5			0.1	20	
Batch X003456 - SW 9045C pH										
Duplicate (X003456-DUP1)		Source: 14F0624-01		Prepared & Analyzed: 06/30/2014						
pH	7.6	0.010	pH Units		7.5			2	5	

LABORATORY RESULTS

Client: True North Consultants
Project: Grant Park Bike Path / Northlake, IL **Lab Order:** 14F0615

Notes and Definitions

S	Spike recovery outside acceptance limits.
R	RPD outside acceptance limits.
M	Reporting limit set between LOQ and MDL.
C1	Analyte result confirmed by second analysis.
*	NELAC certified compound.
U	Analyte not detected (i.e. less than RL or MDL).

Chain of Custody Record

Central IL - 1210 Capital Airport Drive - Springfield, IL 62707-8490 - Phone (217) 753-1148 - Facsimile (217) 753-1152
Chicago IL Office - 9114 Virginia Rd., Ste 112 - Lake in the Hills, IL 60156 - Phone (847) 551-2604 - Facsimile (847) 458-9680
Central/Southern IL Office - Phone (217) 414-7762 - Facsimile (217) 223-7922

Prairie Analytical Systems, INCORPORATED
www.prairieanalytical.com

Client	True North Consultants
Address	1240 Iroquois Avenue, Suite 206
City, State, Zip Code	Naperville, Illinois 60563
Phone / Facsimile	630.717.2880/630.689.5881
Project Name / Number	Grant Park Bike Path
Project Location	Northlake, IL
P.O. # or Invoice To	T114325
Contact Person	Amber Kowal, Brian Mihelich

Reporting: CCDD ■ MAC; CALM ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F; RISC ☐ Resid ☐ Indust

Sample Description	Sampling Date	Sampling Time	Matrix Code	Preserv Code	No. of Containers	Sample Type Comp	Sample Type Grab	VOCs	BETX	SVOCs	PNAs	PCBs	RCRA Metal	pH			Sampler Comments
SB-1	6/26/2014	900	S	5	4		X		X		X		X	X			
SB-2	6/26/2014	915	S	5	4		X		X		X		X	X			
SB-3	6/26/2014	930	S	5	4		X	X		X		X	X	X			
SB-4	6/26/2014	945	S	5	4		X	X		X		X	X	X			
SB-5	6/26/2014	1000	S	0	1		X							X			
SB-6	6/26/2014	1015	S	0	1		X							X			

Matrix Code	A - Aqueous	DW - Drinking Water	GW - Ground Water	NA - Non-Aqueous Liquid	S - Solid	O - Oil	X - Other (Specify)
Preserv Code	0 - None	1 - HCl	2 - H2SO4	3 - HNO3	4 - NaOH	5 - 5035 Kit	X - Other (Specify)

Relinquished By	Date	Time	Received By	Date	Time	Method of Shipment
Amber Kowal	6/26/2014	1600		6/26/14	1600	
	6/26/14	1730				
				6-27-14	9:50	UPS

Special Instructions:

Turnaround Time: Standard ■ Rush ☐ Date Required: 4.5 Days

QC Level: 1 ☐ 2 ■ 3 ☐ 4 ☐

On wet ice? Yes / No

Temperature (°C): 2.8

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PAS COC Rev. 3

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Copies: White - Client / Yellow - PAS, Inc / Pink - Sampler

TABLE I

Summary of Soil Analytical Results - Soil Characterization Sampling

Volatile Organic Compounds (VOCs)

CLIENT: Christopher B. Burke Engineering, Ltd.
SITE: King Arthur Bike Path Project: King Arthur Court Northlake, IL 60164
PROJECT NUMBER: TII4324

SAMPLE DATE: June 27, 2014
LABORATORY: Prairie Analytical Systems, Inc.
MATRIX: Soil

Analytical Method: EPA Method 5035A/8260B

Contaminant of Concern	Maximum Allowable Concentration (MAC) within a Metropolitan Statistical Area (MSA)		Sample ID	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6		
			Sample Date	6/27/2014	6/27/2014	6/27/2014	6/27/2014	6/27/2014	6/27/2014		
			Depth	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'		
	Value	Objective	Soil Type	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay		
Acetone	25	MAC							< 0.0454		
Benzene	0.03	MAC		< 0.00446	< 0.00425	< 0.00648	< 0.00464	< 0.00495	< 0.00454		
Bromodichloromethane	0.6	MAC							< 0.00454		
Bromoform	0.8	MAC							< 0.00454		
Bromomethane	0.2	MAC							< 0.00907		
2-Butanone	17	MAC							< 0.00907		
Carbon disulfide	9	MAC							< 0.00907		
Carbon tetrachloride	0.07	MAC							< 0.00454		
Chlorobenzene	1	MAC							< 0.00454		
Chloroethane	NE	NE							< 0.00907		
Chloroform	0.3	MAC							< 0.00454		
Chloromethane	NE	NE							< 0.00907		
Dibromochloromethane	0.4	MAC							< 0.00454		
1,1-Dichloroethane	23	MAC							< 0.00454		
1,2-Dichloroethane	0.02	MAC							< 0.00454		
1,1-Dichloroethylene	0.06	MAC							< 0.00454		
cis-1,2-Dichloroethylene	0.4	MAC							< 0.00454		
trans-1,2-Dichloroethylene	0.7	MAC							< 0.00454		
1,2-Dichloropropane	0.03	MAC							< 0.00454		
cis-1,3-Dichloropropene	0.005	MAC							< 0.00272		
trans-1,3-Dichloropropene	0.005	MAC							< 0.00272		
Ethylbenzene	13	MAC		< 0.00446	< 0.00425	< 0.00648	< 0.00464	< 0.00495	< 0.00454		
2-Hexanone	NE	NE							< 0.00454		
Methyl tertiary-butyl ether	0.32	MAC							< 0.00454		
4-Methyl-2-pentanone	NE	NE							< 0.00454		
Methylene chloride	0.02	MAC							< 0.00454		
Styrene	4	MAC							< 0.00454		
1,1,2,2-Tetrachloroethane	NE	NE							< 0.00181		
Tetrachloroethylene	0.06	MAC							< 0.00454		
Toluene	12	MAC		0.00487	< 0.00425	< 0.00648	< 0.00464	< 0.00495	< 0.00454		
1,1,1-Trichloroethane	2	MAC							< 0.00454		
1,1,2-Trichloroethane	0.02	MAC							< 0.00454		
Trichloroethylene	0.06	MAC							< 0.00454		
Vinyl Chloride	0.01	MAC							< 0.00454		
Xylenes (total)	5.6	MAC		< 0.0134	< 0.0127	< 0.0194	< 0.0139	< 0.0148	< 0.0136		

Notes:

Constituents that are not identified in 35 IAC 1100 Subpart F (MAC Table) are compared to the Metropolitan Statistical Area Background Concentration found in 35 IAC 742 Appendix A, Table H

< = Analyte not detected (i.e. less than RL or MDL)
All data reported in milligrams per kilogram (mg/kg) unless otherwise noted.
NA = This constituent was not analyzed.
NE = No remediation objective established by the IEPA for this constituent.
Bold identifies an exceedence of the referenced objective.

TRUENORTH CONSULTANTS

TABLE 2

Summary of Soil Analytical Results - Soil Characterization Sampling

Semi-Volatile Organic Compounds (SVOCs)

CLIENT: Christopher B. Burke Engineering, Ltd.
SITE: King Arthur Bike Path Project: King Arthur Court Northlake, IL 60164
PROJECT NUMBER: TII4324

SAMPLE DATE: June 27, 2014
LABORATORY: Prairie Analytical Systems, Inc.
MATRIX: Soil

Analytical Method: EPA Method 5035A/8260B

Contaminant of Concern	Maximum Allowable Concentration (MAC) within a Metropolitan Statistical Area (MSA)		Sample ID	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6		
			Sample Date	6/27/2014	6/27/2014	6/27/2014	6/27/2014	6/27/2014	6/27/2014		
			Depth	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'		
	Value	Objective	Soil Type	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay		
Acenaphthene	570	MAC							<0.401		
Anthracene	12000	MAC							<0.401		
Benzo(a)anthracene	1.8	MAC							<0.401		
Benzo(b)fluoranthene	2.1	MAC							<0.401		
Benzo(k)fluoranthene	9.0	MAC							<0.401		
Benzo(a)pyrene	2.1	MAC							<0.401		
Bis(2-chloroethyl)ether	0.66	MAC							<0.401		
Bis(2-ethylhexyl)phthalate	46	MAC							<0.0722		
Butyl benzyl phthalate	930	MAC							<0.401		
Carbazole	0.6	MAC							<0.401		
4-Chloroaniline	0.7	MAC							<0.401		
2-Chlorophenol	1.5	MAC							<0.401		
Chrysene	88	MAC							<0.401		
Di-n-butyl phthalate	2300	MAC							<0.401		
Di-n-octyl phthalate	1600	MAC							<0.401		
Dibenz(a,h)anthracene	0.42	MAC							<0.802		
3,3'-Dichlorobenzidine	1.3	MAC							<0.401		
2,4-Dichlorophenol	0.48	MAC							<0.401		
Diethyl phthalate	470	MAC							<0.401		
2,4-Dimethylphenol	9	MAC							<0.401		
2,4-Dinitrophenol	3.3	MAC							<0.401		
2,4-Dinitrotoluene	0.25	MAC							<0.401		
2,6-Dinitrotoluene	0.26	MAC							<0.401		
Fluoranthene	3100	MAC							<0.0722		
Fluorene	560	MAC							<2.00		
Hexachlorobenzene	0.4	MAC							<0.401		
Hexachlorocyclopentadiene	1.1	MAC							<0.120		
Hexachloroethane	0.5	MAC							<0.401		
Indeno(1,2,3-cd)pyrene	1.6	MAC							<0.00602		
Isophorone	8	MAC							<0.401		
2-Methylphenol	15	MAC							<0.401		
Naphthalene	1.8	MAC							<0.401		
Nitrobenzene	0.26	MAC							<0.401		
N-Nitroso-di-n-propylamine	0.0018	MAC							<2.00		
N-Nitrosodiphenylamine	1	MAC							<0.120		
Pentachlorophenol	0.02	MAC							<0.120		
Phenol	100	MAC							<0.120		
Pyrene	2300	MAC							<0.401		
1,2,4-Trichlorobenzene	5	MAC							<0.401		
2,4,5-Trichlorophenol	26	MAC							<0.120		
2,4,6-Trichlorophenol	0.66	MAC							<0.401		

Notes:

Constituents that are not identified in 35 IAC 1100 Subpart F (MAC Table) are compared to the Metropolitan Statistical Area Background Concentration found in 35 IAC 742 Appendix A, Table H

< = Analyte not detected (i.e. less than RL or MDL)
All data reported in milligrams per kilogram (mg/kg) unless otherwise noted.
NA = This constituent was not analyzed.
NE = No remediation objective established by the IEPA for this constituent.
Bold identifies an exceedence of the referenced objective.

TRUE NORTH CONSULTANTS

TABLE 3

Summary of Soil Analytical Results - Soil Characterization Sampling

Polynuclear Aromatic Hydrocarbons (PNAs)

CLIENT: Christopher B. Burke Engineering, Ltd.
SITE: King Arthur Bike Path Project: King Arthur Court Northlake, IL 60164
PROJECT NUMBER: TII4324

SAMPLE DATE: June 27, 2014
LABORATORY: Prairie Analytical Systems
MATRIX: Soil

Analytical Method: EPA Method 5035A/8260B

Contaminant of Concern	Maximum Allowable Concentration (MAC) within a Metropolitan Statistical Area (MSA)		Sample ID	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6		
			Sample Date	6/27/2014	6/27/2014	6/27/2014	6/27/2014	6/27/2014	6/27/2014		
			Depth	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'		
	Value	Objective	Soil Type	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay		
Acenaphthene	570	MAC		< 0.398	< 0.396	< 0.429	< 0.392	< 0.384			
Acenaphthylene	85	MAC		< 0.398	< 0.396	< 0.429	< 0.392	< 0.384			
Anthracene	12000	MAC		< 0.398	< 0.396	< 0.429	< 0.392	< 0.384			
Benzo(a)anthracene	1.8	MAC		< 0.398	< 0.396	< 0.429	< 0.392	0.4			
Benzo(b)fluoranthene	2.1	MAC		< 0.398	< 0.396	< 0.429	< 0.392	< 0.384			
Benzo(k)fluoranthene	9	MAC		< 0.398	< 0.396	< 0.429	< 0.392	< 0.384			
Benzo(g,h,i)perylene	2,300	MAC		< 0.398	< 0.396	< 0.429	< 0.392	< 0.384			
Benzo(a)pyrene	2.1	MAC		< 0.0717	< 0.0713	0.121	< 0.0705	0.313			
Chrysene	88	MAC		< 0.398	< 0.396	< 0.429	< 0.392	0.433			
Dibenzo(a,h)anthracene	0.42	MAC		< 0.0717	< 0.0713	< 0.0774	< 0.0705	< 0.0692			
Fluoranthene	3,100	MAC		< 0.398	< 0.396	< 0.429	< 0.392	0.948			
Fluorene	560	MAC		< 0.398	< 0.396	< 0.429	< 0.392	< 0.384			
Indeno(1,2,3-cd)pyrene	1.6	MAC		< 0.398	< 0.396	< 0.429	< 0.392	< 0.384			
Naphthalene	1.8	MAC		< 0.398	< 0.396	< 0.429	< 0.392	< 0.384			
Phenanthrene	210	MAC		< 0.398	< 0.396	< 0.429	< 0.392	0.588			
Pyrene	2,300	MAC		< 0.398	< 0.396	< 0.429	< 0.392	0.768			

Notes:
Constituents that are not identified in 35 IAC 1100 Subpart F (MAC Table) are compared to the Metropolitan Statistical Area Background Concentration found in 35 IAC 742 Appendix A, Table H
< = Analyte not detected (i.e. less than RL or MDL)
All data reported in milligrams per kilogram (mg/kg) unless otherwise noted.
NA = This constituent was not analyzed.
NE = No remediation objective established by the IEPA for this constituent.
Bold identifies an exceedence of the referenced objective.

TRUE NORTH CONSULTANTS

TABLE 4

Summary of Soil Analytical Results - Soil Characterization Sampling

Polychlorinated Biphenyls (PCBs)

CLIENT: Christopher B. Burke Engineering, Ltd.
SITE: King Arthur Bike Path Project: King Arthur Court Northlake, IL 60164
PROJECT NUMBER: TII4324

SAMPLE DATE: June 27, 2014
LABORATORY: Prairie Analytical Systems
MATRIX: Soil

Analytical Method: EPA Method 6020

Contaminant of Concern	Maximum Allowable Concentration (MAC) within a Metropolitan Statistical Area (MSA)		Sample ID	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6		
			Sample Date	6/27/2014	6/27/2014	6/27/2014	6/27/2014	6/27/2014	6/27/2014		
			Depth	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'		
	Value	Objective	Soil Type	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay		
Aroclor 1016	1	MAC						< 0.0385	< 0.0396		
Aroclor 1221	1	MAC						< 0.0385	< 0.0396		
Aroclor 1232	1	MAC						< 0.0385	< 0.0396		
Aroclor 1242	1	MAC						< 0.0385	< 0.0396		
Aroclor 1248	1	MAC						< 0.0385	< 0.0396		
Aroclor 1254	1	MAC						< 0.0385	< 0.0396		
Aroclor 1260	1	MAC						< 0.0385	< 0.0396		

Notes:
Constituents that are not identified in 35 IAC 1100 Subpart F (MAC Table) are compared to the Metropolitan Statistical Area Background Concentration found in 35 IAC 742 Appendix A, Table H
< = Analyte not detected (i.e. less than RL or MDL)
All data reported in milligrams per kilogram (mg/kg) unless otherwise noted.
NA = This constituent was not analyzed.
NE = No remediation objective established by the IEPA for this constituent.
Bold identifies an exceedence of the referenced objective.

TRUE NORTH CONSULTANTS

TABLE 5

Summary of Soil Analytical Results - Soil Characterization Sampling

Resource Conservation Recovery Act (RCRA) Metals

CLIENT: Christopher B. Burke Engineering, Ltd.
SITE: King Arthur Bike Path Project: King Arthur Court Northlake, IL 60164
PROJECT NUMBER: TII4324

SAMPLE DATE: June 27, 2014
LABORATORY: Prairie Analytical Systems
MATRIX: Soil

Analytical Method: EPA Method 6020

Contaminant of Concern	Maximum Allowable Concentration (MAC) within a Metropolitan Statistical Area (MSA)		Sample ID	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6		
			Sample Date	6/27/2014	6/27/2014	6/27/2014	6/27/2014	6/27/2014	6/27/2014		
			pH	8.3	8.1	7.8	8.1	7.8	7.8		
			6.25 < pH < 9.0	Yes	Yes	Yes	Yes	Yes	Yes		
			Depth	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'		
	Value	Objective	Soil Type	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay		
Arsenic	13	MAC		27	10	9.7	10	13	13		
Barium	1,500	MAC		54	92	91	47	110	70		
Cadmium	5.2	MAC		1	0.73	0.68	0.66	0.77	0.71		
Chromium	21	MAC		21	20	**22**	15	19	20		
Lead	107	MAC		19	18	18	12	48	21		
Mercury	0.89	MAC		< 0.0468	0.0534	< 0.0506	< 0.0452	0.0559	0.0665		
Selenium	1.3	MAC		< 1.2	< 1.1	< 1.3	< 1.2	< 1.2	< 1.2		
Silver	4.4	MAC		< 0.59	< 0.56	< 0.63	< 0.58	< 0.58	< 0.58		

Notes:
Constituents that are not identified in 35 IAC 1100 Subpart F (MAC Table) are compared to the Metropolitan Statistical Area Background Concentration found in 35 IAC 742 Appendix A, Table H
< = Analyte not detected (i.e. less than RL or MDL)
All data reported in milligrams per kilogram (mg/kg) unless otherwise noted.
NA = This constituent was not analyzed.
NE = No remediation objective established by the IEPA for this constituent.
Bold identifies an exceedence of the referenced objective.

TRUE NORTH CONSULTANTS

TABLE 6

Summary of Soil Analytical Results - Soil Characterization Sampling

Resource Conservation Recovery Act (RCRA) Metals

CLIENT: Christopher B. Burke Engineering, Ltd.
SITE: King Arthur Bike Path Project: King Arthur Court Northlake, IL 60164
PROJECT NUMBER: TII4324

SAMPLE DATE: June 27, 2014
LABORATORY: Prairie Analytical Systems
MATRIX: Soil

Analytical Method: EPA Method 6020

Contaminant of Concern	Maximum Allowable Concentration (MAC) within a Metropolitan Statistical Area (MSA)		Sample ID	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6		
			Sample Date	6/27/2014	6/27/2014	6/27/2014	6/27/2014	6/27/2014	6/27/2014		
			Depth	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'		
	Value	Objective	Soil Type	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay		
Arsenic	0.006	SCOG				NA					
Barium	2	SCOG				NA					
Cadmium	0.005	SCOG				NA					
Chromium	0.1	SCOG				< 0.0050					
Lead	0.0075	SCOG				NA					
Mercury	0.002	SCOG				NA					
Selenium	0.05	SCOG				NA					
Silver	0.05	SCOG				NA					

Notes:
Constituents that are not identified in 35 IAC 1100 Subpart F (MAC Table) are compared to the Metropolitan Statistical Area Background Concentration found in 35 IAC 742 Appendix A, Table H

As an alternative to the subject maximum allowable concentration value, compliance verification may be determined by comparing soil sample extraction results (TCLP/SPLP) for this constituent to the respective TACO Class I Soil Component of the Groundwater Ingestion Exposure Route objective (35 Ill. Admin. Code 742.Appendix B, Table A). (See 35 IAC 1100.610(b)(1)(B); 1100.610(b)(3)(C)).

< = Analyte not detected (i.e. less than RL or MDL)
All data reported in milligrams per liter (mg/L) unless otherwise noted.
NA = This constituent was not analyzed.
NE = No remediation objective established by the IEPA for this constituent.
Bold identifies an exceedence of the referenced objective.

TRUE NORTH CONSULTANTS

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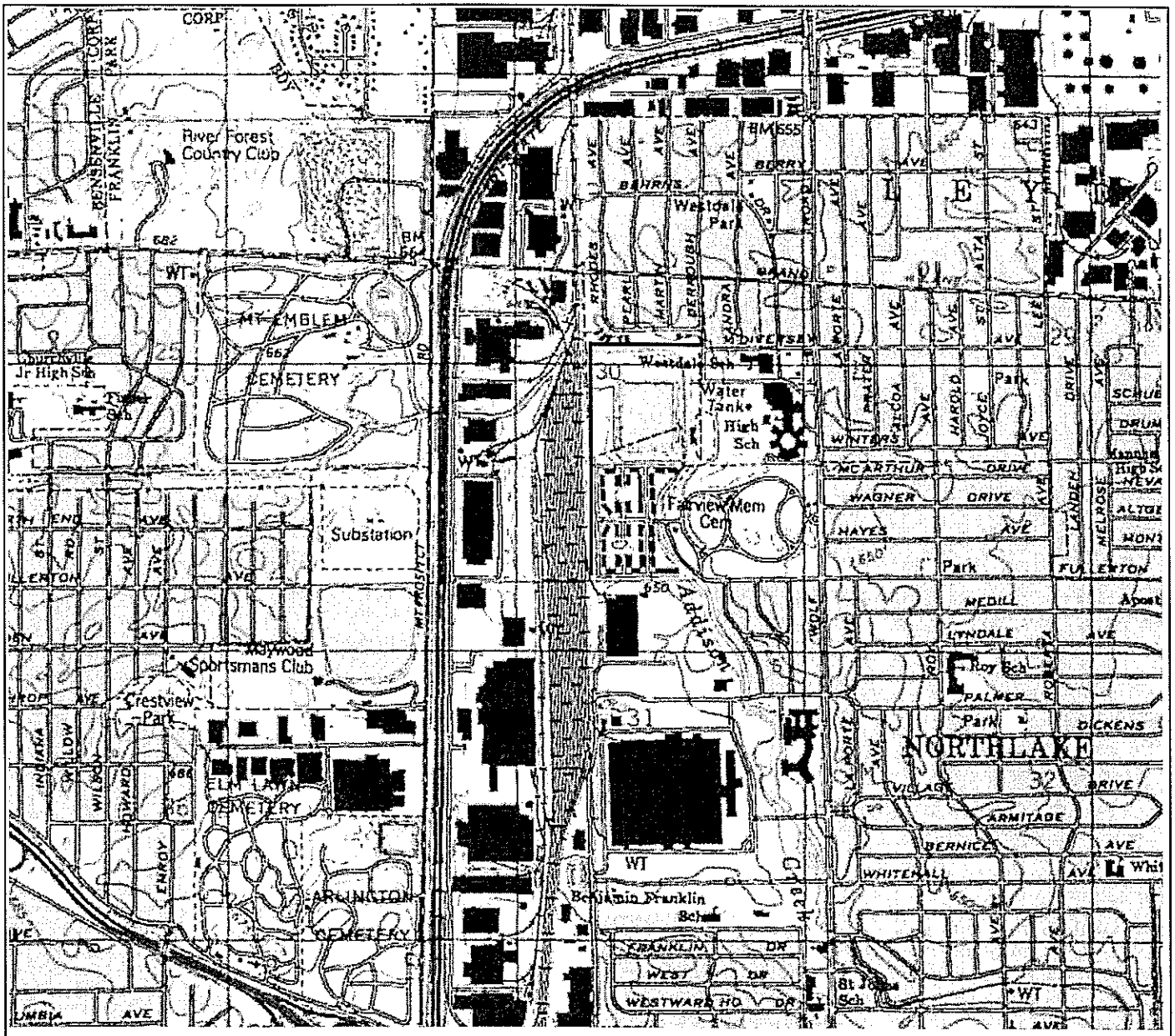
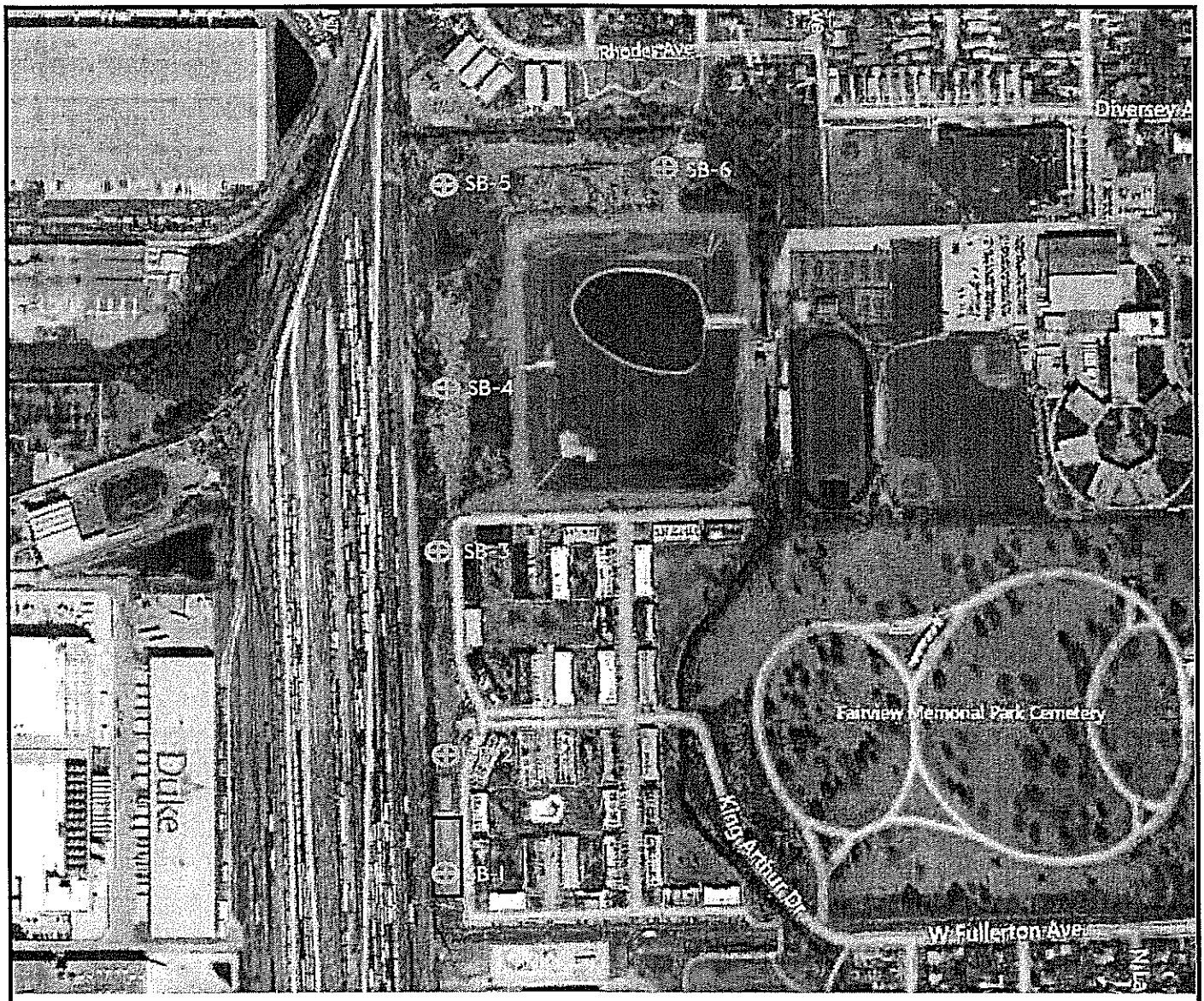


1999 ELMHURST, ILLINOIS — TOPOGRAPHIC MAP ADAPTED FROM MYTOPO

APPROXIMATE SITE LOCATION

TRUENORTH CONSULTANTS 1240 IROQUOIS AVE, SUITE 206 NAPERVILLE, ILLINOIS 60563	SITE LOCATION: KING ARTHUR KING ARTHUR COURT NORTHLAKE, IL 60164	N NOT TO SCALE	FIGURE: 1 PROJECT NUMBER: TII4324 DATE: 7/10/2014
	CLIENT: CHRISTOPHER B. BURKE ENGINEERING, LTD. 9575 W. HIGGINS ROAD, SUITE 600 ROSEMONT, IL 60018		



2014– AERIAL PHOTOGRAPH ADAPTED FROM MICROSOFT BING

APPROXIMATE LOCATION OF SOIL SAMPLE BORING

APPROXIMATE AREA OF SOILS WITH ELEVATED PID SCREENING READINGS OR EXCEEDING THE MOST STRINGENT TIER I SROs, METROPOLITAN BACKGROUND CONCENTRATIONS LISTED IN 35 IAC 742 OR SOIL pH OUTSIDE THE RANGE SPECIFIED IN 35 IAC 1100.201(c)

TRUE NORTH CONSULTANTS 1240 IROQUOIS AVE, SUITE 206 NAPERVILLE, ILLINOIS 60563	SITE LOCATION: KING ARTHUR KING ARTHUR COURT NORTHLAKE, IL 60164	N NOT TO SCALE	FIGURE: 2 PROJECT NUMBER: TII4324
	CLIENT: CHRISTOPHER B. BURKE ENGINEERING, LTD. 9575 W. HIGGINS ROAD, SUITE 600 ROSEMONT, IL 60018		DATE: 7/10/2014

Prairie Analytical Systems, INCORPORATED

Thursday, July 10, 2014

Amber Kowal
True North Consultants
1240 Iroquois Avenue, Suite 210
Naperville, IL 60563
TEL: (630) 717-2880
FAX: (630) 689-5881

RE: King Arthur Bike Path: Northlake, IL AMENDED REPORT PAS WO: 14F0635

Prairie Analytical Systems, Inc. received 6 sample(s) on 6/27/2014 for the analyses presented in the following report.

All applicable quality control procedures met method specific acceptance criteria unless otherwise noted.

This is an AMENDED REPORT issued subsequent to the orginal report. Please see the case narrative for the nature of the amendment.

If you have any questions, please feel free to contact me at (217) 753-1148.

Respectfully submitted,

Kristen A. Potter
Project Manager

Certifications: NELAP/NELAC - IL #100323

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635

Case Narrative

This report was originally issued on 7/7/14. Since then the client requested that sample SB-3 (PAS# 14F0635-03) be analyzed for SPLP chromium. This amended report includes the additional data.

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635
Client Sample ID: SB-1 **Lab ID:** 14F0635-01
Collection Date: 6/27/14 8:15 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Volatile Organic Compounds by GC-MS									
*Benzene	U	0.00446		mg/Kg dry	1	6/30/14 13:36	6/30/14 21:26	SW 8260B Re	BDP
*Ethylbenzene	U	0.00446		mg/Kg dry	1	6/30/14 13:36	6/30/14 21:26	SW 8260B Re	BDP
***Toluene**	**0.00487**	0.00446		mg/Kg dry	1	6/30/14 13:36	6/30/14 21:26	SW 8260B Re	BDP
*Xylenes (total)	U	0.0134		mg/Kg dry	1	6/30/14 13:36	6/30/14 21:26	SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene		*94 %*		*75-120*		6/30/14 13:36	6/30/14 21:26	SW 8260B Re	BDP
Surrogate: 1,2-Dichloroethane-d4		*117 %*		*75-119*		6/30/14 13:36	6/30/14 21:26	SW 8260B Re	BDP
Surrogate: Toluene-d8		*107 %*		*78-114*		6/30/14 13:36	6/30/14 21:26	SW 8260B Re	BDP
Semi-Volatile Organic Compounds by GC-MS									
*Acenaphthene	U	0.398		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:00	SW 8270C	BDP
*Acenaphthylene	U	0.398		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:00	SW 8270C	BDP
*Anthracene	U	0.398		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:00	SW 8270C	BDP
*Benzo(a)anthracene	U	0.398		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:00	SW 8270C	BDP
*Benzo(b)fluoranthene	U	0.398		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:00	SW 8270C	BDP
*Benzo(k)fluoranthene	U	0.398		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:00	SW 8270C	BDP
*Benzo(g,h,i)perylene	U	0.398		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:00	SW 8270C	BDP
*Benzo(a)pyrene	U	0.0717		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:00	SW 8270C	BDP
*Chrysene	U	0.398		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:00	SW 8270C	BDP
*Dibenz(a,h)anthracene	U	0.0717		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:00	SW 8270C	BDP
*Fluoranthene	U	0.398		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:00	SW 8270C	BDP
*Fluorene	U	0.398		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:00	SW 8270C	BDP
*Indeno(1,2,3-cd)pyrene	U	0.398		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:00	SW 8270C	BDP
*Naphthalene	U	0.398		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:00	SW 8270C	BDP
*Phenanthrene	U	0.398		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:00	SW 8270C	BDP
*Pyrene	U	0.398		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:00	SW 8270C	BDP
Surrogate: 2-Fluorobiphenyl		*75 %*		*38-122*		7/1/14 9:57	7/1/14 18:00	SW 8270C	BDP
Surrogate: Nitrobenzene-d5		*103 %*		*45-136*		7/1/14 9:57	7/1/14 18:00	SW 8270C	BDP
Surrogate: 4-Terphenyl-d14		*84 %*		*57-122*		7/1/14 9:57	7/1/14 18:00	SW 8270C	BDP
Metals by ICP									
***Arsenic**	**27**	0.59		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:07	SW 6010B	CEP
***Barium**	**54**	0.30		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:07	SW 6010B	CEP
***Cadmium**	**1.0**	0.30		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:07	SW 6010B	CEP
***Chromium**	**21**	0.30		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:07	SW 6010B	CEP
***Lead**	**19**	0.30		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:07	SW 6010B	CEP
*Selenium	U	1.2		mg/Kg dry	1	6/30/14 13:31	7/2/14 22:13	SW 6010B	CEP
*Silver	U	0.59		mg/Kg dry	1	6/30/14 13:31	7/2/14 22:13	SW 6010B	CEP
Mercury by CVAA									
*Mercury	U	0.0468		mg/Kg dry	1	7/3/14 11:59	7/7/14 0:53	SW 7471B	JTC
Conventional Chemistry Parameters									
***pH**	**8.3**	0.010		pH Units	1	7/1/14 12:24	7/1/14 13:55	SW 9045C	RSR
Percent Solids	**83.1**	0.100		%	1	6/30/14 17:35	7/1/14 12:59	ASTM D2974	JLS

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635
Client Sample ID: SB-2 **Lab ID:** 14F0635-02
Collection Date: 6/27/14 8:30 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Volatile Organic Compounds by GC-MS									
*Benzene	U	0.00425		mg/Kg dry	1	6/30/14 13:36	6/30/14 21:56	SW 8260B Re	BDP
*Ethylbenzene	U	0.00425		mg/Kg dry	1	6/30/14 13:36	6/30/14 21:56	SW 8260B Re	BDP
*Toluene	U	0.00425		mg/Kg dry	1	6/30/14 13:36	6/30/14 21:56	SW 8260B Re	BDP
*Xylenes (total)	U	0.0127		mg/Kg dry	1	6/30/14 13:36	6/30/14 21:56	SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene		*95 %*		*75-120*		6/30/14 13:36	6/30/14 21:56	SW 8260B Re	BDP
Surrogate: 1,2-Dichloroethane-d4		*108 %*		*75-119*		6/30/14 13:36	6/30/14 21:56	SW 8260B Re	BDP
Surrogate: Toluene-d8		*103 %*		*78-114*		6/30/14 13:36	6/30/14 21:56	SW 8260B Re	BDP
Semi-Volatile Organic Compounds by GC-MS									
*Acenaphthene	U	0.396		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:33	SW 8270C	BDP
*Acenaphthylene	U	0.396		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:33	SW 8270C	BDP
*Anthracene	U	0.396		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:33	SW 8270C	BDP
*Benzo(a)anthracene	U	0.396		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:33	SW 8270C	BDP
*Benzo(b)fluoranthene	U	0.396		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:33	SW 8270C	BDP
*Benzo(k)fluoranthene	U	0.396		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:33	SW 8270C	BDP
*Benzo(g,h,i)perylene	U	0.396		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:33	SW 8270C	BDP
*Benzo(a)pyrene	U	0.0713		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:33	SW 8270C	BDP
*Chrysene	U	0.396		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:33	SW 8270C	BDP
*Dibenz(a,h)anthracene	U	0.0713		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:33	SW 8270C	BDP
*Fluoranthene	U	0.396		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:33	SW 8270C	BDP
*Fluorene	U	0.396		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:33	SW 8270C	BDP
*Indeno(1,2,3-cd)pyrene	U	0.396		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:33	SW 8270C	BDP
*Naphthalene	U	0.396		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:33	SW 8270C	BDP
*Phenanthrene	U	0.396		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:33	SW 8270C	BDP
*Pyrene	U	0.396		mg/Kg dry	1	7/1/14 9:57	7/1/14 18:33	SW 8270C	BDP
Surrogate: 2-Fluorobiphenyl		*71 %*		*38-122*		7/1/14 9:57	7/1/14 18:33	SW 8270C	BDP
Surrogate: Nitrobenzene-d5		*93 %*		*45-136*		7/1/14 9:57	7/1/14 18:33	SW 8270C	BDP
Surrogate: 4-Terphenyl-d14		*79 %*		*57-122*		7/1/14 9:57	7/1/14 18:33	SW 8270C	BDP
Metals by ICP									
***Arsenic**	**10**	0.56		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:12	SW 6010B	CEP
***Barium**	**92**	2.8		mg/Kg dry	10	6/30/14 13:31	7/2/14 19:02	SW 6010B	CEP
***Cadmium**	**0.73**	0.28		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:12	SW 6010B	CEP
***Chromium**	**20**	0.28		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:12	SW 6010B	CEP
***Lead**	**18**	0.28		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:12	SW 6010B	CEP
*Selenium	U	1.1		mg/Kg dry	1	6/30/14 13:31	7/2/14 22:19	SW 6010B	CEP
*Silver	U	0.56		mg/Kg dry	1	6/30/14 13:31	7/2/14 22:19	SW 6010B	CEP
Mercury by CVAA									
***Mercury**	**0.0534**	0.0475		mg/Kg dry	1	7/3/14 11:59	7/7/14 0:56	SW 7471B	JTC
Conventional Chemistry Parameters									
***pH**	**8.1**	0.010		pH Units	1	7/1/14 12:24	7/1/14 13:55	SW 9045C	RSR
Percent Solids	**83.3**	0.100		%	1	6/30/14 17:35	7/1/14 12:59	ASTM D2974	JLS

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635
Client Sample ID: SB-3 **Lab ID:** 14F0635-03
Collection Date: 6/27/14 8:45 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Volatile Organic Compounds by GC-MS									
*Benzene	U	0.00648		mg/Kg dry	1	6/30/14 13:36	6/30/14 22:25	SW 8260B Re	BDP
*Ethylbenzene	U	0.00648		mg/Kg dry	1	6/30/14 13:36	6/30/14 22:25	SW 8260B Re	BDP
*Toluene	U	0.00648		mg/Kg dry	1	6/30/14 13:36	6/30/14 22:25	SW 8260B Re	BDP
*Xylenes (total)	U	0.0194		mg/Kg dry	1	6/30/14 13:36	6/30/14 22:25	SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene		*89 %*		*75-120*		6/30/14 13:36	6/30/14 22:25	SW 8260B Re	BDP
Surrogate: 1,2-Dichloroethane-d4		*105 %*		*75-119*		6/30/14 13:36	6/30/14 22:25	SW 8260B Re	BDP
Surrogate: Toluene-d8		*109 %*		*78-114*		6/30/14 13:36	6/30/14 22:25	SW 8260B Re	BDP
Semi-Volatile Organic Compounds by GC-MS									
*Acenaphthene	U	0.429		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:06	SW 8270C	BDP
*Acenaphthylene	U	0.429		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:06	SW 8270C	BDP
*Anthracene	U	0.429		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:06	SW 8270C	BDP
*Benzo(a)anthracene	U	0.429		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:06	SW 8270C	BDP
*Benzo(b)fluoranthene	U	0.429		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:06	SW 8270C	BDP
*Benzo(k)fluoranthene	U	0.429		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:06	SW 8270C	BDP
*Benzo(g,h,i)perylene	U	0.429		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:06	SW 8270C	BDP
***Benzo(a)pyrene**	**0.121**	0.0774		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:06	SW 8270C	BDP
*Chrysene	U	0.429		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:06	SW 8270C	BDP
*Dibenz(a,h)anthracene	U	0.0774		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:06	SW 8270C	BDP
*Fluoranthene	U	0.429		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:06	SW 8270C	BDP
*Fluorene	U	0.429		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:06	SW 8270C	BDP
*Indeno(1,2,3-cd)pyrene	U	0.429		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:06	SW 8270C	BDP
*Naphthalene	U	0.429		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:06	SW 8270C	BDP
*Phenanthrene	U	0.429		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:06	SW 8270C	BDP
*Pyrene	U	0.429		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:06	SW 8270C	BDP
Surrogate: 2-Fluorobiphenyl		*73 %*		*38-122*		7/1/14 9:57	7/1/14 19:06	SW 8270C	BDP
Surrogate: Nitrobenzene-d5		*100 %*		*45-136*		7/1/14 9:57	7/1/14 19:06	SW 8270C	BDP
Surrogate: 4-Terphenyl-d14		*84 %*		*57-122*		7/1/14 9:57	7/1/14 19:06	SW 8270C	BDP
Metals by ICP									
***Arsenic**	**9.7**	0.63		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:17	SW 6010B	CEP
***Barium**	**91**	3.2		mg/Kg dry	10	6/30/14 13:31	7/2/14 19:07	SW 6010B	CEP
***Cadmium**	**0.68**	0.32		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:17	SW 6010B	CEP
***Chromium**	**22**	0.32		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:17	SW 6010B	CEP
***Lead**	**18**	0.32		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:17	SW 6010B	CEP
*Selenium	U	1.3		mg/Kg dry	1	6/30/14 13:31	7/2/14 22:24	SW 6010B	CEP
*Silver	U	0.63		mg/Kg dry	1	6/30/14 13:31	7/2/14 22:24	SW 6010B	CEP
SPLP Metals by ICP									
*Chromium	U	0.0050		mg/L	1	7/9/14 10:08	7/9/14 17:00	SW 6010B	CEP
Mercury by CVAA									
*Mercury	U	0.0506		mg/Kg dry	1	7/3/14 11:59	7/7/14 0:59	SW 7471B	JTC
Conventional Chemistry Parameters									
***pH**	**7.8**	0.010		pH Units	1	7/1/14 12:24	7/1/14 13:55	SW 9045C	RSR
Percent Solids	**77.5**	0.100		%	1	6/30/14 17:35	7/1/14 12:59	ASTM D2974	JLS

LABORATORY RESULTS

Client:	True North Consultants		
Project:	King Arthur Bike Path: Northlake, IL	**Lab Order:**	14F0635
Client Sample ID:	SB-3	**Lab ID:**	14F0635-03
Collection Date:	6/27/14 8:45	**Matrix:**	Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635
Client Sample ID: SB-4 **Lab ID:** 14F0635-04
Collection Date: 6/27/14 9:00 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Volatile Organic Compounds by GC-MS									
*Benzene	U	0.00464		mg/Kg dry	1	6/30/14 13:36	6/30/14 22:54	SW 8260B Re	BDP
*Ethylbenzene	U	0.00464		mg/Kg dry	1	6/30/14 13:36	6/30/14 22:54	SW 8260B Re	BDP
*Toluene	U	0.00464		mg/Kg dry	1	6/30/14 13:36	6/30/14 22:54	SW 8260B Re	BDP
*Xylenes (total)	U	0.0139		mg/Kg dry	1	6/30/14 13:36	6/30/14 22:54	SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene		*104 %*		*75-120*		6/30/14 13:36	6/30/14 22:54	SW 8260B Re	BDP
Surrogate: 1,2-Dichloroethane-d4		*97 %*		*75-119*		6/30/14 13:36	6/30/14 22:54	SW 8260B Re	BDP
Surrogate: Toluene-d8		*110 %*		*78-114*		6/30/14 13:36	6/30/14 22:54	SW 8260B Re	BDP
Semi-Volatile Organic Compounds by GC-MS									
*Acenaphthene	U	0.392		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:40	SW 8270C	BDP
*Acenaphthylene	U	0.392		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:40	SW 8270C	BDP
*Anthracene	U	0.392		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:40	SW 8270C	BDP
*Benzo(a)anthracene	U	0.392		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:40	SW 8270C	BDP
*Benzo(b)fluoranthene	U	0.392		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:40	SW 8270C	BDP
*Benzo(k)fluoranthene	U	0.392		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:40	SW 8270C	BDP
*Benzo(g,h,i)perylene	U	0.392		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:40	SW 8270C	BDP
*Benzo(a)pyrene	U	0.0705		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:40	SW 8270C	BDP
*Chrysene	U	0.392		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:40	SW 8270C	BDP
*Dibenz(a,h)anthracene	U	0.0705		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:40	SW 8270C	BDP
*Fluoranthene	U	0.392		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:40	SW 8270C	BDP
*Fluorene	U	0.392		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:40	SW 8270C	BDP
*Indeno(1,2,3-cd)pyrene	U	0.392		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:40	SW 8270C	BDP
*Naphthalene	U	0.392		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:40	SW 8270C	BDP
*Phenanthrene	U	0.392		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:40	SW 8270C	BDP
*Pyrene	U	0.392		mg/Kg dry	1	7/1/14 9:57	7/1/14 19:40	SW 8270C	BDP
Surrogate: 2-Fluorobiphenyl		*78 %*		*38-122*		7/1/14 9:57	7/1/14 19:40	SW 8270C	BDP
Surrogate: Nitrobenzene-d5		*104 %*		*45-136*		7/1/14 9:57	7/1/14 19:40	SW 8270C	BDP
Surrogate: 4-Terphenyl-d14		*86 %*		*57-122*		7/1/14 9:57	7/1/14 19:40	SW 8270C	BDP
Metals by ICP									
***Arsenic**	**10**	0.58		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:22	SW 6010B	CEP
***Barium**	**47**	0.29		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:22	SW 6010B	CEP
***Cadmium**	**0.66**	0.29		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:22	SW 6010B	CEP
***Chromium**	**15**	0.29		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:22	SW 6010B	CEP
***Lead**	**12**	0.29		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:22	SW 6010B	CEP
*Selenium	U	1.2		mg/Kg dry	1	6/30/14 13:31	7/2/14 22:29	SW 6010B	CEP
*Silver	U	0.58		mg/Kg dry	1	6/30/14 13:31	7/2/14 22:29	SW 6010B	CEP
Mercury by CVAA									
*Mercury	U	0.0452		mg/Kg dry	1	7/3/14 11:59	7/7/14 1:03	SW 7471B	JTC
Conventional Chemistry Parameters									
***pH**	**8.1**	0.010		pH Units	1	7/1/14 12:24	7/1/14 13:55	SW 9045C	RSR
Percent Solids	**83.6**	0.100		%	1	6/30/14 17:35	7/1/14 12:59	ASTM D2974	JLS

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635
Client Sample ID: SB-5 **Lab ID:** 14F0635-05
Collection Date: 6/27/14 9:15 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Volatile Organic Compounds by GC-MS									
*Benzene	U	0.00495		mg/Kg dry	1	6/30/14 13:36	6/30/14 23:23	SW 8260B Re	BDP
*Ethylbenzene	U	0.00495		mg/Kg dry	1	6/30/14 13:36	6/30/14 23:23	SW 8260B Re	BDP
*Toluene	U	0.00495		mg/Kg dry	1	6/30/14 13:36	6/30/14 23:23	SW 8260B Re	BDP
*Xylenes (total)	U	0.0148		mg/Kg dry	1	6/30/14 13:36	6/30/14 23:23	SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene		*86 %*		*75-120*		6/30/14 13:36	6/30/14 23:23	SW 8260B Re	BDP
Surrogate: 1,2-Dichloroethane-d4		*100 %*		*75-119*		6/30/14 13:36	6/30/14 23:23	SW 8260B Re	BDP
Surrogate: Toluene-d8		*133 %*	S1	*78-114*		6/30/14 13:36	6/30/14 23:23	SW 8260B Re	BDP
Semi-Volatile Organic Compounds by GC-MS									
*Acenaphthene	U	0.384		mg/Kg dry	1	7/1/14 9:57	7/1/14 20:13	SW 8270C	BDP
*Acenaphthylene	U	0.384		mg/Kg dry	1	7/1/14 9:57	7/1/14 20:13	SW 8270C	BDP
*Anthracene	U	0.384		mg/Kg dry	1	7/1/14 9:57	7/1/14 20:13	SW 8270C	BDP
***Benzo(a)anthracene**	**0.400**	0.384		mg/Kg dry	1	7/1/14 9:57	7/1/14 20:13	SW 8270C	BDP
*Benzo(b)fluoranthene	U	0.384		mg/Kg dry	1	7/1/14 9:57	7/1/14 20:13	SW 8270C	BDP
*Benzo(k)fluoranthene	U	0.384		mg/Kg dry	1	7/1/14 9:57	7/1/14 20:13	SW 8270C	BDP
*Benzo(g,h,i)perylene	U	0.384		mg/Kg dry	1	7/1/14 9:57	7/1/14 20:13	SW 8270C	BDP
***Benzo(a)pyrene**	**0.313**	0.0692		mg/Kg dry	1	7/1/14 9:57	7/1/14 20:13	SW 8270C	BDP
***Chrysene**	**0.433**	0.384		mg/Kg dry	1	7/1/14 9:57	7/1/14 20:13	SW 8270C	BDP
*Dibenz(a,h)anthracene	U	0.0692		mg/Kg dry	1	7/1/14 9:57	7/1/14 20:13	SW 8270C	BDP
***Fluoranthene**	**0.948**	0.384		mg/Kg dry	1	7/1/14 9:57	7/1/14 20:13	SW 8270C	BDP
*Fluorene	U	0.384		mg/Kg dry	1	7/1/14 9:57	7/1/14 20:13	SW 8270C	BDP
*Indeno(1,2,3-cd)pyrene	U	0.384		mg/Kg dry	1	7/1/14 9:57	7/1/14 20:13	SW 8270C	BDP
*Naphthalene	U	0.384		mg/Kg dry	1	7/1/14 9:57	7/1/14 20:13	SW 8270C	BDP
***Phenanthrene**	**0.588**	0.384		mg/Kg dry	1	7/1/14 9:57	7/1/14 20:13	SW 8270C	BDP
***Pyrene**	**0.768**	0.384		mg/Kg dry	1	7/1/14 9:57	7/1/14 20:13	SW 8270C	BDP
Surrogate: 2-Fluorobiphenyl		*72 %*		*38-122*		7/1/14 9:57	7/1/14 20:13	SW 8270C	BDP
Surrogate: Nitrobenzene-d5		*97 %*		*45-136*		7/1/14 9:57	7/1/14 20:13	SW 8270C	BDP
Surrogate: 4-Terphenyl-d14		*77 %*		*57-122*		7/1/14 9:57	7/1/14 20:13	SW 8270C	BDP
Polychlorinated Biphenyls by GC-ECD									
*Aroclor 1016	U	0.0385		mg/Kg dry	1	6/30/14 14:25	7/7/14 13:06	SW 8082	AJD
*Aroclor 1221	U	0.0385		mg/Kg dry	1	6/30/14 14:25	7/7/14 13:06	SW 8082	AJD
*Aroclor 1232	U	0.0385		mg/Kg dry	1	6/30/14 14:25	7/7/14 13:06	SW 8082	AJD
*Aroclor 1242	U	0.0385		mg/Kg dry	1	6/30/14 14:25	7/7/14 13:06	SW 8082	AJD
*Aroclor 1248	U	0.0385		mg/Kg dry	1	6/30/14 14:25	7/7/14 13:06	SW 8082	AJD
*Aroclor 1254	U	0.0385		mg/Kg dry	1	6/30/14 14:25	7/7/14 13:06	SW 8082	AJD
*Aroclor 1260	U	0.0385		mg/Kg dry	1	6/30/14 14:25	7/7/14 13:06	SW 8082	AJD
Surrogate: Decachlorobiphenyl		*60 %*		*60-140*		6/30/14 14:25	7/7/14 13:06	SW 8082	AJD
Surrogate: Tetrachloro-m-xylene		*60 %*		*60-140*		6/30/14 14:25	7/7/14 13:06	SW 8082	AJD
Metals by ICP									
***Arsenic**	**13**	0.58		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:42	SW 6010B	CEP
***Barium**	**110**	2.9		mg/Kg dry	10	6/30/14 13:31	7/2/14 19:12	SW 6010B	CEP
***Cadmium**	**0.77**	0.29		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:42	SW 6010B	CEP
***Chromium**	**19**	0.29		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:42	SW 6010B	CEP
***Lead**	**48**	0.29		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:42	SW 6010B	CEP
*Selenium	U	1.2		mg/Kg dry	1	6/30/14 13:31	7/2/14 22:34	SW 6010B	CEP
*Silver	U	0.58		mg/Kg dry	1	6/30/14 13:31	7/2/14 22:34	SW 6010B	CEP

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LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635
Client Sample ID: SB-5 **Lab ID:** 14F0635-05
Collection Date: 6/27/14 9:15 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Mercury by CVAA									
*Mercury	0.0559	0.0445		mg/Kg dry	1	7/3/14 11:59	7/7/14 1:06	SW 7471B	JTC
Conventional Chemistry Parameters									
*pH	7.8	0.010		pH Units	1	7/1/14 12:24	7/1/14 13:55	SW 9045C	RSR
Percent Solids	83.9	0.100		%	1	6/30/14 17:35	7/1/14 12:59	ASTM D2974	JLS

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL
Lab Order: 14F0635
Client Sample ID: SB-6
Lab ID: 14F0635-06
Collection Date: 6/27/14 9:30
Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Volatile Organic Compounds by GC-MS									
*Acetone	U	0.0454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*Benzene	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*Bromodichloromethane	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*Bromoform	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*Bromomethane	U	0.00907		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*2-Butanone	U	0.00907		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*Carbon disulfide	U	0.00907		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*Carbon tetrachloride	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*Chlorobenzene	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*Chloroethane	U	0.00907		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*Chloroform	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*Chloromethane	U	0.00907		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*Dibromochloromethane	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*1,1-Dichloroethane	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*1,2-Dichloroethane	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*1,1-Dichloroethene	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*cis-1,2-Dichloroethene	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*trans-1,2-Dichloroethene	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*1,2-Dichloropropane	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*cis-1,3-Dichloropropene	U	0.00272		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*trans-1,3-Dichloropropene	U	0.00272		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*Ethylbenzene	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*2-Hexanone	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*Methyl tert-butyl ether	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*4-Methyl-2-pentanone	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*Methylene chloride	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*Styrene	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*1,1,2,2-Tetrachloroethane	U	0.00181		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*Tetrachloroethene	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*Toluene	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*1,1,1-Trichloroethane	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*1,1,2-Trichloroethane	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*Trichloroethene	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*Vinyl chloride	U	0.00454		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
*Xylenes (total)	U	0.0136		mg/Kg dry	1	7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
Surrogate: 4-Bromofluorobenzene		*98 %*		*75-120*		7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
Surrogate: 1,2-Dichloroethane-d4		*95 %*		*75-119*		7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
Surrogate: Toluene-d8		*92 %*		*78-114*		7/2/14 14:59	7/2/14 21:34	SW 8260B Re	AJD
Semi-Volatile Organic Compounds by GC-MS									
*Acenaphthene	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Acenaphthylene	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Anthracene	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Benzo(a)anthracene	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Benzo(b)fluoranthene	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Benzo(k)fluoranthene	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Benzo(g,h,i)perylene	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Benzo(a)pyrene	U	0.0722		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Bis(2-chloroethoxy)methane	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635
Client Sample ID: SB-6 **Lab ID:** 14F0635-06
Collection Date: 6/27/14 9:30 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
*Bis(2-chloroethyl)ether	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Bis(2-chloroisopropyl)ether	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Bis(2-ethylhexyl)phthalate	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*4-Bromophenyl phenyl ether	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Butyl benzyl phthalate	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Carbazole	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*4-Chloro-3-methylphenol	U	0.802		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*4-Chloroaniline	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*2-Chloronaphthalene	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*2-Chlorophenol	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*4-Chlorophenyl phenyl ether	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Chrysene	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Di-n-butyl phthalate	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Di-n-octyl phthalate	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Dibenz(a,h)anthracene	U	0.0722		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Dibenzofuran	U	2.00		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*1,2-Dichlorobenzene	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*1,3-Dichlorobenzene	U	0.120		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*1,4-Dichlorobenzene	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*3,3'-Dichlorobenzidine	U	0.00602		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*2,4-Dichlorophenol	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Diethyl phthalate	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Dimethyl phthalate	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*2,4-Dimethylphenol	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*4,6-Dinitro-2-methylphenol	U	2.00		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*2,4-Dinitrophenol	U	0.120		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*2,4-Dinitrotoluene	U	0.120		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*2,6-Dinitrotoluene	U	0.120		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Fluoranthene	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Fluorene	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Hexachlorobenzene	U	0.120		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Hexachlorobutadiene	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Hexachlorocyclopentadiene	U	0.802		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Hexachloroethane	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Indeno(1,2,3-cd)pyrene	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Isophorone	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*2-Methylnaphthalene	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*2-Methylphenol	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
3 & 4-Methylphenol	U	0.120		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Naphthalene	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*2-Nitroaniline	U	0.120		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*3-Nitroaniline	U	0.00602		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*4-Nitroaniline	U	0.0722		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Nitrobenzene	U	0.0722		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*2-Nitrophenol	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*4-Nitrophenol	U	2.00		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*N-Nitroso-di-n-propylamine	U	0.000718	M	mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*N-Nitrosodiphenylamine	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Pentachlorophenol	U	0.0120		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Phenanthrene	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635
Client Sample ID: SB-6 **Lab ID:** 14F0635-06
Collection Date: 6/27/14 9:30 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
*Phenol	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*Pyrene	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*1,2,4-Trichlorobenzene	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*2,4,5-Trichlorophenol	U	0.401		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
*2,4,6-Trichlorophenol	U	0.120		mg/Kg dry	1	6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
Surrogate: 2-Fluorobiphenyl		*82 %*		*40-120*		6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
Surrogate: 2-Fluorophenol		*58 %*		*20-115*		6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
Surrogate: Nitrobenzene-d5		*91 %*		*45-135*		6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
Surrogate: Phenol-d6		*64 %*		*20-100*		6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
Surrogate: 4-Terphenyl-d14		*87 %*		*60-130*		6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
Surrogate: 2,4,6-Tribromophenol		*64 %*		*30-100*		6/30/14 14:22	7/1/14 20:10	SW 8270C	AJD
Polychlorinated Biphenyls by GC-ECD									
*Aroclor 1016	U	0.0396		mg/Kg dry	1	6/30/14 14:25	7/1/14 18:29	SW 8082	AJD
*Aroclor 1221	U	0.0396		mg/Kg dry	1	6/30/14 14:25	7/1/14 18:29	SW 8082	AJD
*Aroclor 1232	U	0.0396		mg/Kg dry	1	6/30/14 14:25	7/1/14 18:29	SW 8082	AJD
*Aroclor 1242	U	0.0396		mg/Kg dry	1	6/30/14 14:25	7/1/14 18:29	SW 8082	AJD
*Aroclor 1248	U	0.0396		mg/Kg dry	1	6/30/14 14:25	7/1/14 18:29	SW 8082	AJD
*Aroclor 1254	U	0.0396		mg/Kg dry	1	6/30/14 14:25	7/1/14 18:29	SW 8082	AJD
*Aroclor 1260	U	0.0396		mg/Kg dry	1	6/30/14 14:25	7/1/14 18:29	SW 8082	AJD
Surrogate: Decachlorobiphenyl		*72 %*		*60-140*		6/30/14 14:25	7/1/14 18:29	SW 8082	AJD
Surrogate: Tetrachloro-m-xylene		*68 %*		*60-140*		6/30/14 14:25	7/1/14 18:29	SW 8082	AJD
Metals by ICP									
***Arsenic**	**13**	0.58		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:47	SW 6010B	CEP
***Barium**	**70**	2.9		mg/Kg dry	10	6/30/14 13:31	7/2/14 19:17	SW 6010B	CEP
***Cadmium**	**0.71**	0.29		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:47	SW 6010B	CEP
***Chromium**	**20**	0.29		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:47	SW 6010B	CEP
***Lead**	**21**	0.29		mg/Kg dry	1	6/30/14 13:31	7/1/14 18:47	SW 6010B	CEP
*Selenium	U	1.2		mg/Kg dry	1	6/30/14 13:31	7/2/14 22:39	SW 6010B	CEP
*Silver	U	0.58		mg/Kg dry	1	6/30/14 13:31	7/2/14 22:39	SW 6010B	CEP
Mercury by CVAA									
***Mercury**	**0.0665**	0.0473		mg/Kg dry	1	7/3/14 11:59	7/7/14 1:10	SW 7471B	JTC
Conventional Chemistry Parameters									
***pH**	**7.8**	0.010		pH Units	1	7/1/14 12:24	7/1/14 13:55	SW 9045C	RSR
Percent Solids	**83.0**	0.100		%	1	6/30/14 17:35	7/1/14 12:59	ASTM D2974	JLS

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635

Volatile Organic Compounds by GC-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003452 - SW 5035A VOA										
Blank (X003452-BLK1)				Prepared & Analyzed: 06/30/2014						
Benzene	U	0.00500	mg/Kg wet							
Ethylbenzene	U	0.00500	mg/Kg wet							
Toluene	U	0.00500	mg/Kg wet							
Xylenes (total)	U	0.0150	mg/Kg wet							
Surrogate: 4-Bromofluorobenzene	*0.0488*		*mg/Kg wet*	*0.050000*		*98*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0501*		*mg/Kg wet*	*0.050000*		*100*	*75-119*			
Surrogate: Toluene-d8	*0.0502*		*mg/Kg wet*	*0.050000*		*100*	*78-114*			
LCS (X003452-BS1)				Prepared & Analyzed: 06/30/2014						
Benzene	0.0486	0.00500	mg/Kg wet	0.050000		97	80-130			
Ethylbenzene	0.0493	0.00500	mg/Kg wet	0.050000		99	77-132			
Toluene	0.0480	0.00500	mg/Kg wet	0.050000		96	80-130			
Xylenes (total)	0.147	0.0150	mg/Kg wet	0.15000		98	80-130			
Surrogate: 4-Bromofluorobenzene	*0.0492*		*mg/Kg wet*	*0.050000*		*98*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0518*		*mg/Kg wet*	*0.050000*		*104*	*75-119*			
Surrogate: Toluene-d8	*0.0506*		*mg/Kg wet*	*0.050000*		*101*	*78-114*			
Matrix Spike (X003452-MS1)		Source: 14F0631-01		Prepared & Analyzed: 06/30/2014						
Benzene	0.0499	0.00614	mg/Kg dry	0.061378	ND	81	50-140			
Ethylbenzene	0.0475	0.00614	mg/Kg dry	0.061378	ND	77	50-140			
Toluene	0.0491	0.00614	mg/Kg dry	0.061378	ND	80	55-135			
Xylenes (total)	0.134	0.0184	mg/Kg dry	0.18413	ND	73	60-130			
Surrogate: 4-Bromofluorobenzene	*0.0575*		*mg/Kg dry*	*0.061378*		*94*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0610*		*mg/Kg dry*	*0.061378*		*99*	*75-119*			
Surrogate: Toluene-d8	*0.0633*		*mg/Kg dry*	*0.061378*		*103*	*78-114*			
Matrix Spike Dup (X003452-MSD1)		Source: 14F0631-01		Prepared & Analyzed: 06/30/2014						
Benzene	0.0581	0.00634	mg/Kg dry	0.063371	ND	92	50-140	15	20	
Ethylbenzene	0.0554	0.00634	mg/Kg dry	0.063371	ND	87	50-140	15	20	
Toluene	0.0575	0.00634	mg/Kg dry	0.063371	ND	91	55-135	16	20	
Xylenes (total)	0.160	0.0190	mg/Kg dry	0.19011	ND	84	60-130	18	20	
Surrogate: 4-Bromofluorobenzene	*0.0598*		*mg/Kg dry*	*0.063371*		*94*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0628*		*mg/Kg dry*	*0.063371*		*99*	*75-119*			
Surrogate: Toluene-d8	*0.0664*		*mg/Kg dry*	*0.063371*		*105*	*78-114*			

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635

Volatile Organic Compounds by GC-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003537 - SW 5035A VOA										
Blank (X003537-BLK1)				Prepared: 07/02/2014 Analyzed: 07/03/2014						
Acetone	U	0.0500	mg/Kg wet							
Benzene	U	0.00500	mg/Kg wet							
Bromodichloromethane	U	0.00500	mg/Kg wet							
Bromoform	U	0.00500	mg/Kg wet							
Bromomethane	U	0.0100	mg/Kg wet							
2-Butanone	U	0.0100	mg/Kg wet							
Carbon disulfide	U	0.0100	mg/Kg wet							
Carbon tetrachloride	U	0.00500	mg/Kg wet							
Chlorobenzene	U	0.00500	mg/Kg wet							
Chloroethane	U	0.0100	mg/Kg wet							
Chloroform	U	0.00500	mg/Kg wet							
Chloromethane	U	0.0100	mg/Kg wet							
Dibromochloromethane	U	0.00500	mg/Kg wet							
1,1-Dichloroethane	U	0.00500	mg/Kg wet							
1,2-Dichloroethane	U	0.00500	mg/Kg wet							
1,1-Dichloroethene	U	0.00500	mg/Kg wet							
cis-1,2-Dichloroethene	U	0.00500	mg/Kg wet							
trans-1,2-Dichloroethene	U	0.00500	mg/Kg wet							
1,2-Dichloropropane	U	0.00500	mg/Kg wet							
cis-1,3-Dichloropropene	U	0.00300	mg/Kg wet							
trans-1,3-Dichloropropene	U	0.00300	mg/Kg wet							
Ethylbenzene	U	0.00500	mg/Kg wet							
2-Hexanone	U	0.00500	mg/Kg wet							
Methyl tert-butyl ether	U	0.00500	mg/Kg wet							
4-Methyl-2-pentanone	U	0.00500	mg/Kg wet							
Methylene chloride	U	0.00500	mg/Kg wet							
Styrene	U	0.00500	mg/Kg wet							
1,1,2,2-Tetrachloroethane	U	0.00200	mg/Kg wet							
Tetrachloroethene	U	0.00500	mg/Kg wet							
Toluene	U	0.00500	mg/Kg wet							
1,1,1-Trichloroethane	U	0.00500	mg/Kg wet							
1,1,2-Trichloroethane	U	0.00500	mg/Kg wet							
Trichloroethene	U	0.00500	mg/Kg wet							
Vinyl chloride	U	0.00500	mg/Kg wet							
Xylenes (total)	U	0.0150	mg/Kg wet							
Surrogate: 4-Bromofluorobenzene	*0.0475*		*mg/Kg wet*	*0.050000*		*95*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0416*		*mg/Kg wet*	*0.050000*		*83*	*75-119*			
Surrogate: Toluene-d8	*0.0457*		*mg/Kg wet*	*0.050000*		*91*	*78-114*			

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635

Volatile Organic Compounds by GC-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003537 - SW 5035A VOA										
LCS (X003537-BS1)				Prepared & Analyzed: 07/02/2014						
Benzene	0.0447	0.00500	mg/Kg wet	0.050000		89	80-130			
Chlorobenzene	0.0441	0.00500	mg/Kg wet	0.050000		88	85-120			
1,1-Dichloroethene	0.0419	0.00500	mg/Kg wet	0.050000		84	70-130			
Ethylbenzene	0.0422	0.00500	mg/Kg wet	0.050000		84	77-132			
Toluene	0.0402	0.00500	mg/Kg wet	0.050000		80	80-130			
Trichloroethene	0.0462	0.00500	mg/Kg wet	0.050000		92	75-130			
Xylenes (total)	0.130	0.0150	mg/Kg wet	0.15000		87	80-130			
Surrogate: 4-Bromofluorobenzene	*0.0465*		*mg/Kg wet*	*0.050000*		*93*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0441*		*mg/Kg wet*	*0.050000*		*88*	*75-119*			
Surrogate: Toluene-d8	*0.0457*		*mg/Kg wet*	*0.050000*		*91*	*78-114*			
Matrix Spike (X003537-MS1)	**Source: 14G0028-01**			Prepared: 07/02/2014 Analyzed: 07/03/2014						
Benzene	0.0427	0.00658	mg/Kg dry	0.065762	ND	65	50-140			
Chlorobenzene	0.0287	0.00658	mg/Kg dry	0.065762	ND	44	60-130			S
1,1-Dichloroethene	0.0446	0.00658	mg/Kg dry	0.065762	ND	68	60-130			
Ethylbenzene	0.0373	0.00658	mg/Kg dry	0.065762	ND	57	50-140			
Toluene	0.0373	0.00658	mg/Kg dry	0.065762	ND	57	55-130			
Trichloroethene	0.0380	0.00658	mg/Kg dry	0.065762	ND	58	60-130			S
Xylenes (total)	0.101	0.0197	mg/Kg dry	0.19729	ND	51	60-130			S
Surrogate: 4-Bromofluorobenzene	*0.0567*		*mg/Kg dry*	*0.065762*		*86*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0581*		*mg/Kg dry*	*0.065762*		*88*	*75-119*			
Surrogate: Toluene-d8	*0.0643*		*mg/Kg dry*	*0.065762*		*98*	*78-114*			
Matrix Spike Dup (X003537-MSD1)	**Source: 14G0028-01**			Prepared: 07/02/2014 Analyzed: 07/03/2014						
Benzene	0.0378	0.00650	mg/Kg dry	0.064984	ND	58	50-140	12	20	
Chlorobenzene	0.0258	0.00650	mg/Kg dry	0.064984	ND	40	60-130	11	20	S
1,1-Dichloroethene	0.0393	0.00650	mg/Kg dry	0.064984	ND	60	60-130	13	20	
Ethylbenzene	0.0341	0.00650	mg/Kg dry	0.064984	ND	52	50-140	9	25	
Toluene	0.0337	0.00650	mg/Kg dry	0.064984	ND	52	55-130	10	25	S
Trichloroethene	0.0343	0.00650	mg/Kg dry	0.064984	ND	53	60-130	10	20	S
Xylenes (total)	0.0939	0.0195	mg/Kg dry	0.19495	ND	48	60-130	8	25	S
Surrogate: 4-Bromofluorobenzene	*0.0562*		*mg/Kg dry*	*0.064984*		*86*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0565*		*mg/Kg dry*	*0.064984*		*87*	*75-119*			
Surrogate: Toluene-d8	*0.0643*		*mg/Kg dry*	*0.064984*		*99*	*78-114*			

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635

Semi-Volatile Organic Compounds by GC-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003462 - SW 3550B BNA										
Blank (X003462-BLK1)				Prepared & Analyzed: 06/30/2014						
Acenaphthene	U	0.333	mg/Kg wet							
Acenaphthylene	U	0.333	mg/Kg wet							
Anthracene	U	0.333	mg/Kg wet							
Benzo(a)anthracene	U	0.333	mg/Kg wet							
Benzo(b)fluoranthene	U	0.333	mg/Kg wet							
Benzo(k)fluoranthene	U	0.333	mg/Kg wet							
Benzo(g,h,i)perylene	U	0.333	mg/Kg wet							
Benzo(a)pyrene	U	0.0600	mg/Kg wet							
Bis(2-chloroethoxy)methane	U	0.333	mg/Kg wet							
Bis(2-chloroethyl)ether	U	0.333	mg/Kg wet							
Bis(2-chloroisopropyl)ether	U	0.333	mg/Kg wet							
Bis(2-ethylhexyl)phthalate	U	0.333	mg/Kg wet							
4-Bromophenyl phenyl ether	U	0.333	mg/Kg wet							
Butyl benzyl phthalate	U	0.333	mg/Kg wet							
Carbazole	U	0.333	mg/Kg wet							
4-Chloro-3-methylphenol	U	0.666	mg/Kg wet							
4-Chloroaniline	U	0.333	mg/Kg wet							
2-Chloronaphthalene	U	0.333	mg/Kg wet							
2-Chlorophenol	U	0.333	mg/Kg wet							
4-Chlorophenyl phenyl ether	U	0.333	mg/Kg wet							
Chrysene	U	0.333	mg/Kg wet							
Di-n-butyl phthalate	U	0.333	mg/Kg wet							
Di-n-octyl phthalate	U	0.333	mg/Kg wet							
Dibenz(a,h)anthracene	U	0.0600	mg/Kg wet							
Dibenzofuran	U	1.66	mg/Kg wet							
1,2-Dichlorobenzene	U	0.333	mg/Kg wet							
1,3-Dichlorobenzene	U	0.100	mg/Kg wet							
1,4-Dichlorobenzene	U	0.333	mg/Kg wet							
3,3'-Dichlorobenzidine	U	0.00500	mg/Kg wet							
2,4-Dichlorophenol	U	0.333	mg/Kg wet							
Diethyl phthalate	U	0.333	mg/Kg wet							
Dimethyl phthalate	U	0.333	mg/Kg wet							
2,4-Dimethylphenol	U	0.333	mg/Kg wet							
4,6-Dinitro-2-methylphenol	U	1.66	mg/Kg wet							
2,4-Dinitrophenol	U	0.100	mg/Kg wet							
2,4-Dinitrotoluene	U	0.100	mg/Kg wet							
2,6-Dinitrotoluene	U	0.100	mg/Kg wet							
Fluoranthene	U	0.333	mg/Kg wet							
Fluorene	U	0.333	mg/Kg wet							
Hexachlorobenzene	U	0.100	mg/Kg wet							
Hexachlorobutadiene	U	0.333	mg/Kg wet							
Hexachlorocyclopentadiene	U	0.666	mg/Kg wet							
Hexachloroethane	U	0.333	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	U	0.333	mg/Kg wet							

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635

Semi-Volatile Organic Compounds by GC-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003462 - SW 3550B BNA										
Blank (X003462-BLK1)				Prepared & Analyzed: 06/30/2014						
Isophorone	U	0.333	mg/Kg wet							
2-Methylnaphthalene	U	0.333	mg/Kg wet							
2-Methylphenol	U	0.333	mg/Kg wet							
3 & 4-Methylphenol	U	0.100	mg/Kg wet							
Naphthalene	U	0.333	mg/Kg wet							
2-Nitroaniline	U	0.100	mg/Kg wet							
3-Nitroaniline	U	0.00500	mg/Kg wet							
4-Nitroaniline	U	0.0600	mg/Kg wet							
Nitrobenzene	U	0.0600	mg/Kg wet							
2-Nitrophenol	U	0.333	mg/Kg wet							
4-Nitrophenol	U	1.66	mg/Kg wet							
N-Nitroso-di-n-propylamine	U	0.00100	mg/Kg wet							M
N-Nitrosodiphenylamine	U	0.333	mg/Kg wet							
Pentachlorophenol	U	0.0100	mg/Kg wet							
Phenanthrene	U	0.333	mg/Kg wet							
Phenol	U	0.333	mg/Kg wet							
Pyrene	U	0.333	mg/Kg wet							
1,2,4-Trichlorobenzene	U	0.333	mg/Kg wet							
2,4,5-Trichlorophenol	U	0.333	mg/Kg wet							
2,4,6-Trichlorophenol	U	0.100	mg/Kg wet							
Surrogate: 2-Fluorobiphenyl	*0.625*		*mg/Kg wet*	*0.66667*		*94*	*40-120*			
Surrogate: 2-Fluorophenol	*0.643*		*mg/Kg wet*	*1.0000*		*64*	*20-115*			
Surrogate: Nitrobenzene-d5	*0.673*		*mg/Kg wet*	*0.66667*		*101*	*45-135*			
Surrogate: Phenol-d6	*0.689*		*mg/Kg wet*	*1.0000*		*69*	*20-100*			
Surrogate: 4-Terphenyl-d14	*0.628*		*mg/Kg wet*	*0.66667*		*94*	*60-130*			
Surrogate: 2,4,6-Tribromophenol	*0.660*		*mg/Kg wet*	*1.0000*		*66*	*30-100*			
LCS (X003462-BS1)				Prepared & Analyzed: 06/30/2014						
Acenaphthene	0.635	0.333	mg/Kg wet	0.66667		95	30-140			
4-Chloro-3-methylphenol	1.16	0.666	mg/Kg wet	1.3333		87	30-180			
2-Chlorophenol	1.25	0.333	mg/Kg wet	1.3333		94	35-150			
1,4-Dichlorobenzene	0.481	0.333	mg/Kg wet	0.66667		72	30-105			
2,4-Dinitrotoluene	0.595	0.100	mg/Kg wet	0.66667		89	35-130			
4-Nitrophenol	1.52	1.66	mg/Kg wet	1.3333		114	30-150			
N-Nitroso-di-n-propylamine	0.626	0.00100	mg/Kg wet	0.66667		94	40-130			
Pentachlorophenol	1.34	0.0100	mg/Kg wet	1.3333		101	40-190			
Phenol	1.12	0.333	mg/Kg wet	1.3333		84	30-190			
Pyrene	0.597	0.333	mg/Kg wet	0.66667		90	35-140			
1,2,4-Trichlorobenzene	0.644	0.333	mg/Kg wet	0.66667		97	40-115			
Surrogate: 2-Fluorobiphenyl	*0.630*		*mg/Kg wet*	*0.66667*		*94*	*40-120*			
Surrogate: 2-Fluorophenol	*0.598*		*mg/Kg wet*	*1.0000*		*60*	*20-115*			
Surrogate: Nitrobenzene-d5	*0.631*		*mg/Kg wet*	*0.66667*		*95*	*45-135*			
Surrogate: Phenol-d6	*0.654*		*mg/Kg wet*	*1.0000*		*65*	*20-100*			
Surrogate: 4-Terphenyl-d14	*0.642*		*mg/Kg wet*	*0.66667*		*96*	*60-130*			
Surrogate: 2,4,6-Tribromophenol	*0.677*		*mg/Kg wet*	*1.0000*		*68*	*30-100*			

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635

Semi-Volatile Organic Compounds by GC-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003480 - SW 3550B PNA										
Blank (X003480-BLK1)				Prepared & Analyzed: 07/01/2014						
Acenaphthene	U	0.333	mg/Kg wet							
Acenaphthylene	U	0.333	mg/Kg wet							
Anthracene	U	0.333	mg/Kg wet							
Benzo(a)anthracene	U	0.333	mg/Kg wet							
Benzo(b)fluoranthene	U	0.333	mg/Kg wet							
Benzo(k)fluoranthene	U	0.333	mg/Kg wet							
Benzo(g,h,i)perylene	U	0.333	mg/Kg wet							
Benzo(a)pyrene	U	0.0600	mg/Kg wet							
Chrysene	U	0.333	mg/Kg wet							
Dibenz(a,h)anthracene	U	0.0600	mg/Kg wet							
Fluoranthene	U	0.333	mg/Kg wet							
Fluorene	U	0.333	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	U	0.333	mg/Kg wet							
Naphthalene	U	0.333	mg/Kg wet							
Phenanthrene	U	0.333	mg/Kg wet							
Pyrene	U	0.333	mg/Kg wet							
Surrogate: 2-Fluorobiphenyl	*0.522*		*mg/Kg wet*	*0.66667*		*78*	*38-122*			
Surrogate: Nitrobenzene-d5	*0.728*		*mg/Kg wet*	*0.66667*		*109*	*45-136*			
Surrogate: 4-Terphenyl-d14	*0.552*		*mg/Kg wet*	*0.66667*		*83*	*57-122*			
LCS (X003480-BS1)				Prepared & Analyzed: 07/01/2014						
Acenaphthene	0.678	0.333	mg/Kg wet	0.66667		102	50-135			
Acenaphthylene	0.555	0.333	mg/Kg wet	0.66667		83	51-134			
Anthracene	0.555	0.333	mg/Kg wet	0.66667		83	52-117			
Benzo(a)anthracene	0.697	0.333	mg/Kg wet	0.66667		105	50-126			
Benzo(b)fluoranthene	0.538	0.333	mg/Kg wet	0.66667		81	57-134			
Benzo(k)fluoranthene	0.511	0.333	mg/Kg wet	0.66667		77	59-168			
Benzo(g,h,i)perylene	0.736	0.333	mg/Kg wet	0.66667		110	56-147			
Benzo(a)pyrene	0.484	0.0600	mg/Kg wet	0.66667		73	41-133			
Chrysene	0.585	0.333	mg/Kg wet	0.66667		88	52-127			
Dibenz(a,h)anthracene	0.646	0.0600	mg/Kg wet	0.66667		97	60-170			
Fluoranthene	0.615	0.333	mg/Kg wet	0.66667		92	57-130			
Fluorene	0.665	0.333	mg/Kg wet	0.66667		100	47-154			
Indeno(1,2,3-cd)pyrene	0.709	0.333	mg/Kg wet	0.66667		106	59-132			
Naphthalene	0.565	0.333	mg/Kg wet	0.66667		85	40-135			
Phenanthrene	0.576	0.333	mg/Kg wet	0.66667		86	54-126			
Pyrene	0.617	0.333	mg/Kg wet	0.66667		93	57-132			
Surrogate: 2-Fluorobiphenyl	*0.596*		*mg/Kg wet*	*0.66667*		*89*	*38-122*			
Surrogate: Nitrobenzene-d5	*0.728*		*mg/Kg wet*	*0.66667*		*109*	*45-136*			
Surrogate: 4-Terphenyl-d14	*0.668*		*mg/Kg wet*	*0.66667*		*100*	*57-122*			

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635

Semi-Volatile Organic Compounds by GC-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003480 - SW 3550B PNA										
Matrix Spike (X003480-MS1)	**Source: 14F0636-03**			Prepared: 07/01/2014 Analyzed: 07/02/2014						
Acenaphthene	0.732	0.401	mg/Kg dry	0.80335	ND	91	50-135			
Acenaphthylene	0.620	0.401	mg/Kg dry	0.80335	ND	77	51-134			
Anthracene	0.686	0.401	mg/Kg dry	0.80335	0.00535	85	52-117			
Benzo(a)anthracene	0.625	0.401	mg/Kg dry	0.80335	0.0461	72	50-126			
Benzo(b)fluoranthene	0.825	0.401	mg/Kg dry	0.80335	0.0475	97	57-134			
Benzo(k)fluoranthene	0.739	0.401	mg/Kg dry	0.80335	0.0343	88	59-168			
Benzo(g,h,i)perylene	0.551	0.401	mg/Kg dry	0.80335	ND	69	56-147			
Benzo(a)pyrene	0.676	0.0723	mg/Kg dry	0.80335	0.0502	78	41-133			
Chrysene	0.813	0.401	mg/Kg dry	0.80335	0.0582	94	52-127			
Dibenz(a,h)anthracene	0.557	0.0723	mg/Kg dry	0.80335	ND	69	60-170			
Fluoranthene	0.679	0.401	mg/Kg dry	0.80335	0.0996	72	57-130			
Fluorene	0.804	0.401	mg/Kg dry	0.80335	ND	100	47-154			
Indeno(1,2,3-cd)pyrene	0.709	0.401	mg/Kg dry	0.80335	ND	88	59-132			
Naphthalene	0.618	0.401	mg/Kg dry	0.80335	ND	77	40-135			
Phenanthrene	0.675	0.401	mg/Kg dry	0.80335	0.0540	77	54-126			
Pyrene	0.722	0.401	mg/Kg dry	0.80335	0.0940	78	57-132			
Surrogate: 2-Fluorobiphenyl	*0.697*		*mg/Kg dry*	*0.80335*		*87*	*38-122*			
Surrogate: Nitrobenzene-d5	*0.831*		*mg/Kg dry*	*0.80335*		*103*	*45-136*			
Surrogate: 4-Terphenyl-d14	*0.698*		*mg/Kg dry*	*0.80335*		*87*	*57-122*			
Matrix Spike Dup (X003480-MSD1)	**Source: 14F0636-03**			Prepared: 07/01/2014 Analyzed: 07/02/2014						
Acenaphthene	0.753	0.399	mg/Kg dry	0.79970	ND	94	50-135	3	20	
Acenaphthylene	0.639	0.399	mg/Kg dry	0.79970	ND	80	51-134	3	20	
Anthracene	0.818	0.399	mg/Kg dry	0.79970	0.00535	102	52-117	18	20	
Benzo(a)anthracene	0.744	0.399	mg/Kg dry	0.79970	0.0461	87	50-126	17	20	
Benzo(b)fluoranthene	0.750	0.399	mg/Kg dry	0.79970	0.0475	88	57-134	10	20	
Benzo(k)fluoranthene	0.853	0.399	mg/Kg dry	0.79970	0.0343	102	59-168	14	20	
Benzo(g,h,i)perylene	0.563	0.399	mg/Kg dry	0.79970	ND	70	56-147	2	20	
Benzo(a)pyrene	0.694	0.0720	mg/Kg dry	0.79970	0.0502	81	41-133	3	20	
Chrysene	0.874	0.399	mg/Kg dry	0.79970	0.0582	102	52-127	7	20	
Dibenz(a,h)anthracene	0.591	0.0720	mg/Kg dry	0.79970	ND	74	60-170	6	20	
Fluoranthene	0.851	0.399	mg/Kg dry	0.79970	0.0996	94	57-130	22	20	R
Fluorene	0.775	0.399	mg/Kg dry	0.79970	ND	97	47-154	4	20	
Indeno(1,2,3-cd)pyrene	0.737	0.399	mg/Kg dry	0.79970	ND	92	59-132	4	20	
Naphthalene	0.702	0.399	mg/Kg dry	0.79970	ND	88	40-135	13	20	
Phenanthrene	0.815	0.399	mg/Kg dry	0.79970	0.0540	95	54-126	19	20	
Pyrene	0.846	0.399	mg/Kg dry	0.79970	0.0940	94	57-132	16	20	
Surrogate: 2-Fluorobiphenyl	*0.721*		*mg/Kg dry*	*0.79970*		*90*	*38-122*			
Surrogate: Nitrobenzene-d5	*0.806*		*mg/Kg dry*	*0.79970*		*101*	*45-136*			
Surrogate: 4-Terphenyl-d14	*0.768*		*mg/Kg dry*	*0.79970*		*96*	*57-122*			

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635

Polychlorinated Biphenyls by GC-ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003463 - SW 3550B PCB										
Blank (X003463-BLK1)				Prepared & Analyzed: 06/30/2014						
Aroclor 1016	U	0.0330	mg/Kg wet							
Aroclor 1221	U	0.0330	mg/Kg wet							
Aroclor 1232	U	0.0330	mg/Kg wet							
Aroclor 1242	U	0.0330	mg/Kg wet							
Aroclor 1248	U	0.0330	mg/Kg wet							
Aroclor 1254	U	0.0330	mg/Kg wet							
Aroclor 1260	U	0.0330	mg/Kg wet							
Surrogate: Decachlorobiphenyl	*0.0552*		*mg/Kg wet*	*0.066667*		*83*	*60-140*			
Surrogate: Tetrachloro-m-xylene	*0.0493*		*mg/Kg wet*	*0.066667*		*74*	*60-140*			
LCS (X003463-BS1)				Prepared & Analyzed: 06/30/2014						
Aroclor 1016	0.590	0.0330	mg/Kg wet	0.66667		88	60-130			
Aroclor 1260	0.600	0.0330	mg/Kg wet	0.66667		90	70-130			
Surrogate: Decachlorobiphenyl	*0.0555*		*mg/Kg wet*	*0.066667*		*83*	*60-140*			
Surrogate: Tetrachloro-m-xylene	*0.0520*		*mg/Kg wet*	*0.066667*		*78*	*60-140*			

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635

Metals by ICP - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003460 - SW 3050B Metals										
Blank (X003460-BLK1)				Prepared: 06/30/2014 Analyzed: 07/01/2014						
Arsenic	U	0.50	mg/Kg wet							
Barium	U	0.25	mg/Kg wet							
Cadmium	U	0.25	mg/Kg wet							
Chromium	U	0.25	mg/Kg wet							
Lead	U	0.25	mg/Kg wet							
Selenium	U	1.0	mg/Kg wet							
Silver	U	0.50	mg/Kg wet							
LCS (X003460-BS1)				Prepared: 06/30/2014 Analyzed: 07/01/2014						
Arsenic	25	0.50	mg/Kg wet	25.000		101	85-115			
Barium	25	0.25	mg/Kg wet	25.000		100	85-115			
Cadmium	25	0.25	mg/Kg wet	25.000		100	85-115			
Chromium	26	0.25	mg/Kg wet	25.000		103	85-115			
Lead	25	0.25	mg/Kg wet	25.000		100	85-115			
Selenium	22	1.0	mg/Kg wet	25.000		89	85-115			
Silver	2.4	0.50	mg/Kg wet	2.5000		94	80-120			
Matrix Spike (X003460-MS1)	Source: 14F0636-01			Prepared: 06/30/2014 Analyzed: 07/01/2014						
Arsenic	37	0.61	mg/Kg dry	30.377	6.5	100	75-125			
Barium	36	0.30	mg/Kg dry	30.377	6.7	96	75-125			
Cadmium	28	0.30	mg/Kg dry	30.377	0.36	91	75-125			
Chromium	36	0.30	mg/Kg dry	30.377	7.2	96	75-125			
Lead	36	0.30	mg/Kg dry	30.377	8.6	91	75-125			
Selenium	26	1.2	mg/Kg dry	30.377	ND	87	75-125			
Silver	2.5	0.61	mg/Kg dry	3.0377	ND	84	75-125			
Matrix Spike Dup (X003460-MSD1)	Source: 14F0636-01			Prepared: 06/30/2014 Analyzed: 07/01/2014						
Arsenic	37	0.61	mg/Kg dry	30.316	6.5	100	75-125	0.5	20	
Barium	35	0.30	mg/Kg dry	30.316	6.7	94	75-125	2	20	
Cadmium	29	0.30	mg/Kg dry	30.316	0.36	93	75-125	2	20	
Chromium	37	0.30	mg/Kg dry	30.316	7.2	99	75-125	2	20	
Lead	37	0.30	mg/Kg dry	30.316	8.6	93	75-125	1	20	
Selenium	25	1.2	mg/Kg dry	30.316	ND	84	75-125	4	20	
Silver	2.5	0.61	mg/Kg dry	3.0316	ND	82	75-125	2	20	

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635

SPLP Metals by ICP - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003654 - SW 3005A Metals										
Blank (X003654-BLK1)				Prepared & Analyzed: 07/09/2014						
Chromium	U	0.0050	mg/L							
Blank (X003654-BLK2)				Prepared & Analyzed: 07/09/2014						
Chromium	U	0.0050	mg/L							
LCS (X003654-BS1)				Prepared & Analyzed: 07/09/2014						
Chromium	0.51	0.0050	mg/L	0.50000		102	85-115			
Matrix Spike (X003654-MS1)	Source: 14F0635-03			Prepared & Analyzed: 07/09/2014						
Chromium	0.51	0.0050	mg/L	0.50000	0.0026	102	75-125			
Matrix Spike Dup (X003654-MSD1)	Source: 14F0635-03			Prepared & Analyzed: 07/09/2014						
Chromium	0.51	0.0050	mg/L	0.50000	0.0026	101	75-125	0.8	20	

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635

Mercury by CVAA - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003560 - SW 7471B Mercury										
Blank (X003560-BLK1)				Prepared: 07/03/2014 Analyzed: 07/07/2014						
Mercury	U	0.0400	mg/Kg wet							
LCS (X003560-BS1)				Prepared: 07/03/2014 Analyzed: 07/07/2014						
Mercury	0.482	0.0400	mg/Kg wet	0.50000		96	80-120			
Matrix Spike (X003560-MS1)		Source: 14F0636-01		Prepared: 07/03/2014 Analyzed: 07/07/2014						
Mercury	0.701	0.0481	mg/Kg dry	0.60152	0.0306	111	80-120			
Matrix Spike Dup (X003560-MSD1)		Source: 14F0636-01		Prepared: 07/03/2014 Analyzed: 07/07/2014						
Mercury	0.690	0.0480	mg/Kg dry	0.60033	0.0306	110	80-120	2	20	

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635

Conventional Chemistry Parameters - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch X003472 - ASTM D2974 Solids										
Blank (X003472-BLK1)				Prepared: 06/30/2014 Analyzed: 07/01/2014						
Percent Solids	U	0.100	%							
Duplicate (X003472-DUP1)		Source: 14F0637-06		Prepared: 06/30/2014 Analyzed: 07/01/2014						
Percent Solids	93.9	0.100	%		93.8			0.1	20	
Batch X003484 - SW 9045C pH										
Duplicate (X003484-DUP1)		Source: 14F0635-06		Prepared & Analyzed: 07/01/2014						
pH	7.8	0.010	pH Units		7.8			0.8	5	

LABORATORY RESULTS

Client: True North Consultants
Project: King Arthur Bike Path: Northlake, IL **Lab Order:** 14F0635

Notes and Definitions

S1	Analyte exceeds the laboratory control sample acceptance criteria, but there is no observable concentration in the sample.
S	Spike recovery outside acceptance limits.
R	RPD outside acceptance limits.
M	Reporting limit set between LOQ and MDL.
*	NELAC certified compound.
U	Analyte not detected (i.e. less than RL or MDL).

Chain of Custody Record

Central IL - 1210 Capital Airport Drive - Springfield, IL 62707-8490 - Phone (217) 753-1148 - Facsimile (217) 753-1152
Chicago IL Office - 9114 Virginia Rd., Ste 112 - Lake in the Hills, IL 60156 - Phone (847) 651-2604 - Facsimile (847) 458-9680
Central/Southern IL Office - Phone (217) 414-7762 - Facsimile (217) 223-7922

Prairie Analytical Systems, INCORPORATED
www.prairieanalytical.com

Client	True North Consultants
Address	1240 Iroquois Avenue, Suite 206
City, State, Zip Code	Naperville, Illinois 60563
Phone / Facsimile	630.717.2880/630.689.5881
Project Name / Number	King Arthur Bike Path
Project Location	Northlake, IL
P.O. # or Invoice To	T114324
Contact Person	Amber Kowal, Brian Mihelich

Reporting: CCDD ■ MAC; CALM ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F; RISC ☐ Resid ☐ Indust

Sample Description	Sampling Date	Sampling Time	Matrix Code	Preserv Code	No. of Containers	Sample Type Comp	Sample Type Grab	VOCs	BETX	SVOCs	PNAs	PCBs	RCRA Metal	pH			Sampler Comments
SB-1	6/27/2014	815	S	5	4		X		X		X		X	X			
SB-2	6/27/2014	830	S	5	4		X		X		X		X	X			
SB-3	6/27/2014	845	S	5	4		X		X		X		X	X			
SB-4	6/27/2014	900	S	5	4		X		X		X		X	X			
SB-5	6/27/2014	915	S	5	4		X		X		X	X	X	X			
SB-6	6/27/2014	930	S	5	4		X	X		X		X	X	X			

Matrix Code	A - Aqueous	DW - Drinking Water	GW - Ground Water	NA - Non-Aqueous Liquid	S - Solid	O - Oil	X - Other (Specify)
Preserv Code	0 - None	1 - HCl	2 - H2SO4	3 - HNO3	4 - NaOH	5 - 5035 Kit	X - Other (Specify)

Relinquished By	Date	Time	Received By	Date	Time	Method of Shipment
Amber Kowal	6/27/2014	1640		6/27/14	1640	UPS
	6/27/14	1730		6-26-14	10:30	

Special Instructions:

Turnaround Time: Standard ■ Rush ☐
Date Required: 4.5 Days

QC Level: 1☐ 2■ 3☐ 4☐

On wet ice? (Yes) No

Temperature (°C): 3.0

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

SPECIAL PROVISION FOR COOPERATION WITH UTILITIES

Effective: January 1, 1999
Revised: January 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.

Replace Article 105.07 of the Standard Specifications with the following:

"**105.07 Cooperation with Utilities.** The adjustment of utilities consists of the relocation, removal, replacement, rearrangements, reconstruction, improvement, disconnection, connection, shifting, new installation or altering of an existing utility facility in any manner.

When the plans or special provisions include information pertaining to the location of underground utility facilities, such information represents only the opinion of the Department as to the location of such utilities and is only included for the convenience of the bidder. The Department assumes no responsibility in respect to the sufficiency or the accuracy of the information shown on the plans relative to the location of the underground utility facilities.

Utilities which are to be adjusted shall be adjusted by the utility owner or the owner's representative or by the Contractor as a contract item. Generally, arrangements for adjusting existing utilities will be made by the Department prior to project construction; however, utilities will not necessarily be adjusted in advance of project construction and, in some cases, utilities will not be removed from the proposed construction limits. When utility adjustments must be performed in conjunction with construction, the utility adjustment work will be shown on the plans and/or covered by Special Provisions.

When the Contractor discovers a utility has not been adjusted by the owner or the owner's representative as indicated in the contract documents, or the utility is not shown on the plans or described in the Special Provisions as to be adjusted in conjunction with construction, the Contractor shall not interfere with said utility, and shall take proper precautions to prevent damage or interruption of the utility and shall promptly notify the Engineer of the nature and location of said utility.

All necessary adjustments, as determined by the Engineer, of utilities not shown on the plans or not identified by markers, will be made at no cost to the Contractor except traffic structures, light poles, etc., that are normally located within the proposed construction limits as hereinafter defined will not be adjusted unless required by the proposed improvement.

(a) Limits of Proposed Construction for Utilities Paralleling the Roadway. For the purpose of this Article, limits of proposed construction for utilities extending in the same longitudinal direction as the roadway, shall be defined as follows:

(1) The horizontal limits shall be a vertical plane, outside of, parallel to, and 600 mm (2 ft) distant at right angles from the plan or revised slope limits.

In cases where the limits of excavation for structures are not shown on the plans, the horizontal limits shall be a vertical plane 1.2 m (4 ft) outside the edges of structure footings or the structure where no footings are required.

(2) The upper vertical limits shall be the regulations governing the roadbed clearance for the specific utility involved.

(3) The lower vertical limits shall be the top of the utility at the depth below the proposed grade as prescribed by the governing agency or the limits of excavation, whichever is less.

(b) Limits of Proposed Construction for Utilities Crossing the Roadway. For the purpose of this Article, limits of proposed construction for utilities crossing the roadway in a generally transverse direction shall be defined as follows:

(1) Utilities crossing excavations for structures that are normally made by trenching such as sewers, underdrains, etc. and all minor structures such as manholes, inlets, foundations for signs, foundations for traffic signals, etc., the limits shall be the space to be occupied by the proposed permanent construction unless otherwise required by the regulations governing the specific utility involved.

(2) For utilities crossing the proposed site of major structures such as bridges, sign trusses, etc., the limits shall be as defined above for utilities extending in the same general direction as the roadway.

The Contractor may make arrangements for adjustment of utilities outside of the limits of proposed construction provided the Contractor furnishes the Department with a signed agreement with the utility owner covering the adjustments to be made. The cost of any adjustments made outside the limits of proposed construction shall be the responsibility of the Contractor unless otherwise provided.

The Contractor shall request all utility owners to field locate their facilities according to Article 107.31. The Engineer may make the request for location from the utility after receipt of notice from the Contractor. On request, the Engineer will make an inspection to verify that the utility company has field located its facilities, but will not assume responsibility for the accuracy of such work. The Contractor shall be responsible for maintaining the excavations or markers provided by the utility owners. This field location procedure may be waived if the utility owner has stated in writing to the Department it is satisfied the construction plans are sufficiently accurate. If the utility owner does not submit such statement to the Department, and they do not field locate their facilities in both horizontal and vertical alignment, the Engineer will authorize the Contractor in writing to proceed to locate the facilities in the most economical and reasonable manner, subject to the approval of the Engineer, and be paid according to Article 109.04.

The Contractor shall coordinate w ith any planned utility adjustment or new installation and the Contractor shall take all precautions to prevent disturbance or damage to utility facilities. Any failure on the part of the utility owner, or their representative, to proceed with any planned utility adjustment or new installation shall be reported promptly by the Contractor to the Engineer orally and in writing.

The Contractor shall take all necessary precautions for the protection of the utility facilities. The Contractor shall be responsible for any damage or destruction of utility facilities resulting from neglect, misconduct, or omission in the Contractor's manner or method of execution or nonexecution of the work, or caused by defective work or the use of unsatisfactory materials. Whenever any damage or destruction of a utility facility occurs as a result of work performed by the Contractor, the utility company will be immediately notified. The utility company will make arrangements to restore such facility to a condition equal to that existing before any such damage or destruction was done.

It is understood and agreed that the Contractor has considered in the bid all of the permanent and temporary utilities in their present and/or adjusted positions.

No additional compensation will be allowed for any delays, inconvenience, or damage sustained by the Contractor due to any interference from the said utility facilities or the operation of relocating the said utility facilities.

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:

City of Northlake

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

COILABLE NONMETALLIC CONDUIT (BDE)

Effective: August 1, 2014

Revise Article 1088.01(c) of the Standard Specifications to read:

"(c) Coilable Nonmetallic Conduit. The conduit shall be a high density polyethylene duct which is intended for underground use can be manufactured and coiled or reeled in continuous transportable lengths and uncoiled for further processing and/or installation without adversely affecting its properties or performance. The conduit and its manufacture shall be according to UL Standard 651A.

Performance Tests. Testing procedures and test results shall meet the requirements of UL Standard 651A. Certified copies of the test report shall be submitted to the Engineer prior to the installation of the conduit."

80341

CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

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

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

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

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

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

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

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

a) Included on the U.S. Environmental Protection Agency (USEPA) *Verified Retrofit Technology List* (http://www.epa.gov/cleandiesel/verification/verif-list.htm), or verified by the California Air Resources Board (CARB) (http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm); or

b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit

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

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

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

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

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

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

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

Diesel Retrofit Deficiency Deduction

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

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

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

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

80261

CONTRACT CLAIMS (BDE)

Effective: April 1, 2014

Revise the first paragraph of Article 109.09(a) of the Standard Specifications to read:

"(a) Submission of Claim. All claims filed by the Contractor shall be in writing and in sufficient detail to enable the Department to ascertain the basis and amount of the claim. As a minimum, the following information must accompany each claim submitted."

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

"(e) Procedure. The Department provides two administrative levels for claims review.

Level I Engineer of Construction
Level II Chief Engineer/Director of Highways or Designee

(1) Level I. All claims shall first be submitted at Level I. Two copies each of the claim and supporting documentation shall be submitted simultaneously to the District and the Engineer of Construction. The Engineer of Construction, in consultation with the District, will consider all information submitted with the claim and render a decision on the claim within 90 days after receipt by the Engineer of Construction. Claims not conforming to this Article will be returned without consideration. The Engineer of Construction may schedule a claim presentation meeting if in the Engineer of Construction's judgment such a meeting would aid in resolution of the claim, otherwise a decision will be made based on the claim documentation submitted. If a Level I decision is not rendered within 90 days of receipt of the claim, or if the Contractor disputes the decision, an appeal to Level II may be made by the Contractor.

(2) Level II. An appeal to Level II shall be made in writing to the Engineer of Construction within 45 days after the date of the Level I decision. Review of the claim at Level II shall be conducted as a full evaluation of the claim. A claim presentation meeting may be scheduled if the Chief Engineer/Director of Highways determines that such a meeting would aid in resolution of the claim, otherwise a decision will be made based on the claim documentation submitted. A Level II final decision will be rendered within 90 days of receipt of the written request for appeal.

Full compliance by the Contractor with the provisions specified in this Article is a contractual condition precedent to the Contractor's right to seek relief in the Court of Claims. The Director's written decision shall be the final administrative action of the Department. Unless the Contractor files a claim for adjudication by the Court of Claims within 60 days after the date of the written decision, the failure to file shall constitute a release and waiver of the claim."

80335

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000
Revised: January 2, 2015

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

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

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

> The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of contracts funded in whole or in part with federal or state funds. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:
>
> (a) Withholding progress payments;
>
> (b) Assessing sanctions;
>
> (c) Liquidated damages; and/or
>
> (d) Disqualifying the Contractor from future bidding as non-responsible.

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

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

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform 12.00 % of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

(a) The bidder documents that enough DBE participation has been obtained to meet the goal or,

(b) The bidder documents that a good faith effort has been made to meet the goal, even though the effort did not succeed in obtaining enough DBE participation to meet the goal.

DBE LOCATOR REFERENCES. Bidders shall consult the IL UCP DBE Directory as a reference source for DBE-certified companies. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217) 785-4611, or by visiting the Department's website at www.dot.il.gov.

BIDDING PROCEDURES. Compliance with this Special Provision is a material bidding requirement. The failure of the bidder to comply will render the bid not responsive.

(a) The bidder shall submit a Disadvantaged Business Utilization Plan on Department forms SBE 2025 and 2026 with the bid.

(b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of plan approval or disapproval under the procedures of this Special Provision.

(c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. For bidding purposes, submission of the completed SBE 2025 forms, signed by the DBEs and faxed to the bidder will be acceptable as long as the original is available and provided upon request. All elements of information indicated on the said form shall be provided, including but not limited to the following:

(1) The names and addresses of DBE firms that will participate in the contract;

(2) A description, including pay item numbers, of the work each DBE will perform;

(3) The dollar amount of the participation of each DBE firm participating. The dollar amount of participation for identified work shall specifically state the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;

(4) DBE Participation Commitment Statements, form SBE 2025, signed by the bidder and each participating DBE firm documenting the commitment to use the DBE subcontractors whose participation is submitted to meet the contract goal;

(5) If the bidder is a joint venture comprised of DBE companies and non-DBE companies, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s); and,

(6) If the contract goal is not met, evidence of good faith efforts; the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor is selected over a DBE for work on the contract.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan submitted by the apparent successful bidder is approved. All information submitted by the bidder must be complete, accurate and adequately document that enough DBE participation has been obtained or document that good faith efforts of the bidder, in the event enough DBE participation has not been obtained, before the Department will commit to the performance of the contract by the bidder. The Utilization Plan will be approved by the Department if the Utilization Plan documents sufficient commercially useful DBE work performance to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A. The Utilization Plan will not be approved by the Department if the Utilization Plan does not document sufficient DBE participation to meet the contract goal unless the apparent successful bidder documented in the Utilization Plan that it made a good faith effort to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of

efforts that the bidder has made. Mere *pro forma* efforts, in other words, efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

(a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.

(1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.

(2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.

(3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

(4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.

b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith

efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable. In accordance with Section 6 of the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.

(5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.

(6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.

(7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.

(8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.

(b) If the Department determines that the apparent successful bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that the bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification shall include a statement of reasons for the determination.

(c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after the receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217) 785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The determination shall become final if a request is not made and delivered. A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in

order to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for consideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

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

(a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.

(b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.

(c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.

(d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:

(1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.

(2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.

(e) DBE as a material supplier:

(1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.

(2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.

(3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

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

(a) NO AMENDMENT. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.

(b) CHANGES TO WORK. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, than a new Request for Approval of Subcontractor shall not be

required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.

(c) SUBCONTRACT. The Contractor must provide DBE subcontracts to IDOT upon request. Subcontractors shall ensure that all lower tier subcontracts or agreements with DBEs to supply labor or materials be performed in accordance with this Special Provision.

(d) ALTERNATIVE WORK METHODS. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:

(1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or

(2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or

(3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.

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

As stated above, the Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of

Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor, with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

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

(1) The listed DBE subcontractor fails or refuses to execute a written contract;

(2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor;

(3) The listed DBE subcontractor fails or refuses to meet the prime Contractor's reasonable, nondiscriminatory bond requirements;

(4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;

(5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1,200 or applicable state law.

(6) You have determined that the listed DBE subcontractor is not a responsible contractor;

(7) The listed DBE subcontractor voluntarily withdraws from the projects and provides to you written notice of its withdrawal;

(8) The listed DBE is ineligible to receive DBE credit for the type of work required;

(9) A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract;

(10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the prime Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the prime

Contractor can self-perform the work for which the DBE contractor was engaged or so that the prime Contractor can substitute another DBE or non-DBE contractor after contract award.

When a DBE is terminated, or fails to complete its work on the Contract for any reason the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal. The good faith efforts shall be documented by the Contractor. If the Department requests documentation under this provision, the Contractor shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of the Contractor. The Department shall provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.

(f) PAYMENT RECORDS. The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.

(g) ENFORCEMENT. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.

(h) RECONSIDERATION. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor my request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance

to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

80029

FRICTION AGGREGATE (BDE)

Effective: January 1, 2011
Revised: November 1, 2014

Revise Article 1004.01(a)(4) of the Standard Specifications to read:

"(4) Crushed Stone. Crushed stone shall be the angular fragments resulting from crushing undisturbed, consolidated deposits of rock by mechanical means. Crushed stone shall be divided into the following, when specified.

a. Carbonate Crushed Stone. Carbonate crushed stone shall be either dolomite or limestone. Dolomite shall contain 11.0 percent or more magnesium oxide (MgO). Limestone shall contain less than 11.0 percent magnesium oxide (MgO).

b. Crystalline Crushed Stone. Crystalline crushed stone shall be either metamorphic or igneous stone, including but is not limited to, quartzite, granite, rhyolite and diabase."

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

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

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

Use	Mixture	Aggregates Allowed
Class A	Seal or Cover	Allowed Alone or in Combination [5/]: Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete

Use	Mixture	Aggregates Allowed
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/]: 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 Leveling Binder IL-9.5 or IL-9.5L SMA Ndesign 50 Surface	<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/]
HMA High ESAL	D Surface and Leveling Binder IL-9.5 SMA Ndesign 50 Surface	<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/] Crushed Concrete[3/]
		<u>Other Combinations Allowed:</u> *Up to...* | *With...* 25% Limestone | Dolomite

Use	Mixture	Aggregates Allowed	
		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/]: Crushed Gravel Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete[3/] No Limestone.	
		<u>Other Combinations Allowed:</u>	
		Up to...	*With...*
		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 or Crushed Concrete[3/]	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag
HMA High ESAL	F Surface IL-9.5 SMA Ndesign 80 Surface	<u>Allowed Alone or in Combination</u> [5/]: Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.	
		<u>Other Combinations Allowed</u>:	

Use	Mixture	Aggregates Allowed	
		Up to...	*With...*
		50% Crushed Gravel, Crushed Concrete[3/], 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 shall not be used in SMA Ndesign 80. In SMA Ndesign 50, carbonate crushed stone shall not be blended with any of the other aggregates allowed alone in Ndesign 50 SMA binder or Ndesign 50 SMA surface.
3/ Crushed concrete will not be permitted in SMA mixes.
4/ Crushed steel slag shall not be used as leveling binder.
5/ When combinations of aggregates are used, the blend percent measurements shall be by volume."

80265

HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)

Effective: January 1, 2010
Revised: April 1, 2012

Description. This work shall consist of testing the density of longitudinal joints as part of the quality control/quality assurance (QC/QA) of hot-mix asphalt (HMA). Work shall be according to Section 1030 of the Standard Specifications except as follows.

Quality Control/Quality Assurance (QC/QA). Delete the second and third sentence of the third paragraph of Article 1030.05(d)(3) of the Standard Specifications.

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

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

a. Confined Edge. Each confined edge density shall be represented by a one-minute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.

b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced ten feet apart longitudinally along the unconfined pavement edge and centered at the random density test location."

Revise the Density Control Limits table in Article 1030.05(d)(4) of the Standard Specifications to read:

"Mixture Composition	Parameter	Individual Test (includes confined edges)	Unconfined Edge Joint Density Minimum
IL-4.75	Ndesign = 50	93.0 – 97.4%	91.0%
IL-9.5, IL-12.5	Ndesign ≥ 90	92.0 – 96.0%	90.0%
IL-9.5,IL-9.5L, IL-12.5	Ndesign < 90	92.5 – 97.4%	90.0%
IL-19.0, IL-25.0	Ndesign ≥ 90	93.0 – 96.0%	90.0%
IL-19.0, IL-19.0L, IL-25.0	Ndesign < 90	93.0 – 97.4%	90.0%

SMA	Ndesign = 50 & 80	93.5 – 97.4%	91.0%
All Other	Ndesign = 30	93.0 - 97.4%	90.0%"

80246

HOT MIX ASPHALT – PRIME COAT (BDE)

Effective: November 1, 2014

Revise Note 1 of Article 406.02 of the Standard Specifications to read:

"Note 1. The bituminous material used for prime coat shall be one of the types listed in the following table.

When emulsified asphalts are used, any dilution with water shall be performed by the emulsion producer. The emulsified asphalt shall be thoroughly agitated within 24 hours of application and show no separation of water and emulsion.

Application	Bituminous Material Types
Prime Coat on Brick, Concrete, or HMA Bases	SS-1, SS-1h, SS-1hP, SS-1vh, RS-1, RS-2, CSS-1, CSS-1h, CSS-1hp, CRS-1, CRS-2, HFE-90, RC-70
Prime Coat on Aggregate Bases	MC-30, PEP"

Add the following to Article 406.03 of the Standard Specifications.

"(i) Vacuum Sweeper 1101.19
(j) Spray Paver ..... 1102.06"

Revise Article 406.05(b) of the Standard Specifications to read:

"(b) Prime Coat. The bituminous material shall be prepared according to Article 403.05 and applied according to Article 403.10. The use of RC-70 shall be limited to air temperatures less than 60 °F (15 °C).

(1) Brick, Concrete or HMA Bases. The base shall be cleaned of all dust, debris and any substance that will prevent the prime coat from adhering to the base. Cleaning shall be accomplished by sweeping to remove all large particles and air blasting to remove dust. As an alternative to air blasting, a vacuum sweeper may be used to accomplish the dust removal. The base shall be free of standing water at the time of application. The prime coat shall be applied uniformly and at a rate that will provide a residual asphalt rate on the prepared surface as specified in the following table.

Type of Surface to be Primed	Residual Asphalt Rate lb/sq ft (kg/sq m)
Milled HMA, Aged Non-Milled HMA, Milled Concrete, Non-Milled Concrete & Tined Concrete	0.05 (0.244)
Fog Coat between HMA Lifts, IL-4.75 & Brick	0.025 (0.122)

The bituminous material for the prime coat shall be placed one lane at a time. If a spray paver is not used, the primed lane shall remain closed until the prime coat is

fully cured and does not pickup under traffic. When placing prime coat through an intersection where it is not possible to keep the lane closed, the prime coat may be covered immediately following its application with fine aggregate mechanically spread at a uniform rate of 2 to 4 lb/sq yd (1 to 2 kg/sq m).

(2) Aggregate Bases. The prime coat shall be applied uniformly and at a rate that will provide a residual asphalt rate on the prepared surface of 0.25 lb/sq ft ± 0.01 (1.21 kg/sq m ±0.05).

The prime coat shall be permitted to cure until the penetration has been approved by the Engineer, but at no time shall the curing period be less than 24 hours for MC-30 or four hours for PEP. Pools of prime occurring in the depressions shall be broomed or squeegeed over the surrounding surface the same day the prime coat is applied.

The base shall be primed 1/2 width at a time. The prime coat on the second half/width shall not be applied until the prime coat on the first half/width has cured so that it will not pickup under traffic.

The residual asphalt rate will be verified a minimum of once per type of surface to be primed as specified herein for which at least 2000 tons (1800 metric tons) of HMA will be placed. The test will be according to the "Determination of Residual Asphalt in Prime and Tack Coat Materials" test procedure.

Prime coat shall be fully cured prior to placement of HMA to prevent pickup by haul trucks or paving equipment. If pickup occurs, paving shall cease in order to provide additional cure time, and all areas where the pickup occurred shall be repaired.

If after five days, loss of prime coat is evident prior to covering with HMA, additional prime coat shall be placed as determined by the Engineer at no additional cost to the Department."

Revise the last sentence of the first paragraph of Article 406.13(b) of the Standard Specifications to read:

"Water added to emulsified asphalt, as allowed in Article 406.02, will not be included in the quantities measured for payment."

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

"Aggregate for covering prime coat will not be measured for payment."

Revise the first paragraph of Article 406.14 of the Standard Specifications to read:

"**406.14 Basis of Payment.** Prime Coat will be paid for at the contract unit price per pound (kilogram) of residual asphalt applied for BITUMINOUS MATERIALS (PRIME COAT), or POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)."

Revise Article 407.02 of the Standard Specifications to read:

"**407.02 Materials.** Materials shall be according to Article 406.02, except as follows.

Item	Article/Section
(a) Packaged Rapid Hardening Mortar or Concrete	1018"

Revise Article 407.06(b) of the Standard Specifications to read:

"(b) A bituminous prime coat shall be applied between each lift of HMA according to Article 406.05(b)."

Delete the second paragraph of Article 407.12 of the Standard Specifications.

Revise the first paragraph of Article 408.04 of the Standard Specifications to read:

"**408.04 Method of Measurement.** Bituminous priming material will be measured for payment according to Article 406.13."

Revise the first paragraph of Article 408.05 of the Standard Specifications to read:

"**408.05 Basis of Payment.** This work will be paid for at the contract unit price per pound (kilogram) of residual asphalt applied for BITUMINOUS MATERIALS (PRIME COAT) or POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT) and at the contract unit price per ton (metric ton) for INCIDENTAL HOT-MIX ASPHALT SURFACING."

Revise Article 1032.02 of the Standard Specifications to read:

"**1032.02 Measurement.** Asphalt binders, emulsified asphalts, rapid curing liquid asphalt, medium curing liquid asphalts, slow curing liquid asphalts, asphalt fillers, and road oils will be measured by weight.

A weight ticket for each truck load shall be furnished to the inspector. The truck shall be weighed at a location approved by the Engineer. The ticket shall show the weight of the empty truck (the truck being weighed each time before it is loaded), the weight of the loaded truck, and the net weight of the bituminous material.

When an emulsion or cutback is used for prime coat, the percentage of asphalt residue of the actual certified product shall be shown on the producer's bill of lading or attached certificate of analysis. If the producer adds extra water to an emulsion at the request of the purchaser, the amount of water shall also be shown on the bill of lading.

Payment will not be made for bituminous materials in excess of 105 percent of the amount specified by the Engineer."

Add the following to the table in Article 1032.04 of the Standard Specifications.

"SS-1vh	160-180	70-80
RS-1, CRS-1	75-130	25-55"

Add the following to Article 1032.06 of the Standard Specifications.

"(g) Non Tracking Emulsified Asphalt SS-1vh shall be according to the following.

Requirements for SS-1vh			
Test		SPEC	AASHTO Test Method
Saybolt Viscosity @ 25C,	SFS	20-200	T 72
Storage Stability, 24hr.,	%	1 max.	T 59
Residue by Evaporation,	%	50 min.	T 59
Sieve Test,	%	0.3 max.	T 59
Tests on Residue from Evaporation			
Penetration @25°C, 100g., 5 sec., dmm		20 max.	T 49
Softening Point,	°C	65 min.	T 53
Solubility,	%	97.5 min.	T 44
Orig. DSR @ 82°C,	kPa	1.00 min.	T 315"

Revise the last table in Article 1032.06(f)(2)d. of the Standard Specifications to read:

"Grade	Use
SS-1, SS-1h, RS-1, RS-2, CSS-1, CRS-1, CRS-2, CSS-1h, HFE-90, SS-1hP, CSS-1hP, SS-1vh	Prime or fog seal
PEP	Bituminous surface treatment prime
RS-2, HFE-90, HFE-150, HFE- 300, CRSP, HFP, CRS-2, HFRS-2	Bituminous surface treatment
CSS-1h Latex Modified	Microsurfacing"

Add the following to Article 1101 of the Standard Specifications.

"**1101.19 Vacuum Sweeper.** The vacuum sweeper shall have a minimum sweeping path of 52 in. (1.3 m) and a minimum blower rating of 20,000 cu ft per minute (566 cu m per minute)."

Add the following to Article 1102 of the Standard Specifications:

"**1102.06 Spray Paver.** The spreading and finishing machine shall be capable of spraying a rapid setting emulsion tack coat, paving a layer of HMA, and providing a smooth HMA mat in one pass. The HMA shall be spread over the tack coat in less than five seconds after the

application of the tack coat during normal paving speeds. No wheel or other part of the paving machine shall come into contact with the tack coat before the HMA is applied. In addition to meeting the requirements of Article 1102.03, the spray paver shall also meet the requirements of Article 1102.05 for the tank, heating system, pump, thermometer, tachometer or synchronizer, and calibration. The spray bar shall be equipped with properly sized and spaced nozzles to apply a uniform application of tack coat at the specified rate for the full width of the mat being placed."

80348

LRFD PIPE CULVERT BURIAL TABLES (BDE)

Effective: November 1, 2013
Revised: November 1, 2014

Revise Article 542.02 of the Standard Specifications to read as follows:

"Item	Article/Section
(a) Galvanized Corrugated Steel Pipe	1006.01
(b) Galvanized Corrugated Steel Pipe Arch	1006.01
(c) Bituminous Coated Corrugated Steel Pipe	1006.01
(d) Bituminous Coated Corrugated Steel Pipe Arch	1006.01
(e) Reserved	
(f) Aluminized Steel Type 2 Corrugated Pipe	1006.01
(g) Aluminized Steel Type 2 Corrugated Pipe Arch	1006.01
(h) Precoated Galvanized Corrugated Steel Pipe	1006.01
(i) Precoated Galvanized Corrugated Steel Pipe Arch	1006.01
(j) Corrugated Aluminum Alloy Pipe	1006.03
(k) Corrugated Aluminum Alloy Pipe Arch	1006.03
(l) Extra Strength Clay Pipe	1040.02
(m) Concrete Sewer, Storm Drain, and Culvert Pipe	1042
(n) Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe	1042
(o) Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe	1042
(p) Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe	1042
(q) Polyvinyl Chloride (PVC) Pipe	1040.03
(r) Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior	1040.03
(s) Corrugated Polypropylene (CPP) pipe with smooth Interior	1040.07
(t) Corrugated Polyethylene (PE) Pipe with a Smooth Interior	1040.04
(u) Polyethylene (PE) Pipe with a Smooth Interior	1040.04
(v) Rubber Gaskets and Preformed Flexible Joint Sealants for Concrete Pipe	1056
(w) Mastic Joint Sealer for Pipe	1055
(x) External Sealing Band	1057
(y) Fine Aggregate (Note 1)	1003.04
(z) Coarse Aggregate (Note 2)	1004.05
(aa) Packaged Rapid Hardening Mortar or Concrete	1018
(bb) Nonshrink Grout	1024.02
(cc) Reinforcement Bars and Welded Wire Fabric	1006.10
(dd) Handling Hole Plugs	1042.16

Note 1. The fine aggregate shall be moist.

Note 2. The coarse aggregate shall be wet."

Revise the table for permitted materials in Article 542.03 of the Standard Specifications as follows:

"Class	Materials
A	Rigid Pipes: Extra Strength Clay Pipe Concrete Sewer Storm Drain and Culvert Pipe, Class 3 Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
C	Rigid Pipes: Extra Strength Clay Pipe Concrete Sewer Storm Drain and Culvert Pipe, Class 3 Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe Flexible Pipes: Aluminized Steel Type 2 Corrugated Pipe Aluminized Steel Type 2 Corrugated Pipe Arch Precoated Galvanized Corrugated Steel Pipe Precoated Galvanized Corrugated Steel Pipe Arch Corrugated Aluminum Alloy Pipe Corrugated Aluminum Alloy Pipe Arch Polyvinyl Chloride (PVC) Pipe Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior Polyethylene (PE) Pipe with a Smooth Interior Corrugated Polypropylene (CPP) Pipe with Smooth Interior
D	Rigid Pipes: Extra Strength Clay Pipe Concrete Sewer Storm Drain and Culvert Pipe, Class 3 Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe Flexible Pipes: Galvanized Corrugated Steel Pipe Galvanized Corrugated Steel Pipe Arch Bituminous Coated Corrugated Steel Pipe Bituminous Coated Corrugated Steel Pipe Arch Aluminized Steel Type 2 Corrugated Pipe Aluminized Steel Type 2 Corrugated Pipe Arch Precoated Galvanized Corrugated Steel Pipe Precoated Galvanized Corrugated Steel Pipe Arch Corrugated Aluminum Alloy Pipe Corrugated Aluminum Alloy Pipe Arch Polyvinyl Chloride (PVC) Pipe Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior Corrugated Polyethylene (PE) Pipe with a Smooth Interior Polyethylene (PE) Pipe with a Smooth Interior" Corrugated Polypropylene (CPP) Pipe with Smooth Interior

Revise Articles 542.03(b) and (c) of the Standard Specifications to read:

"(b) Extra strength clay pipe will only be permitted for pipe culverts Type 1, for 10 in., 12 in., 42 in. and 48 in. (250 mm, 300 mm, 1050 mm and 1200 mm), Types 2, up to and including 48 in. (1200 mm), Type 3, up to and including 18 in. (450 mm), Type 4 up to and including 10 in. (250 mm), for all pipe classes.

(c) Concrete sewer, storm drain, and culvert pipe Class 3 will only be permitted for pipe culverts Type 1, up to and including 10 in (250 mm), Type 2, up to and including 30 in. (750 mm), Type 3, up to and including 15 in. (375 mm); Type 4, up to and including 10 in. (250 mm), for all pipe classes."

Replace the pipe tables in Article 542.03 of the Standard Specifications with the following:

"Table IA: Classes of Reinforced Concrete Pipe
for the Respective Diameters of Pipe and Fill Heights over the Top of the Pipe

Nominal Diameter in.	Type 1 Fill Height: 3' and less 1' min cover	Type 2 Fill Height: Greater than 3' not exceeding 10'	Type 3 Fill Height: Greater than 10' not exceeding 15'	Type 4 Fill Height: Greater than 15' not exceeding 20'	Type 5 Fill Height: Greater than 20' not exceeding 25'	Type 6 Fill Height: Greater than 25' not exceeding 30'	Type 7 Fill Height: Greater than 30' not exceeding 35'
12	IV	II	III	IV	IV	V	V
15	IV	II	III	IV	IV	V	V
18	IV	II	III	IV	IV	V	V
21	III	II	III	IV	IV	V	V
24	III	II	III	IV	IV	V	V
30	IV	II	III	IV	IV	V	V
36	III	II	III	IV	IV	V	V
42	II	II	III	IV	IV	V	V
48	II	II	III	IV	IV	V	V
54	II	II	III	IV	IV	V	V
60	II	II	III	IV	IV	V	V
66	II	II	III	IV	IV	V	V
72	II	II	III	IV	V	V	V
78	II	II	III	IV	2020	2370	2730
84	II	II	III	IV	2020	2380	2740
90	II	II	III	1680	2030	2390	2750
96	II	III	III	1690	2040	2400	2750
102	II	III	III	1700	2050	2410	2760
108	II	III	1360	1710	2060	2410	2770

Notes:
A number indicates the D-Load for the diameter and depth of fill and that a special design is required.
Design assumptions; Water filled pipe, Type 2 bedding and Class C Walls

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Table IA: Classes of Reinforced Concrete Pipe
for the Respective Diameters of Pipe and Fill Heights over the Top of the Pipe
(Metric)

Nominal Diameter mm	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6	Type 7
	Fill Height:	Fill Height:	Fill Height:	Fill Height:	Fill Height:	Fill Height:	Fill Height:
	1 m and less 0.3 m min cover	Greater than 1 m not exceeding 3 m	Greater than 3 m not exceeding 4.5 m	Greater than 4.5 m not exceeding 6 m	Greater than 6 m not exceeding 7.5 m	Greater than 7.5 m not exceeding 9 m	Greater than 9 m not exceeding 10.5 m
300	IV	II	III	IV	IV	V	V
375	IV	II	III	IV	IV	V	V
450	IV	II	III	IV	IV	V	V
525	III	II	III	IV	IV	V	V
600	III	II	III	IV	IV	V	V
750	IV	II	III	IV	IV	V	V
900	III	II	III	IV	IV	V	V
1050	II	II	III	IV	IV	V	V
1200	II	II	III	IV	IV	V	V
1350	II	II	III	IV	IV	V	V
1500	II	II	III	IV	IV	V	V
1650	II	II	III	IV	IV	V	V
1800	II	II	III	IV	V	V	V
1950	II	II	III	IV	100	110	130
2100	II	II	III	IV	100	110	130
2250	II	II	III	80	100	110	130
2400	II	III	III	80	100	110	130
2550	II	III	III	80	100	120	130
2700	II	III	70	80	100	120	130

Notes:
A number indicates the D-Load for the diameter and depth of fill and that a special design is required.
Design assumptions; Water filled pipe, Type 2 bedding and Class C Walls

TABLE IB: THICKNESS OF CORRUGATED STEEL PIPE
FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 2 2/3"x1/2", 3"x1" AND 5"x1" CORRUGATIONS

Nominal Diameter in.*	Type 1			Type 2			Type 3			Type 4			Type 5			Type 6			Type 7		
	Fill Height: 3' and less 1' min. cover			Fill Height: Greater than 3' not exceeding 10'			Fill Height: Greater than 10' not exceeding 15'			Fill Height: Greater than 15' not exceeding 20'			Fill Height: Greater than 20' not exceeding 25'			Fill Height: Greater than 25' not exceeding 30'			Fill Height: Greater than 30' not exceeding 35'		
	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"
12	0.064			0.064			0.064			0.064			0.064			0.064			0.064		
15	0.064			0.064			0.064			0.064			0.064			0.064			(0.079)		
18	(0.079)			0.064			0.064			0.064			0.064			(0.079)			(0.079)		
21	(0.079)			0.064			0.064			0.064			(0.079)			(0.079)			(0.079)		
24	(0.079)			0.064			0.064			0.064			(0.079)			(0.079)			(0.109)		
30	(0.109E)			0.064			0.064			(0.079)			(0.079)			(0.109)			0.109		
36	(0.109E)			0.064			(0.079)			(0.079)			(0.109)			0.109			(0.138E)		
42	0.079			0.064			(0.079)			(0.079)			(0.109)			(0.109E)			(0.109E)		
48	0.109	(0.109)	0.109	(0.109)	0.079	0.079	(0.109)	0.079	(0.109)	0.109	(0.109)	0.109	(0.138)	(0.109)	0.109	(0.138E)	0.109	0.109	(0.138E)	0.109	(0.138)
54	0.109	(0.109)	0.109	(0.109)	0.079	0.079	0.109	(0.109)	0.109	0.109	(0.109)	0.109	(0.138)	0.109	0.109	(0.138E)	0.109	(0.138)	(0.138E)	0.138	0.138
60	0.109	0.109	0.109	0.109	0.079	(0.109)	0.109	(0.109)	0.109	0.109	(0.109)	0.109	(0.138)	0.109	0.109	(0.138E)	(0.138)	(0.138)	0.138E	(0.138E)	(0.138E)
66	(0.138)	0.109	0.109	0.109	0.079	(0.109)	0.109	(0.109)	0.109	0.109	0.109	0.109	(0.138)	0.109	(0.138)	(0.138E)	0.138	0.138	0.138E	(0.138E)	0.138E
72	0.138	0.109	(0.138)	0.138	(0.109)	(0.109)	0.138	(0.109)	0.109	0.138	0.109	0.109	0.138	(0.138)	(0.138)	(0.168E)	(0.138E)	0.138E	(0.168E)	(0.138E)	0.138E
78	0.168	0.109	(0.138)	0.168	(0.109)	0.109	0.168	0.109	0.109	0.168	0.109	(0.138)	0.168	(0.138)	(0.138)	H0.168E	(0.138E)	0.138E	H0.168E	0.138E	(0.168E)
84	0.168	(0.138)	(0.138)	0.168	(0.109)	0.109	0.168	0.109	0.109	0.168	0.109	(0.138)	0.168	(0.138)	0.138	H0.168E	(0.138E)	0.138E	H0.168E	(0.168E)	(0.168E)
90		(0.138)	(0.138)		(0.109)	0.109		0.109	0.109		(0.138)	(0.138)		(0.138)	0.138		0.138E	(0.168E)		(0.168E)	(0.168E)
96		(0.138)	(0.138)		(0.109)	0.109		0.109	0.109		(0.138)	(0.138)		(0.138)	0.138		(0.168E)	(0.168E)		(0.168E)	(0.168E)
102		0.109Z	0.109Z		(0.109)	0.109		0.109	(0.138)		(0.138)	(0.138)		(0.138)	0.138		(0.168E)	(0.168E)		H0.138E	H0.168E
108		0.109Z	(0.138Z)		0.109	0.109		0.109	(0.138)		(0.138)	0.138		0.138	(0.168)		(0.168E)	(0.168E)		H0.138E	H0.168E
114		0.109Z	(0.138Z)		0.109	0.109		0.109	(0.138)		(0.138)	0.138		(0.168)	(0.168)		(0.168E)	0.168E		H0.138E	H0.168E
120		0.109Z	(0.138Z)		0.109	0.109		(0.138)	(0.138)		(0.138)	0.138		(0.168)	(0.168)		H0.138E	H0.168E		H0.168E	H0.168E
126		0.138Z	0.138Z		0.138	0.138		0.138	0.138		0.138	(0.168)		(0.168)	(0.168)		H0.138E	H0.168E		H0.168E	H0.168E
132		0.138Z	0.138Z		0.138	0.138		0.138	0.138		(0.168)	(0.168)		0.168	0.168		H0.138E	H0.168E		H0.168E	H0.168E
138		0.138Z	0.138Z		0.138	0.138		0.138	0.138		(0.168)	(0.168)		(0.168E)	H0.168E		H0.168E	H0.168E		H0.168E	
144		0.168Z	0.168Z		0.168	0.168		0.168	0.168		0.168	0.168		H0.168E	H0.168E		H0.168E	H0.168E		H0.168E	

Notes:
* Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for diameters up to 42" according to Article 1006.01, 1 1/2" x 1/4" corrugations shall be used for diameters less than 12".
Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized.
A thickness preceded by "H" indicates only helical seam fabrication is allowed.
E Elongation according to Article 542.04(e)
Z 1'-6" Minimum fill

TABLE IB: THICKNESS OF CORRUGATED STEEL PIPE
FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 68 mm x 13 mm, 75 mm x 25 mm AND 125 mm x 25 mm CORRUGATIONS
(Metric)

Nominal Diameter mm*	Type 1 Fill Height: 1 m and less 0.3 m min. cover			Type 2 Fill Height: Greater than 1 m not exceeding 3 m			Type 3 Fill Height: Greater than 3 m not exceeding 4.5 m			Type 4 Fill Height: Greater than 4.5 m not exceeding 6 m			Type 5 Fill Height: Greater than 6 m not exceeding 7.5 m			Type 6 Fill Height: Greater than 7.5 m not exceeding 9 m			Type 7 Fill Height: Greater than 9 m not exceeding 10.5 m		
	68 x 13 mm	75 x 25 mm	125 x 25 mm	68 x 13 mm	75 x 25 mm	125 x 25 mm	68 x 13 mm	75 x 25 mm	125 x 25 mm	68 x 13 mm	75 x 25 mm	125 x 25 mm	68 x 13 mm	75 x 25 mm	125 x 25 mm	68 x 13 mm	75 x 25 mm	125 x 25 mm	68 x 13 mm	75 x 25 mm	125 x 25 mm
300	1.63			1.63			1.63			1.63			1.63			1.63			1.63		
375	1.63			1.63			1.63			1.63			1.63			1.63			(2.01)		
450	(2.01)			1.63			1.63			1.63			1.63			(2.01)			(2.01)		
525	(2.01)			1.63			1.63			1.63			(2.01)			(2.01)			(2.01)		
600	(2.01)			1.63			1.63			1.63			(2.01)			(2.01)			(2.77)		
750	(2.77E)			1.63			1.63			(2.01)			(2.01)			(2.77)			2.77		
900	(2.77E)			1.63			(2.01)			(2.01)			(2.77)			2.77			(3.51E)		
1050	2.01			1.63			(2.01)			(2.01)			(2.77)			(2.77E)			(2.77E)		
1200	2.77	(2.77)	2.77	(2.77)	2.01	2.01	(2.77)	2.01	(2.77)	2.77	(2.77)	2.77	(3.51)	(2.77)	2.77	(3.51E)	2.77	2.77	(3.51E)	2.77	(3.51)
1350	2.77	(2.77)	2.77	(2.77)	2.01	2.01	2.77	(2.77)	2.77	2.77	(2.77)	2.77	(3.51)	2.77	2.77	(3.51E)	2.77	(3.51)	(3.51E)	3.51	3.51
1500	2.77	2.77	2.77	2.77	2.01	(2.77)	2.77	(2.77)	2.77	2.77	(2.77)	2.77	(3.51)	2.77	2.77	(3.51E)	(3.51)	(3.51)	3.51E	(3.51E)	(3.51E)
1650	(3.51)	2.77	2.77	2.77	2.01	(2.77)	2.77	(2.77)	2.77	2.77	2.77	2.77	(3.51)	2.77	(3.51)	(3.51E)	3.51	3.51	3.51E	(3.51E)	3.51E
1800	3.51	2.77	(3.51)	3.51	(2.77)	(2.77)	3.51	(2.77)	2.77	3.51	2.77	2.77	3.51	(3.51)	(3.51)	(4.27E)	(3.51E)	3.51E	(4.27E)	(3.51E)	3.51E
1950	4.27	2.77	(3.51)	4.27	(2.77)	2.77	4.27	2.77	2.77	4.27	2.77	(3.51)	4.27	(3.51)	(3.51)	H 4.27E	(3.51E)	3.51E	H 4.27E	3.51E	(4.27E)
2100	4.27	(3.51)	(3.51)	4.27	(2.77)	2.77	4.27	2.77	2.77	4.27	2.77	(3.51)	4.27	(3.51)	3.51	H 4.27E	(3.51E)	3.51E	H 4.27E	(4.27E)	(4.27E)
2250		(3.51)	(3.51)		(2.77)	2.77		2.77	2.77		(3.51)	(3.51)		(3.51)	3.51		3.51E	(4.27E)		(4.27E)	(4.27E)
2400		(3.51)	(3.51)		(2.77)	2.77		2.77	2.77		(3.51)	(3.51)		(3.51)	3.51		(4.27E)	(4.27E)		(4.27E)	(4.27E)
2550		2.77Z	2.77Z		(2.77)	2.77		2.77	(3.51)		(3.51)	(3.51)		(3.51)	3.51		(4.27E)	(4.27E)		H 3.51E	H 4.27E
2700		2.77Z	(3.51Z)		2.77	2.77		2.77	(3.51)		(3.51)	3.51		3.51	(4.27)		(4.27E)	(4.27E)		H 3.51E	H 4.27E
2850		2.77Z	(3.51Z)		2.77	2.77		2.77	(3.51)		(3.51)	3.51		(4.27)	(4.27)		(4.27E)	4.27E		H 3.51E	H 4.27E
3000		2.77Z	(3.51Z)		2.77	2.77		(3.51)	(3.51)		(3.51)	3.51		(4.27)	(4.27)		H 3.51E	H 4.27E		H 4.27E	H 4.27E
3150		3.51Z	3.51Z		3.51	3.51		3.51	3.51		3.51	(4.27)		(4.27)	(4.27)		H 3.51E	H 4.27E		H 4.27E	H 4.27E
3300		3.51Z	3.51Z		3.51	3.51		3.51	3.51		(4.27)	(4.27)		4.27	4.27		H 3.51E	H 4.27E		H 4.27E	H 4.27E
3450		3.51Z	3.51Z		3.51	3.51		3.51	3.51		(4.27)	(4.27)		(4.27E)	H 4.27E		H 4.27E	H 4.27E		H 4.27E	
3600		4.27Z	4.27Z		4.27	4.27		4.27	4.27		4.27	4.27		H 4.27E	H 4.27E		H 4.27E	H 4.27E		H 4.27E	

Notes:

* Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for diameters up to 1050 mm according to Article 1006.01, 38 mm x 6.5 mm corrugations shall be used for diameters less than 300 mm.

Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized.

A thickness preceded by an "H" indicates only helical seam fabrication is allowed.

E Elongation according to Article 542.04(e)

Z 450 mm Minimum Fill

TABLE IC: THICKNESS OF CORRUGATED ALUMINUM ALLOY PIPE
FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 2 2/3"x1/2" AND 3"x1" CORRUGATIONS

Nominal Diameter in.	Type 1 Fill Height: 3' and less 1' min. cover		Type 2 Fill Height: Greater than 3' not exceeding 10'		Type 3 Fill Height: Greater than 10' not exceeding 15'		Type 4 Fill Height: Greater than 15' not exceeding 20'		Type 5 Fill Height: Greater than 20' not exceeding 25'		Type 6 Fill Height: Greater than 25' not exceeding 30'		Type 7 Fill Height: Greater than 30' not exceeding 35'	
	2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"
12	(0.075)		0.060		0.060		0.060		0.060		0.060		0.060	
15	(0.075)		0.060		0.060		0.060		0.060		0.060		(0.075)	
18	(0.075)		0.060		0.060		0.060		0.060		(0.075)		H 0.060	
21	H 0.060E		0.060		0.060		0.060		(0.075)		H 0.060		H 0.060E	
24	(0.105E)		0.060		0.060		(0.075)		(0.105)		(0.105)		(0.105E)	
30	H 0.075E	H 0.060	0.075	H 0.060	0.075	H 0.060	(0.105)	H 0.060	(0.105)	H 0.060	H 0.075E	H 0.060	H 0.075E	H 0.060
36	(0.135E)	H 0.060E	0.075	H 0.060	(0.105)	H 0.060	(0.105)	H 0.060	(0.135)	H 0.060	H 0.075E	H 0.060	H 0.075E	H 0.060E
42	0.105E	(0.075)	0.105	0.060	0.105	0.060	0.105	0.060	0.105	(0.075)	0.105E	0.105	0.105E	(0.105E)
48	0.105E	(0.075)	0.105	0.060	0.105	0.060	0.105	(0.075)	0.105	(0.105)	0.105E	(0.105E)	0.105E	(0.135E)
54	0.105E	(0.105)	0.105	0.060	0.105	0.060	0.105	(0.075)	0.105	(0.105)	0.105E	(0.105E)	(0.135E)	(0.135E)
60	0.135E	(0.105)	0.135	0.060	0.135	(0.075)	0.135	(0.105)	0.135	(0.105)	0.135E	(0.135E)	(0.164E)	(0.135E)
66	0.164E	(0.105)	0.164	0.060	0.164	(0.075)	0.164	(0.105)	0.164	(0.135)	0.164E	(0.135E)	H 0.164E	(0.135E)
72	0.164E	(0.105)	0.164	0.060	0.164	(0.075)	0.164	(0.105)	0.164	(0.135)	H 0.164E	(0.135E)	H 0.164E	(0.164E)
78		(0.135)		0.075		(0.105)		(0.105)		(0.135)		(0.135E)		(0.164E)
84		(0.135)		0.105		0.105		(0.135)		(0.135)		(0.164E)		(0.164E)
90		(0.135)		0.105		0.105		(0.135)		(0.135)		(0.164E)		(0.164E)
96		(0.135)		0.105		0.105		(0.135)		(0.135)		(0.164E)		H 0.135E
102		0.135Z		0.135		0.135		0.135		(0.164)		(0.164E)		H 0.135E
108		0.135Z		0.135		0.135		0.135		(0.164)		(0.164E)		H 0.164E
114		0.164Z		0.164		0.164		0.164		0.164		H 0.164E		H 0.164E
120		0.164Z		0.164		0.164		0.164		0.164		H 0.164E		

Notes:
Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized.
A thickness preceded by an "H" indicates only helical seam fabrication is allowed.
E Elongation according to Article 542.04(e), the elongation requirement for Type 1 fill heights may be eliminated for fills above 1'-6"
Z 1'-6" Minimum fill

TABLE IC: THICKNESS OF CORRUGATED ALUMINUM ALLOY PIPE
FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE
FOR 68 mm x 13 mm AND 75 mm x 25 mm CORRUGATIONS
(Metric)

Nominal Diameter mm	Type 1 Fill Height: 1 m and less 0.3 m min. cover		Type 2 Fill Height: Greater than 1 m not exceeding 3 m		Type 3 Fill Height: Greater than 3 m not exceeding 4.5 m		Type 4 Fill Height: Greater than 4.5 m not exceeding 6 m		Type 5 Fill Height: Greater than 6 m not exceeding 7.5 m		Type 6 Fill Height: Greater than 7.5 m not exceeding 9 m		Type 7 Fill Height: Greater than 9 m not exceeding 10.5 m	
	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm
300	(1.91)		1.52		1.52		1.52		1.52		1.52		1.52	
375	(1.91)		1.52		1.52		1.52		1.52		1.52		(1.91)	
450	(1.91)		1.52		1.52		1.52		1.52		(1.91)		H 1.52	
525	H 1.52E		1.52		1.52		1.52		(1.91)		H 1.52		H 1.52E	
600	(2.67E)		1.52		1.52		(1.91)		(2.67)		(2.67)		(2.67E)	
750	H 1.91E	H 1.52	1.91	H 1.52	1.91	H 1.52	(2.67)	H 1.52	(2.67)	H 1.52	H 1.91E	H 1.52	H 1.91E	H 1.52
900	(3.43E)	H 1.52E	1.91	H 1.52	(2.67)	H 1.52	(2.67)	H 1.52	(3.43)	H 1.52	H 1.91E	H 1.52	H 1.91E	H 1.52E
1050	2.67E	(1.91)	2.67	1.52	2.67	1.52	2.67	1.52	2.67	(1.91)	2.67E	2.67	2.67E	(2.67E)
1200	2.67E	(1.91)	2.67	1.52	2.67	1.52	2.67	(1.91)	2.67	(2.67)	2.67E	(2.67E)	2.67E	(3.43E)
1350	2.67E	(2.67)	2.67	1.52	2.67	1.52	2.67	(1.91)	2.67	(2.67)	2.67E	(2.67E)	(3.43E)	(3.43E)
1500	3.43E	(2.67)	3.43	1.52	3.43	(1.91)	3.43	(2.67)	3.43	(2.67)	3.43E	(3.43E)	(4.17E)	(3.43E)
1650	4.17E	(2.67)	4.17	1.52	4.17	(1.91)	4.17	(2.67)	4.17	(3.43)	4.17E	(3.43E)	H 4.17E	(3.43E)
1800	4.17E	(2.67)	4.17	1.52	4.17	(1.91)	4.17	(2.67)	4.17	(3.43)	H 4.17E	(3.43E)	H 4.17E	(4.17E)
1950		(3.43)		1.91		(2.67)		(2.67)		(3.43)		(3.43E)		(4.17E)
2100		(3.43)		2.67		2.67		(3.43)		(3.43)		(4.17E)		(4.17E)
2250		(3.43)		2.67		2.67		(3.43)		(3.43)		(4.17E)		(4.17E)
2400		(3.43)		2.67		2.67		(3.43)		(3.43)		(4.17E)		H 3.43E
2550		3.43Z		3.43		3.43		3.43		(4.17)		(4.17E)		H 3.43E
2700		3.43Z		3.43		3.43		3.43		(4.17)		(4.17E)		H 4.17E
2850		4.17Z		4.17		4.17		4.17		4.17		H 4.17E		H 4.17E
3000		4.17Z		4.17		4.17		4.17		4.17		H 4.17E		

Notes:
Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized.
A thickness preceded by an "H" indicates only helical seam fabrication is allowed.
E Elongation according to Article 542.04(e), the elongation requirement for Type 1 fill heights may be eliminated for fills above 450 mm.
Z 450 mm Minimum fill

Table IIA: THICKNESS FOR CORRUGATED STEEL PIPE ARCHES AND CORRUGATED ALUMINUM ALLOY PIPE ARCHES FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE

Equivalent Round Size in.	Corrugated Steel & Aluminum Pipe Arch 2 2/3" x 1/2"		Corrugated Steel & Aluminum Pipe Arch 3" x 1"		Corrugated Steel Pipe Arch 5" x 1"		Min. Cover	Type 1					Type 2					Type 3				
								Fill Height: 3' and less					Fill Height: Greater than 3' not exceeding 10'					Fill Height: Greater than 10' not exceeding 15'				
								Steel			Aluminum		Steel			Aluminum		Steel			Aluminum	
	Span (in.)*	Rise (in.)	Span (in.)	Rise (in.)	Span (in.)	Rise (in.)	Steel & Aluminum	2 2/3" x 1/2"	3"x1"	5" x 1"	2 2/3" x 1/2"	3"x1"	2 2/3" x 1/2"	3"x1"	5" x 1"	2 2/3" x 1/2"	3"x1"	2 2/3" x 1/2"	3"x1"	5" x 1"	2 2/3" x 1/2"	3"x1"
15	17	13					1'-6"	0.064			0.060		0.064			0.060		0.064			0.060	
18	21	15					1'-6"	0.064			0.060		0.064			0.060		0.064			0.060	
21	24	18					1'-6"	0.064			(0.075)		0.064			0.060		0.064			0.060	
24	28	20					1'-6"	(0.079)			(0.105)		0.064			0.075		0.064			0.075	
30	35	24					1'-6"	(0.079)			(0.105)		0.064			0.075		(0.079)			(0.105)	
36	42	29					1'-6"	(0.079)			0.105		0.064			0.105		0.064			0.105	
42	49	33					1'-6"	0.109			0.105		(0.109)			0.105		(0.109)			0.105	
48	57	38	53	41	53	41	1'-6"	0.109	(0.109)	(0.109)	0.135	0.060	0.109	0.079	0.079	0.135	0.060	0.109	0.079	(0.109)	0.135	0.060
54	64	43	60	46	60	46	1'-6"	0.109	(0.109)	0.109	0.164	(0.075)	0.109	0.079	0.079	0.164	0.060	0.109	(0.109)	0.109	0.164	(0.075)
60	71	47	66	51	66	51	1'-6"	0.138	(0.109)	0.109	0.164	(0.075)	0.138	0.079	(0.109)	0.164	0.060	0.138	(0.109)	0.109	0.164	(0.075)
66	77	52	73	55	73	55	1'-6"	0.168	(0.109)	0.109		0.075	0.168	0.079	(0.109)		0.075	0.168	(0.109)	0.109		0.075
72	83	57	81	59	81	59	1'-6"	0.168	(0.109)	0.109		0.105	0.168	0.079	(0.109)		0.105	0.168	(0.109)	0.109		0.105
78			87	63	87	63	1'-6"		0.109	0.109		0.105		(0.109)	0.109		0.105		0.109	0.109		0.105
84			95	67	95	67	1'-6"		0.109	0.109		0.105		(0.109)	0.109		0.105		0.109	0.109		0.105
90			103	71	103	71	1'-6"		0.109	0.109		0.135		(0.109)	0.109		0.135		0.109	0.109		0.135
96			112	75	112	75	1'-6"		0.109	(0.138)		0.164		0.109	0.109		0.164		0.109	(0.138)		0.164
102			117	79	117	79	1'-6"		0.109	(0.138)		0.164		0.109	0.109		0.164		0.109	(0.138)		0.164
108			128	83	128	83	1'-6"		0.138	0.138				0.138	0.138				0.138	0.138		
114			137	87	137	87	1'-6"		0.138	0.138				0.138	0.138				0.138	0.138		
120			142	91	142	91	1'-6"		0.168	0.168				0.168	0.168				0.168	0.168		

Notes:

* Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for steel spans up to 42" according to Article 1006.01.

Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized.

The Type 1 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 3 tons per square foot.

The Type 2 and 3 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 2 tons per square foot.

This minimum bearing capacity will be determined by the Engineer in the field.

Table IIA: THICKNESS FOR CORRUGATED STEEL PIPE ARCHES AND CORRUGATED ALUMINUM ALLOY PIPE ARCHES FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE
(Metric)

Equivalent Round Size (mm)	Corrugated Steel & Aluminum Pipe Arch 68 x 13 mm		Corrugated Steel & Aluminum Pipe Arch 75 x 25 mm		Corrugated Steel Pipe Arch 125 x 25 mm		Min. Cover	Type 1					Type 2					Type 3				
								Fill Height: 1 m and less					Fill Height: Greater than 1 m not exceeding 3 m					Fill Height: Greater than 3 m not exceeding 4.5 m				
								Steel			Aluminum		Steel			Aluminum		Steel			Aluminum	
	Span (mm)*	Rise (mm)	Span (mm)	Rise (mm)	Span (mm)	Rise (mm)	Steel & Aluminum	68 x 13 mm	75 x 25 mm	125 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	125 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	125 x 25 mm	68 x 13 mm	75 x 25 mm
375	430	330					0.5 m	1.63			1.52		1.63			1.52		1.63			1.52	
450	530	380					0.5 m	1.63			1.52		1.63			1.52		1.63			1.52	
525	610	460					0.5 m	1.63			(1.91)		1.63			1.52		1.63			1.52	
600	710	510					0.5 m	(2.01)			(2.67)		1.63			1.91		1.63			1.91	
750	870	630					0.5 m	(2.01)			(2.67)		1.63			1.91		(2.01)			(2.67)	
900	1060	740					0.5 m	(2.01)			2.67		1.63			2.67		1.63			2.67	
1050	1240	840					0.5 m	2.77			2.67		(2.77)			2.67		(2.77)			2.67	
1200	1440	970	1340	1050	1340	1050	0.5 m	2.77	(2.77)	(2.77)	3.43	1.52	2.77	2.01	2.01	3.43	1.52	2.77	2.01	(2.77)	3.43	1.52
1350	1620	1100	1520	1170	1520	1170	0.5 m	2.77	(2.77)	2.77	4.17	(1.91)	2.77	2.01	2.01	4.17	1.52	2.77	(2.77)	2.77	4.17	(1.91)
1500	1800	1200	1670	1300	1670	1300	0.5 m	3.51	(2.77)	2.77	4.17	(1.91)	3.51	2.01	(2.77)	4.17	1.52	3.51	(2.77)	2.77	4.17	(1.91)
1650	1950	1320	1850	1400	1850	1400	0.5 m	4.27	(2.77)	2.77		1.91	4.27	2.01	(2.77)		1.91	4.27	(2.77)	2.77		1.91
1800	2100	1450	2050	1500	2050	1500	0.5 m	4.27	(2.77)	2.77		2.67	4.27	2.01	(2.77)		2.67	4.27	(2.77)	2.77		2.67
1950			2200	1620	2200	1620	0.5 m		2.77	2.77		2.67		(2.77)	2.77		2.67		2.77	2.77		2.67
2100			2400	1720	2400	1720	0.5 m		2.77	2.77		2.67		(2.77)	2.77		2.67		2.77	2.77		2.67
2250			2600	1820	2600	1820	0.5 m		2.77	2.77		3.43		(2.77)	2.77		3.43		2.77	2.77		3.43
2400			2840	1920	2840	1920	0.5 m		2.77	(3.51)		4.17		2.77	2.77		4.17		2.77	(3.51)		4.17
2550			2970	2020	2970	2020	0.5 m		2.77	(3.51)		4.17		2.77	2.77		4.17		2.77	(3.51)		4.17
2700			3240	2120	3240	2120	0.5 m		3.51	3.51				3.51	3.51				3.51	3.51		
2850			3470	2220	3470	2220	0.5 m		3.51	3.51				3.51	3.51				3.51	3.51		
3000			3600	2320	3600	2320	0.5 m		4.27	4.27				4.27	4.27				4.27	4.27		

Notes:

* Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for steel spans up to 1060 mm according to Article 1006.01.

Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized.

The Type 1 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 290 kN per square meter.

The Type 2 and 3 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 192 kN per square meter.

This minimum bearing capacity will be determined by the Engineer in the field.

Table IIB: CLASSES OF REINFORCED CONCRETE ELLIPTICALL AND REINFORCED CONCRETE ARCH PIPE FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE											
Equivalent Round Size (in.)	Reinforced Concrete Elliptical pipe (in.)		Reinforced Concrete Arch pipe (in.)		Minimum Cover	Type 1		Type 2		Type 3	
						Fill Height: 3' and less		Fill Height: Greater than 3' not exceeding 10'		Fill Height: Greater than 10' not exceeding 15'	
	Span	Rise	Span	Rise	RCCP HE & A	HE	Arch	HE	Arch	HE	Arch
15	23	14	18	11	1' -0"	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
18	23	14	22	13 1/2	1' -0"	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
21	30	19	26	15 1/2	1' -0"	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
24	30	19	28 1/2	18	1' -0"	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
27	34	22	36 1/4	22 1/2	1' -0"	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
30	38	24	36 1/4	22 1/2	1' -0"	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
36	45	29	43 3/4	26 5/8	1' -0"	HE-II	A-II	HE-III	A-III	HE-IV	A-IV
42	53	34	51 1/8	31 5/16	1' -0"	HE-I	A-II	HE-III	A-III	HE-IV	A-IV
48	60	38	58 1/2	36	1' -0"	HE-I	A-II	HE-III	A-III	1460	1450
54	68	43	65	40	1' -0"	HE-I	A-II	HE-III	A-III	1460	1460
60	76	48	73	45	1' -0"	HE-I	A-II	HE-III	A-III	1460	1470
66	83	53	88	54	1' -0"	HE-I	A-II	HE-III	A-III	1470	1480
72	91	58	88	54	1' -0"	HE-I	A-II	HE-III	A-III	1470	1480

Notes:
A number indicates the D-Load for the diameter and depth of fill and that a special design is required.
Design assumptions; Water filled pipe, AASHTO Type 2 installation per AASHTO LRFD Table 12.10.2.1-1

Table IIB: CLASSES OF REINFORCED CONCRETE ELLIPTICALL AND REINFORCED CONCRETE ARCH PIPE FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE (Metric)

Equivalent Round Size (mm)	Reinforced Concrete Elliptical pipe (mm)		Reinforced Concrete Arch pipe (mm)		Minimum Cover	Type 1		Type 2		Type 3	
						Fill Height: 1 m and less		Fill Height: Greater than 1 m not exceeding 3 m		Fill Height: Greater than 3 m not exceeding 4.5 m	
	Span	Rise	Span	Rise	RCCP HE & A	HE	Arch	HE	Arch	HE	Arch
375	584	356	457	279	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
450	584	356	559	343	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
525	762	483	660	394	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
600	762	483	724	457	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
686	864	559	921	572	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
750	965	610	921	572	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
900	1143	737	1111	676	0.3 m	HE-II	A-II	HE-III	A-III	HE-IV	A-IV
1050	1346	864	1299	795	0.3 m	HE-I	A-II	HE-III	A-III	HE-IV	A-IV
1200	1524	965	1486	914	0.3 m	HE-I	A-II	HE-III	A-III	70	70
1350	1727	1092	1651	1016	0.3 m	HE-I	A-II	HE-III	A-III	70	70
1500	1930	1219	1854	1143	0.3 m	HE-I	A-II	HE-III	A-III	70	70
1676	2108	1346	2235	1372	0.3 m	HE-I	A-II	HE-III	A-III	70	70
1800	2311	1473	2235	1372	0.3 m	HE-I	A-II	HE-III	A-III	70	70

Notes:
A number indicates the D-Load for the diameter and depth of fill and that a special design is required.
Design assumptions; Water filled pipe, AASHTO Type 2 installation per AASHTO LRFD Table 12.10.2.1-1

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

Nominal Diameter (in.)	Type 1 Fill Height: 3' and less, with 1' min					Type 2 Fill Height: Greater than 3', not exceeding 10'					Type 3 Fill Height: Greater than 10', not exceeding 15'					Type 4 Fill Height: Greater than 15', not exceeding 20'			
	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPP
10	X	X	X	X	NA	X	X	X	X	NA	X	X	X	X	NA	X	X	X	NA
12	X	X	X	X	X	X	X	X	X	X	X	X	X	NA	X	X	X	X	NA
15	X	X	NA	X	X	X	X	NA	X	X	X	X	NA	NA	X	X	X	NA	X
18	X	X	X	X	X	X	X	X	X	X	X	X	X	NA	X	X	X	X	NA
21	X	X	NA	NA	NA	X	X	NA	NA	NA	X	X	NA	NA	NA	X	X	NA	NA
24	X	X	X	X	X	X	X	X	X	X	X	X	NA	NA	NA	X	X	X	NA
30	X	X	X	X	X	X	X	X	X	X	X	X	X	NA	X	X	X	X	NA
36	X	X	X	X	X	X	X	X	X	X	X	X	X	NA	NA	X	X	X	NA
42	X	NA	X	X	NA	X	NA	X	NA	NA	X	NA	X	NA	NA	X	NA	X	NA
48	X	NA	X	X	X	X	NA	X	NA	NA	X	NA	X	NA	NA	X	NA	X	NA

Notes:

PVC Polyvinyl Chloride (PVC) pipe with a smooth interior
CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior
PE Polyethylene (PE) pipe with a smooth interior
CPE Corrugated Polyethylene (PE) pipe with a smooth interior
CPP Corrugated Polypropylene (CPP) pipe with a smooth interior
X This material may be used for the given pipe diameter and fill height
NA Not Available

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

Nominal Diameter (mm)	Type 1 Fill Height: 1 m and less, with 0.3 m min. cover					Type 2 Fill Height: Greater than 1 m, not exceeding 3 m					Type 3 Fill Height: Greater than 3 m, not exceeding 4.5 m					Type 4 Fill Height: Greater than 4.5 m, not exceeding 6 m			
	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPP
250	X	X	X	X	NA	X	X	X	X	NA	X	X	X	X	NA	X	X	X	NA
300	X	X	X	X	X	X	X	X	X	X	X	X	X	NA	X	X	X	X	NA
375	X	X	NA	X	X	X	X	NA	X	X	X	X	NA	NA	X	X	X	NA	X
450	X	X	X	X	X	X	X	X	X	X	X	X	X	NA	X	X	X	X	NA
525	X	X	NA	NA	NA	X	X	NA	NA	NA	X	X	NA	NA	NA	X	X	NA	NA
600	X	X	X	X	X	X	X	X	X	X	X	X	NA	NA	NA	X	X	X	NA
750	X	X	X	X	X	X	X	X	X	X	X	X	X	NA	X	X	X	X	NA
900	X	X	X	X	X	X	X	X	X	X	X	X	X	NA	NA	X	X	X	NA
1000	X	NA	X	X	NA	X	NA	X	NA	NA	X	NA	X	NA	NA	X	NA	X	NA
1200	X	NA	X	X	X	X	NA	X	NA	NA	X	NA	X	NA	NA	X	NA	X	NA

Notes:

PVC Polyvinyl Chloride (PVC) pipe with a smooth interior
CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior
PE Polyethylene (PE) pipe with a smooth interior
CPE Corrugated Polyethylene (PE) pipe with a smooth interior
CPP Corrugated Polypropylene (CPP) pipe with a smooth interior
X This material may be used for the given pipe diameter and fill height
NA Not Available

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

Notes:
PVC Polyvinyl Chloride (PVC) pipe with a smooth interior
CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior
X This material may be used for the given pipe diameter and fill height
NA Not Available

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

Nominal Diameter (mm)	Type 5			Type 6			Type 7	
	Fill Height: Greater than 6 m, not exceeding 7.5 m			Fill Height: Greater than 7.5 m, not exceeding 9 m			Fill Height: Greater than 9 m, not exceeding 10.5 m	
	PVC	CPVC		PVC	CPVC		CPVC	
250	X	X		X	X		X	
300	X	X		X	X		X	
375	X	X		X	X		X	
450	X	X		X	X		X	
525	X	X		X	X		X	
600	X	X		X	X		X	
750	X	X		X	X		X	
900	X	X		X	X		X	
1000	X	NA		X	NA		NA	
1200	X	NA		X	NA		NA	

Notes:
PVC Polyvinyl Chloride (PVC) pipe with a smooth interior
CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior
PE Polyethylene (PE) pipe with a smooth interior
X This material may be used for the given pipe diameter and fill height
NA Not Available"

Revise the first sentence of the first paragraph of Article 542.04(c) of the Standard Specifications to read:

"Compacted aggregate, at least 4 in. (100 mm) in depth below the pipe culvert, shall be placed the entire width of the trench and for the length of the pipe culvert, except compacted impervious material shall be used for the outer 3 ft (1 m) at each end of the pipe culvert."

Revise the seventh paragraph of Article 542.04(d) of the Standard Specifications to read:

"PVC, PE and CPP pipes shall be joined according to the manufacturer's specifications."

Replace the third sentence of the first paragraph of Article 542.04(h) of the Standard Specifications with the following:

"The total cover required for various construction loadings shall be the responsibility of the Contractor."

Delete "Table IV : Wheel Loads and Total Cover" in Article 542.04(h) of the Standard Specifications.

Revise the first and second paragraphs of Article 542.04(i) of the Standard Specifications to read:

"(i) Deflection Testing for Pipe Culverts. All PE, PVC and CPP pipe culverts shall be tested for deflection not less than 30 days after the pipe is installed and the backfill compacted. The testing shall be performed in the presence of the Engineer.

For PVC, PE, and CPP pipe culverts with diameters 24 in. (600 mm) or smaller, a mandrel drag shall be used for deflection testing. For PVC, PE, and CPP pipe culverts with diameters over 24 in. (600 mm), deflection measurements other than by a mandrel shall be used."

Revise Articles 542.04(i)(1) and (2) of the Standard Specifications to read:

"(1) For all PVC pipe: as defined using ASTM D 3034 methodology.

(2) For all PE and CPP pipe: the average inside diameter based on the minimum and maximum tolerances specified in the corresponding ASTM or AASHTO material specifications."

Revise the second sentence of the second paragraph of Article 542.07 of the Standard Specifications to read:

"When a prefabricated end section is used, it shall be of the same material as the pipe culvert, except for polyethylene (PE), polyvinylchloride (PVC), and polypropylene (PP) pipes which shall have metal end sections."

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

"**1040.03 Polyvinyl Chloride (PVC) Pipe.** Acceptance testing of PVC pipe and fittings shall be accomplished during the same construction season in which they are installed. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties. The pipe shall meet the following additional requirements."

Delete Articles 1040.03(e) and (f) of the Standard Specifications.

Revise Articles 1040.04(c) and (d) of the Standard Specifications to read:

"(c) PE Profile Wall Pipe for Insertion Lining. The pipe shall be according to ASTM F 894. When used for insertion lining of pipe culverts, the pipe liner shall have a minimum pipe stiffness of 46 psi (317 kPa) at five percent deflection for nominal inside diameters of 42 in. (1050 mm) or less. For nominal inside diameters of greater than 42 in. (1050 mm), the pipe liner shall have a minimum pipe stiffness of 32.5 psi (225 kPa) at five percent deflection. All sizes shall have wall construction that presents essentially smooth internal and external surfaces.

(d) PE Pipe with a Smooth Interior. The pipe shall be according to ASTM F 714 (DR 32.5) with a minimum cell classification of PE 335434 as defined in ASTM D 3350. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties and the resin used to manufacture the pipe meets or exceeds the minimum cell classification requirements."

Add the following to Section 1040 of the Standard Specifications:

"**1040.08 Polypropylene (PP) Pipe.** Storage and handling shall be according to the manufacturer's recommendations, except in no case shall the pipe be exposed to direct sunlight for more than six months. Acceptance testing of the pipe shall be accomplished during the same construction season in which it is installed. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties. The pipe shall meet the following additional requirements.

(a) Corrugated PP Pipe with a Smooth Interior. The pipe shall be according to AAHSTO M 330 (nominal size – 12 to 60 in. (300 to 1500 mm)). The pipe shall be Type S or D.

(b) Perforated Corrugated PP Pipe with A Smooth Interior. The pipe shall be according to AASHTO M 330 (nominal size – 12 to 60 in. (300 to 1500 mm)). The pipe shall be

Type SP. In addition, the top centerline of the pipe shall be marked so that it is readily visible from the top of the trench before backfilling, and the upper ends of the slot perforations shall be a minimum of ten degrees below the horizontal."

80324

PAVEMENT STRIPING - SYMBOLS (BDE)

Effective: January 1, 2015

Revise the Symbol Table of Article 780.14 of the Supplemental Specifications to read:

"SYMBOLS

Symbol	Large Size sq ft (sq m)	Small Size sq ft (sq m)
Through Arrow	11.5 (1.07)	6.5 (0.60)
Left or Right Arrow	15.6 (1.47)	8.8 (0.82)
2 Arrow Combination Left (or Right) and Through	26.0 (2.42)	14.7 (1.37)
3 Arrow Combination Left, Right, and Through	38.4 (3.56)	20.9 (1.94)
Lane Drop Arrow	41.5 (3.86)	--
Wrong Way Arrow	24.3 (2.26)	--
Railroad "R" 6 ft (1.8 m)	3.6 (0.33)	--
Railroad "X" 20 ft (6.1 m)	54.0 (5.02)	--
International Symbol of Accessibility	3.1 (0.29)	--
Bike Symbol	4.7 (0.44)	--
Shared Lane Symbol	8.0 (0.74)	--"

80352

PRECAST CONCRETE HANDHOLE (BDE)

Effective: August 1, 2014

Revise the third paragraph of Article 814.03 of the Standard Specifications to read:

"Handholes shall be constructed as shown on the plans and shall be cast-in-place, composite concrete, or precast units. Heavy duty handholes shall be either cast-in-place or precast units."

Add the following to Article 814.03 of the Standard Specifications:

"(c) Precast Concrete. Precast concrete handholes shall be fabricated according to Article 1042.17. Where a handhole is contiguous to a sidewalk, preformed joint filler of 1/2 inch (13 mm) thickness shall be placed between the handhole and the sidew alk."

Add the following to Section1042 of the Standard Specifications:

"**1042.17 Precast Concrete Handholes.** Precast concrete handholes shall be according to Articles 1042.03(a)(c)(d)(e)."

80343

PROGRESS PAYMENTS (BDE)

Effective: November 2, 2013

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

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

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

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

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

80328

RETROREFLECTIVE SHEETING FOR HIGHWAY SIGNS (BDE)

Effective: November 1, 2014

Revise the first sentence of the first paragraph of Article 1091.03(a)(3) of the Standard Specifications to read:

> "When tested according to ASTM E 810, with averaging, the sheeting shall have a minimum coefficient of retroreflection as show in the following tables."

Replace the Tables for Type AA sheeting, Type AP sheeting, Type AZ sheeting and Type ZZ sheeting in Article 1091.03(a)(3) with the following.

Type AA Sheeting
Minimum Coefficient of Retroreflection
Candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AA (Average of 0 and 90 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	FO
0.2	-4	800	600	120	80	40	200
0.2	+30	400	300	60	35	20	100
0.5	-4	200	150	30	20	10	75
0.5	+30	100	75	15	10	5	35

Type AA (45 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	Yellow	FO
0.2	-4	500	165
0.2	+30	115	40
0.5	-4	140	65
0.5	+30	60	30

Type AP Sheeting
Minimum Coefficient of Retroreflection
Candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AP (Average of 0 and 90 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	Brown	FO
0.2	-4	500	380	75	55	35	25	150
0.2	+30	180	135	30	20	15	10	55
0.5	-4	300	225	50	30	20	15	90
0.5	+30	90	70	15	10	7.5	5	30

Type AZ Sheeting
Minimum Coefficient of Retroreflection
Candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AZ (Average of 0 and 90 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	FYG	FY
0.2	-4	375	280	75	45	25	300	230
0.2	+30	235	170	40	25	15	190	150
0.5	-4	245	180	50	30	20	200	155
0.5	+30	135	100	25	15	10	100	75
1.0	-4	50	37.5	8.5	5	2	45	25
1.0	+30	22.5	20	5	3	1	25	12.5

Type ZZ Sheeting
Minimum Coefficient of Retroreflection
Candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type ZZ (Average of 0 and 90 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	FYG	FY	FO
0.2	-4	570	425	90	60	30	460	340	170
0.2	+30	190	140	35	20	10	150	110	65
0.5	-4	400	300	60	40	20	320	240	120
0.5	+30	130	95	20	15	7	100	80	45
1.0	-4	115	90	17	12	5	95	70	35
1.0	+30	45	35	7	5	2	35	25	15

80350

RIGID METAL CONDUIT (BDE)

Effective: August 1, 2014

Add the following to Article 1088.01(a) of the Standard Specifications:

"(6) Stainless Steel Conduit. The conduit shall be Type 304 or Type 316 stainless steel, shall be manufactured according to UL Standard 6A, and shall meet ANSI Standard C80.1. Conduit fittings shall be Type 304 or Type 316 stainless steel and shall be manufactured according to UL Standard 514B.

All conduit supports, straps, clamps. And other attachments shall be Type 304 or Type 316 stainless steel. Attachment hardware shall be stainless steel according to Article 1006.31."

80344

SIDEWALK, CORNER, OR CROSSWALK CLOSURE (BDE)

Effective: January 1, 2015

Revise the first sentence of Article 1106.02(m) of the Supplemental Specifications to read:

> "The top and bottom panels shall have alternating white and orange stripes sloping 45 degrees on both sides."

80354

WARM MIX ASPHALT (BDE)

Effective: January 1, 2012
Revised: November 1, 2014

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

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

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

Equipment.

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

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

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

"(13) Equipment for Warm Mix Technologies.

a. Foaming. Metering equipment for foamed asphalt shall have an accuracy of ± 2 percent of the actual water metered. The foaming control system shall be electronically interfaced with the asphalt binder meter.

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

Mix Design Verification.

Add the following to Article 1030.04 of the Standard Specifications.

"(e) Warm Mix Technologies.

(1) Foaming. WMA mix design verification will not be required when foaming technology is used alone (without WMA additives). However, the foaming technology shall only be used on HMA designs previously approved by the Department.

(2) Additives. WMA mix designs utilizing additives shall be submitted to the Engineer for mix design verification."

Construction Requirements.

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

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

Basis of Payment.

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

80288

WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012

The Contractor shall provide a weekly report of Disadvantaged Business Enterprise (DBE) trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) that are used on the jobsite; or used for the delivery and/or removal of equipment/material to and from the jobsite. The jobsite shall also include offsite locations, such as plant sites or storage sites, when those locations are used solely for this contract.

The report shall be submitted on the form provided by the Department within ten business days following the reporting period. The reporting period shall be Monday through Sunday for each week reportable trucking activities occur. The report shall be submitted to the Engineer and a copy shall be provided to the district EEO Officer.

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

80302

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within 45 working days.

80071

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

I. GENERAL

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

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

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

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

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.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

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

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

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

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

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

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

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

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

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

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and 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 $10,000 or more.

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

IV. Davis-Bacon and Related Act Provisions

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

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

1. Minimum wages

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

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH–1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

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

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a “Statement of Compliance,” signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

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

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

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

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

b. Trainees (programs of the USDOL).

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

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

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

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

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

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

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

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for

debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

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

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

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

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

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term “perform work with its own organization” refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

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

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

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

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded,"

as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

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

* * * * *

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

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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

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

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the

certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

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

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

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

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

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

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