

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.DE-Contracts@Illinois.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 PAPER 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: 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)** – 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 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 – Do Not Submit with Bid** The bidder shall submit a Disadvantaged Business Utilization Plan on completed Department forms SBE 2025 and 2026. (1) The final Utilization Plan must be submitted within five calendar days after the date of the letting. (2) To meet the five day requirement, the bidder may send the Utilization Plan electronically by scanning and sending to DOT.DBE.UP@illinois.gov or faxing to (217) 785-1524. The subject line must include the bid Item Number and the Letting date. The Utilization Plan should be sent as one .pdf file, rather than multiple files and emails for the same Item Number. It is the responsibility of the bidder to obtain confirmation of email or fax delivery.

Alternatively, the Utilization Plan may be sent by certified mail or delivery service within the five calendar day period. If a question arises concerning the mailing date of a Utilization Plan, the mailing date will be established by the U.S. Postal Service postmark on the certified mail receipt from the U.S. Postal Service or the receipt issued by a delivery service. It is the responsibility of the bidder to ensure the postmark or receipt date is affixed within the five days if the bidder intends to rely upon mailing or delivery to satisfy the submission day requirement. The Utilization Plan is to be submitted to:

Illinois Department of Transportation
 Bureau of Small Business Enterprises
 Contract Compliance Section
 2300 South Dirksen Parkway, Room 319
 Springfield, Illinois 62764

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.

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

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RETURN WITH BID

Proposal Submitted By
Name
Address
City

Letting November 4, 2016

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. 61C39
LAKE County
Section 14-F3000-03-BT
Route FOREST PRESERVE TRAIL
Project TE-01D1(044)
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)

Page intentionally left blank

RETURN WITH BID



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. 61C39
LAKE County
Section 14-F3000-03-BT
Project TE-01D1(044)
Route FOREST PRESERVE TRAIL
District 1 Construction Funds**

This project consists of construction of a pedestrian path from 900 feet north of IL Route 60 to IL Route 160. Project will also consist of constructing a pedestrian structure over the Milwaukee District North Line.

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.

RETURN WITH BID

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:

<u>Amount of Bid</u>		<u>Proposal Guaranty</u>	<u>Amount of Bid</u>		<u>Proposal Guaranty</u>	
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.

RETURN WITH BID

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
LAKE	097	01	14-F3000-03-BT	TE-01D1/044/000	FOREST PRESERVE TRAIL

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
XX000503	SPLIT RAIL FENCE	FOOT	568.000 X	=		=	
XX001249	ORNAMENTAL FENCE	FOOT	76.000 X	=		=	
XX003301	GEOTEXTILE FILTER FAB	SQ YD	543.000 X	=		=	
XX005238	TOPSOIL F & P VAR D	CU YD	1,731.000 X	=		=	
XX006429	SIDEWALK, SPECIAL	SQ FT	232.000 X	=		=	
XX006570	TREES (SPECIAL)	EACH	23.000 X	=		=	
XX006658	FLOCCULATION LOGS	EACH	6.000 X	=		=	
XX006659	FLOCCULATION POWDER	POUND	18.000 X	=		=	
XX006750	OUTLOOK RAILING	FOOT	24.000 X	=		=	
XX007147	R&REP LAWN SPRINK SYS	FOOT	1,200.000 X	=		=	
XX007852	PED BENCH FUR & INST	EACH	1.000 X	=		=	
XX008310	AGG SURF CSE B 3 SPL	SQ YD	9.000 X	=		=	
XX008639	SHRUBS SPECIAL	EACH	39.000 X	=		=	
XZ127902	RETAINING WALL SPL	SQ FT	2,822.000 X	=		=	
X0100003	CLEARING & GRUBBING	SQ YD	3,475.000 X	=		=	

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
X0322508	PED TRUSS SUPERSTR	SQ FT	2,682.000	X	=	=	=
X0324062	ENTRANCE SIGN	L SUM	1.000	X	=	=	=
X0327039	TEMP ACCESS RD SP	L SUM	1.000	X	=	=	=
X0327732	PRC ORN CENTER PILAST	EACH	2.000	X	=	=	=
X0327733	PRC ORN CORNER PILAST	EACH	2.000	X	=	=	=
X2130010	EXPLOR TRENCH SPL	FOOT	50.000	X	=	=	=
X2501010	SEEDING CL 2 MOD	ACRE	0.500	X	=	=	=
X2501700	SEEDING CL 3 MOD	ACRE	2.250	X	=	=	=
X2501800	SEEDING CL 4 MOD	ACRE	0.750	X	=	=	=
X2510635	HD EROS CONT BLANK SP	SQ YD	100.000	X	=	=	=
X2800302	TEMP DITCH CHECKS SPL	FOOT	28.000	X	=	=	=
X2810106	STONE RIPRAP CL A3 SP	SQ YD	16.000	X	=	=	=
X4400220	CURB REM & REPLACEMT	FOOT	101.000	X	=	=	=
X6030310	FR & LIDS ADJUST SPL	EACH	2.000	X	=	=	=
X6640302	CH LK FENCE REMOV SP	FOOT	1,058.000	X	=	=	=

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
X6700405	ENGR FLD OFF A MOD	CAL MO	6.000 X	=		=	
X7010216	TRAF CONT & PROT SPL	L SUM	1.000 X	=		=	
Z0013797	STAB CONSTR ENTRANCE	SQ YD	374.000 X	=		=	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000 X	=		=	
Z0017400	DRAIN UTIL STR ADJ	EACH	2.000 X	=		=	
Z0018700	DRAINAGE STR REMOVED	EACH	22.000 X	=		=	
Z0019400	DRY RUB ST/BR CON T W	CU YD	3.000 X	=		=	
Z0030850	TEMP INFO SIGNING	SQ FT	103.000 X	=		=	
Z0033044	RE-OPTIMIZE SIG SYS 1	EACH	1.000 X	=		=	
Z0046304	P UNDR FOR STRUCT 4	FOOT	78.000 X	=		=	
Z0048665	RR PROT LIABILITY INS	L SUM	1.000 X	=		=	
Z0055905	TEMP CONSTR FENCE	FOOT	2,500.000 X	=		=	
Z0076600	TRAINEES	HOURL	500.000 X	=	0.80	=	400.00
Z0076604	TRAINEES TPG	HOURL	500.000 X	=	15.00	=	7,500.00
20100110	TREE REMOV 6-15	UNIT	891.000 X	=		=	

FOREST
14-F3000-03-BT
LAKE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 61C39

ECMS002 DTGECM03 ECMR003 PAGE 4
RUN DATE - 07/18/16
RUN TIME - 183024

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
20100210	TREE REMOV OVER 15	UNIT	337.000	X	=		
20101200	TREE ROOT PRUNING	EACH	18.000	X	=		
20101300	TREE PRUN 1-10	EACH	7.000	X	=		
20101350	TREE PRUN OVER 10	EACH	11.000	X	=		
20200100	EARTH EXCAVATION	CU YD	2,075.000	X	=		
20201200	REM & DISP UNS MATL	CU YD	75.000	X	=		
20400800	FURNISHED EXCAVATION	CU YD	8,905.000	X	=		
20800150	TRENCH BACKFILL	CU YD	12.000	X	=		
20900110	POROUS GRAN BACKFILL	CU YD	26.000	X	=		
21001000	GEOTECH FAB F/GR STAB	SQ YD	3,698.000	X	=		
21101505	TOPSOIL EXC & PLAC	CU YD	3,510.000	X	=		
25000400	NITROGEN FERT NUTR	POUND	90.000	X	=		
25000600	POTASSIUM FERT NUTR	POUND	90.000	X	=		
25100630	EROSION CONTR BLANKET	SQ YD	15,575.000	X	=		
25200200	SUPPLE WATERING	UNIT	10.000	X	=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
28000250	TEMP EROS CONTR SEED	POUND	700.000	X	=		
28000305	TEMP DITCH CHECKS	FOOT	28.000	X	=		
28000400	PERIMETER EROS BAR	FOOT	4,172.000	X	=		
28000510	INLET FILTERS	EACH	9.000	X	=		
28200200	FILTER FABRIC	SQ YD	16.000	X	=		
30300001	AGG SUBGRADE IMPROVE	CU YD	75.000	X	=		
35101600	AGG BASE CSE B 4	SQ YD	84.000	X	=		
35101700	AGG BASE CSE B 5	SQ YD	3,306.000	X	=		
35800100	PREPARATION OF BASE	SQ YD	484.000	X	=		
40600275	BIT MATLS PR CT	POUND	7,392.000	X	=		
40603335	HMA SC "D" N50	TON	550.000	X	=		
42001300	PROTECTIVE COAT	SQ YD	91.000	X	=		
42400200	PC CONC SIDEWALK 5	SQ FT	633.000	X	=		
42400800	DETECTABLE WARNINGS	SQ FT	85.000	X	=		
44000157	HMA SURF REM 2	SQ YD	974.000	X	=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
50200100	STRUCTURE EXCAVATION	CU YD	126.000	X	=	=	
50300225	CONC STRUCT	CU YD	62.000	X	=	=	
50300255	CONC SUP-STR	CU YD	8.000	X	=	=	
50300300	PROTECTIVE COAT	SQ YD	27.000	X	=	=	
50800205	REINF BARS, EPOXY CTD	POUND	6,430.000	X	=	=	
542D0220	P CUL CL D 1 15	FOOT	62.000	X	=	=	
54213660	PRC FLAR END SEC 15	EACH	1.000	X	=	=	
54215550	MET END SEC 15	EACH	4.000	X	=	=	
550A0070	STORM SEW CL A 1 15	FOOT	26.000	X	=	=	
55100700	STORM SEWER REM 15	FOOT	13.000	X	=	=	
58700300	CONCRETE SEALER	SQ FT	89.000	X	=	=	
59100100	GEOCOMPOSITE WALL DR	SQ YD	30.000	X	=	=	
60200805	CB TA 4 DIA T8G	EACH	1.000	X	=	=	
66400305	CH LK FENCE 6	FOOT	2,000.000	X	=	=	
67100100	MOBILIZATION	L SUM	1.000	X	=	=	

FOREST
14-F3000-03-BT
LAKE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 61C39

ECMS002 DTGECM03 ECMR003 PAGE 7
RUN DATE - 07/18/16
RUN TIME - 183024

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
70106800	CHANGEABLE MESSAGE SN	CAL MO	3.000	X	=	=	=
72000100	SIGN PANEL T1	SQ FT	91.000	X	=	=	=
72900200	METAL POST TY B	FOOT	129.000	X	=	=	=
78000400	THPL PVT MK LINE 6	FOOT	372.000	X	=	=	=
78000600	THPL PVT MK LINE 12	FOOT	504.000	X	=	=	=
81028210	UNDRGRD C GALVS 2 1/2	FOOT	14.000	X	=	=	=
85000200	MAIN EX TR SIG INSTAL	EACH	1.000	X	=	=	=
87301215	ELCBL C SIGNAL 14 2C	FOOT	571.000	X	=	=	=
87301225	ELCBL C SIGNAL 14 3C	FOOT	647.000	X	=	=	=
87301255	ELCBL C SIGNAL 14 7C	FOOT	296.000	X	=	=	=
87301900	ELCBL C EGRDC 6 1C	FOOT	24.000	X	=	=	=
87800100	CONC FDN TY A	FOOT	4.000	X	=	=	=
87900200	DRILL EX HANDHOLE	EACH	1.000	X	=	=	=
88102717	PED SH LED 1F BM CDT	EACH	4.000	X	=	=	=
88800100	PED PUSH-BUTTON	EACH	4.000	X	=	=	=

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
89500100	RELOC EX SIG HEAD	EACH	2.000	=			
89501150	RELOC EX TS POST	EACH	1.000	=			
89502300	REM ELCBL FR CON	FOOT	474.000	=			
89502350	REM & RE ELCBL FR CON	FOOT	72.000	=			
89502375	REMOV EX TS EQUIP	EACH	1.000	=			
89502385	REMOV EX CONC FDN	EACH	3.000	=			

TOTAL \$

- 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.

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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.

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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.

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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.

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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.

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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.

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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.**

Additionally, 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.

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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.

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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.

- Are you currently an officer or employee of either the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ___ No ___
- 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. _____

RETURN WITH BID

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 7 1/2% 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 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 ___

RETURN WITH BID

(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. Suspension or 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: suspension or 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: _____ Date _____
Signature of Individual or Authorized Representative

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.

_____ Date _____
Signature of Authorized Representative

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

**Contract No. 61C39
LAKE County
Section 14-F3000-03-BT
Project TE-01D1(044)
Route FOREST PRESERVE 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.

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. 61C39
LAKE County
Section 14-F3000-03-BT
Project TE-01D1(044)
Route FOREST PRESERVE 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 _____

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

Attest _____
Signature _____
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.



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., _____

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

(Company Name)

(Company Name)

By _____
(Signature and Title)

By _____
(Signature of Attorney-in-Fact)

Notary for PRINCIPAL

Notary for SURETY

STATE OF _____
COUNTY OF _____

STATE OF _____
COUNTY OF _____

Signed and attested before me on _____ (date)

Signed and attested before me on _____ (date)

by _____
(Name of Notary Public)

by _____
(Name of Notary Public)

(Seal) _____
(Signature of Notary Public)

(Seal) _____
(Signature of Notary Public)

(Date Commission Expires)

(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.



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., _____

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

(Company Name)

(Company Name)

By _____ (Signature and Title)

By _____ (Signature of Attorney-in-Fact)

Notary for PRINCIPAL

Notary for SURETY

STATE OF _____
COUNTY OF _____

STATE OF _____
COUNTY OF _____

Signed and attested before me on _____ (date)
by _____

Signed and attested before me on _____ (date)
by _____

(Name of Notary Public)

(Name of Notary Public)

(Seal) _____ (Signature of Notary Public)

(Seal) _____ (Signature of Notary Public)

(Date Commission Expires)

(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 _____

(1) Policy

It is public policy that disadvantageded 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 disadvantageded 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.



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. Trucking participation items; description must list what is anticipated towards goal credit.

(2) Work:

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

Pay Item No.	Description (Anticipated items for trucking)*	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:

*Applies to trucking only

(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

Date _____

Contact Person _____

Title _____

Firm Name _____

Address _____

City/State/Zip _____

Phone _____

Email Address _____

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

Date _____

Contact Person _____

Title _____

Firm Name _____

Address _____

City/State/Zip _____

Phone _____

Email Address _____

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



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. 61C39
LAKE County
Section 14-F3000-03-BT
Project TE-01D1(044)
Route FOREST PRESERVE 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 scuspended 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.

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.

**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. _____

RETURN WITH SUBCONTRACT

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 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 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 ___

RETURN WITH SUBCONTRACT

(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. Suspension or 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: suspension or 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: _____ Date _____
Signature of Individual or Authorized Officer

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.

_____ Date _____
Signature of Authorized Officer

RETURN WITH SUBCONTRACT

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B
Subcontractor: Other Contracts & Financial Related Information Disclosure

Form with fields: 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 box with fields: 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)



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.m. November 4, 2016. 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. 61C39
LAKE County
Section 14-F3000-03-BT
Project TE-01D1(044)
Route FOREST PRESERVE TRAIL
District 1 Construction Funds**

This project consists of construction of a pedestrian path from 900 feet north of IL Route 60 to IL Route 160. Project will also consist of constructing a pedestrian structure over the Milwaukee District North Line.

- 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

Randall S. Blankenhorn,
Secretary

INDEX
FOR
SUPPLEMENTAL SPECIFICATIONS
AND RECURRING SPECIAL PROVISIONS

Adopted April 1, 2016

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

No ERRATA this year.

SUPPLEMENTAL SPECIFICATIONS

Std. Spec. Sec.

Page No.

No Supplemental Specifications this year.

CHECK SHEET
FOR
RECURRING SPECIAL PROVISIONS

Adopted April 1, 2016

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

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CHECK SHEET
FOR
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:

LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

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INDEX LOCAL ROADS AND STREETS SPECIAL PROVISIONS

<u>LR #</u>	<u>Pg #</u>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
LR SD12		<input type="checkbox"/> Slab Movement Detection Device	Nov. 11, 1984	Jan. 1, 2007
LR SD13		<input type="checkbox"/> Required Cold Milled Surface Texture	Nov. 1, 1987	Jan. 1, 2007
LR 107-2		<input type="checkbox"/> Railroad Protective Liability Insurance for Local Lettings	Mar. 1, 2005	Jan. 1, 2006
LR 107-4	216	<input checked="" type="checkbox"/> Insurance	Feb. 1, 2007	Aug. 1, 2007
LR 108		<input type="checkbox"/> Combination Bids	Jan. 1, 1994	Mar. 1, 2005
LR 109		<input type="checkbox"/> Equipment Rental Rates	Jan. 1, 2012	
LR 212		<input type="checkbox"/> Shaping Roadway	Aug. 1, 1969	Jan. 1, 2002
LR 355-1		<input type="checkbox"/> Bituminous Stabilized Base Course, Road Mix or Traveling Plant Mix	Oct. 1, 1973	Jan. 1, 2007
LR 355-2		<input type="checkbox"/> Bituminous Stabilized Base Course, Plant Mix	Feb. 20, 1963	Jan. 1, 2007
LR 400-1		<input type="checkbox"/> Bituminous Treated Earth Surface	Jan. 1, 2007	Apr. 1, 2012
LR 400-2		<input type="checkbox"/> Bituminous Surface Plant Mix (Class B)	Jan. 1, 2008	
LR 400-3		<input type="checkbox"/> Hot In-Place Recycling (HIR) – Surface Recycling	Jan. 1, 2012	
LR 400-4		<input type="checkbox"/> Full-Depth Reclamation (FDR) with Emulsified Asphalt	Apr. 1, 2012	Jun. 1, 2012
LR 400-5		<input type="checkbox"/> Cold In-Place Recycling (CIR) With Emulsified Asphalt	Apr. 1, 2012	Jun. 1, 2012
LR 400-6		<input type="checkbox"/> Cold In Place Recycling (CIR) with Foamed Asphalt	June 1, 2012	
LR 400-7		<input type="checkbox"/> Full-Depth Reclamation (FDR) with Foamed Asphalt	June 1, 2012	
LR 402		<input type="checkbox"/> Salt Stabilized Surface Course	Feb. 20, 1963	Jan. 1, 2007
LR 403-1		<input type="checkbox"/> Surface Profile Milling of Existing, Recycled or Reclaimed Flexible Pavement	Apr. 1, 2012	Jun. 1, 2012
LR 403-2		<input type="checkbox"/> Bituminous Hot Mix Sand Seal Coat	Aug. 1, 1969	Jan. 1, 2007
LR 406		<input type="checkbox"/> Filling HMA Core Holes with Non-shrink Grout	Jan. 1, 2008	
LR 420		<input type="checkbox"/> PCC Pavement (Special)	May 12, 1964	Jan. 2, 2007
LR 442		<input type="checkbox"/> Bituminous Patching Mixtures for Maintenance Use	Jan. 1, 2004	Jun. 1, 2007
LR 451		<input type="checkbox"/> Crack Filling Bituminous Pavement with Fiber-Asphalt	Oct. 1, 1991	Jan. 1, 2007
LR 503-1		<input type="checkbox"/> Furnishing Class SI Concrete	Oct. 1, 1973	Jan. 1, 2002
LR 503-2		<input type="checkbox"/> Furnishing Class SI Concrete (Short Load)	Jan. 1, 1989	Jan. 1, 2002
LR 542		<input type="checkbox"/> Pipe Culverts, Type _____ (Furnished)	Sep. 1, 1964	Jan. 1, 2007
LR 663		<input type="checkbox"/> Calcium Chloride Applied	Jun. 1, 1958	Jan. 1, 2007
LR 702		<input type="checkbox"/> Construction and Maintenance Signs	Jan. 1, 2004	Jun. 1, 2007
LR 1000-1		<input type="checkbox"/> 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		<input type="checkbox"/> Cold In-Place Recycling (CIR) and Full Depth Reclamation (FDR) with Foamed Asphalt Mix Design Procedures	June 1, 2012	
LR 1004		<input type="checkbox"/> Coarse Aggregate for Bituminous Surface Treatment	Jan. 1, 2002	Jan. 1, 2007
LR 1030		<input type="checkbox"/> Growth Curve	Mar. 1, 2008	Jan. 1, 2010
LR 1032-1		<input type="checkbox"/> Emulsified Asphalts	Jan. 1, 2007	Feb. 7, 2008
LR 1102		<input type="checkbox"/> 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.

<u>File Name</u>	<u>Pg.</u>		<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80099			Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2014
80274			Aggregate Subgrade Improvement	April 1, 2012	April 1, 2016
80192			Automated Flagger Assistance Device	Jan. 1, 2008	
80173	217	X	Bituminous Materials Cost Adjustments	Nov. 2, 2006	July 1, 2015
80241			Bridge Demolition Debris	July 1, 2009	
50261			Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50481			Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50491			Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50531			Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
80366			Butt Joints	July 1, 2016	
80360	220	X	Coarse Aggregate Quality	July 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	July 1, 2016
80311			Concrete End Sections for Pipe Culverts	Jan. 1, 2013	April 1, 2016
80277			Concrete Mix Design – Department Provided	Jan. 1, 2012	April 1, 2016
80261	222	X	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
* 80029	225	X	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	July 2, 2016
80363	236	X	Engineer's Field Office	April 1, 2016	
80358	237	X	Equal Employment Opportunity	April 1, 2015	
80364	241	X	Errata for the 2016 Standard Specifications	April 1, 2016	
80229			Fuel Cost Adjustment	April 1, 2009	July 1, 2015
80304			Grooving for Recessed Pavement Markings	Nov. 1, 2012	Aug. 1, 2014
80246			Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	April 1, 2016
80347			Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits – Jobsite Sampling	Nov. 1, 2014	April 1, 2016
* 80376			Hot-Mix Asphalt – Tack Coat	Nov. 1, 2016	
80367			Light Poles	July 1, 2016	
80368			Light Tower	July 1, 2016	
80336			Longitudinal Joint and Crack Patching	April 1, 2014	April 1, 2016
80369			Mast Arm Assembly and Pole	July 1, 2016	
80045			Material Transfer Device	June 15, 1999	Aug. 1, 2014
80342			Mechanical Side Tie Bar Inserter	Aug. 1, 2014	April 1, 2016
80370			Mechanical Splicers	July 1, 2016	
80165			Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
80361			Overhead Sign Structures Certification of Metal Fabricator	Nov. 1, 2015	April 1, 2016
80349			Pavement Marking Blackout Tape	Nov. 1, 2014	April 1, 2016
80371			Pavement Marking Removal	July 1, 2016	
80298			Pavement Marking Tape Type IV	April 1, 2012	April 1, 2016
80365	245	X	Pedestrian Push-Button	April 1, 2016	
* 80377	246	X	Portable Changeable Message Signs	Nov. 1, 2016	
80359	247	X	Portland Cement Concrete Bridge Deck Curing	April 1, 2015	July 1, 2016
80353			Portland Cement Concrete Inlay or Overlay	Jan. 1, 2015	April 1, 2016

80338			Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	April 1, 2014	April 1, 2016
80300			Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	April 1, 2016
80372			Preventive Maintenance – Bituminous Surface Treatment (A-1)	Jan. 1, 2009	July 1, 2016
80373			Preventive Maintenance – Cape Seal	Jan. 1, 2009	July 1, 2016
80374			Preventive Maintenance – Micro-Surfacing	Jan. 1, 2009	July 1, 2016
80375			Preventive Maintenance – Slurry Seal	Jan. 1, 2009	July 1, 2016
80328	249	X	Progress Payments	Nov. 2, 2013	
34261			Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157	250	X	Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
80306			Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	April 1, 2016
80340			Speed Display Trailer	April 2, 2014	April 1, 2016
80127			Steel Cost Adjustment	April 2, 2004	July 1, 2015
80362	252	X	Steel Slag in Trench Backfill	Jan. 1, 2016	
80317			Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	April 1, 2016
80355			Temporary Concrete Barrier	Jan. 1, 2015	July 1, 2015
20338	253	X	Training Special Provisions	Oct. 15, 1975	
80318			Traversable Pipe Grate	Jan. 1, 2013	April 1, 2014
80288	256	X	Warm Mix Asphalt	Jan. 1, 2012	April 1, 2016
80302	258	X	Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
80289			Wet Reflective Thermoplastic Pavement Marking	Jan. 1, 2012	
80071	259	X	Working Days	Jan. 1, 2002	

The following special provisions and recurring special provisions are in the 2016 Standard Specifications.

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location</u>	<u>Effective</u>	<u>Revised</u>
80240	Above Grade Inlet Protection	Articles 280.02, 280.04, and 1081.15	July 1, 2009	Jan. 1, 2012
80310	Coated Galvanized Steel Conduit	Articles 811.03	Jan. 1, 2013	Jan. 1, 2015
80341	Coated Nonmetallic Conduit	Article 1088.01	Aug. 1, 2014	Jan. 1, 2015
80294	Concrete Box Culverts with Skews ≤ 30 Degrees Regardless of Design Fill and Skews > 30 Degrees With Design Fills > 5 Feet	Article 540.04	April 1, 2012	April 1, 2014
80334	Concrete Gutter, Curb, Median, and Paved Ditch	Articles 606.02, 606.07, and 1050.04	April, 2014	Aug. 1, 2014
80335	Contract Claims	Article 109.09	April 1, 2014	
Chk Sht #27	English Substitution of Metric Reinforcement Bars	Article 508.09	April 1, 1996	Jan. 1, 2011
80265	Friction Aggregate	Articles 1004.01 and 1004.03	Jan. 1, 2011	Nov. 1, 2014
80329	Glare Screen	Sections 638 and 1085	Jan. 1, 2014	
Chk Sht #20	Guardrail and Barrier Wall Delineation	Sections 635, 725, 782, and 1097	Dec. 15, 1993	Jan. 1, 2012
80322	Hot-Mix Asphalt – Mixture Design Composition and Volumetric Requirements	Sections 312, 355, 406, 407, 442, 482, 601, 1003, 1004, 1030, and 1102	Nov. 1, 2013	Nov. 1, 2014
80323	Hot-Mix Asphalt – Mixture Design Verification and Production	Sections 406, 1030, and 1102	Nov. 1, 2013	Nov. 1, 2014
80348	Hot-Mix Asphalt – Prime Coat	Sections 403, 406, 407, 408, 1032, and 1102	Nov. 1, 2014	
80315	Insertion Lining of Culverts	Sections 543 and 1029	Jan. 1, 2013	Nov. 1, 2013
80351	Light Tower	Article 1069.08	Jan. 1, 2015	
80324	LRFD Pipe Culvert Burial Tables	Sections 542 and 1040	Nov. 1, 2013	April 1, 2015
80325	LRFD Storm Sewer Burial Tables	Sections 550 and 1040	Nov. 1, 2013	April 1, 2015
80337	Paved Shoulder Removal	Article 440.07	April 1, 2014	
80254	Pavement Patching	Article 701.17	Jan. 1, 2010	
80352	Pavement Striping – Symbols	Article 780.14	Jan. 1, 2015	

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location</u>	<u>Effective</u>	<u>Revised</u>
Chk Sht #19	Pipe Underdrains	Section 601 and Articles 1003.01, 1003.04, 1004.05, 1040.06, and 1080.05	Sept. 9, 1987	Jan. 1, 2007
80343	Precast Concrete Handhole	Articles 814.02, 814.03, and 1042.17	Aug. 1, 2014	
80350	Retroreflective Sheeting for Highway Signs	Article 1091.03	Nov. 1, 2014	
80327	Reinforcement Bars	Section 508 and Articles 421.04, 442.06, 1006.10	Nov. 1, 2013	
80344	Rigid Metal Conduit	Article 1088.01	Aug. 1, 2014	
80354	Sidewalk, Corner, or Crosswalk Closure	Article 1106.02	Jan. 1, 2015	April 1, 2015
80301	Tracking the Use of Pesticides	Article 107.23	Aug. 1, 2012	
80356	Traffic Barrier Terminals Type 6 or 6B	Article 631.02	Jan. 1, 2015	
80345	Underpass Luminaire	Articles 821.06 and 1067.04	Aug. 1, 2014	April 1, 2015
80354	Urban Half Road Closure with Mountable Median	Articles 701.18, 701.19, and 701.20	Jan. 1, 2015	July 1, 2015
80346	Waterway Obstruction Warning Luminaire	Article 1067.07	Aug. 1, 2014	April 1, 2015

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

GUIDE BRIDGE SPECIAL PROVISION INDEX/CHECK SHEET

Effective as of the: July 29, 2016 Letting

Pg #	√	File Name	Title	Effective	Revised
		GBSP 4	Polymer Modified Portland Cement Mortar	June 7, 1994	Apr 1, 2016
		GBSP 12	Drainage System	June 10, 1994	Jun 24, 2015
		GBSP 13	High-Load Multi-Rotational Bearings	Oct 13, 1988	Apr 1, 2016
		GBSP 14	Jack and Remove Existing Bearings	April 20, 1994	Jan 1, 2007
		GBSP 15	Three Sided Precast Concrete Structure	July 12, 1994	Dec 29, 2014
		GBSP 16	Jacking Existing Superstructure	Jan 11, 1993	Jan 1, 2007
		GBSP 17	Bonded Preformed Joint Seal	July 12, 1994	Jan 1, 2007
		GBSP 18	Modular Expansion Joint	May 19, 1994	Dec 29, 2014
		GBSP 21	Cleaning and Painting Contact Surface Areas of Existing Steel Structures	June 30, 2003	May 18, 2011
		GBSP 25	Cleaning and Painting Existing Steel Structures	Oct 2, 2001	Apr 22, 2016
		GBSP 26	Containment and Disposal of Lead Paint Cleaning Residues	Oct 2, 2001	Apr 22, 2016
		GBSP 28	Deck Slab Repair	May 15, 1995	Oct 15, 2011
		GBSP 29	Bridge Deck Microsilica Concrete Overlay	May 15, 1995	Apr 1, 2016
		GBSP 30	Bridge Deck Latex Concrete Overlay	May 15, 1995	Jun 24, 2015
		GBSP 31	Bridge Deck High-Reactivity Metakaolin (HRM) Conc Overlay	Jan 21, 2000	Apr 1, 2016
260	X	GBSP 33	Pedestrian Truss Superstructure	Jan 13, 1998	Dec 29, 2014
		GBSP 34	Concrete Wearing Surface	June 23, 1994	Apr 1, 2016
		GBSP 35	Silicone Bridge Joint Sealer	Aug 1, 1995	Oct 15, 2011
		GBSP 45	Bridge Deck Thin Polymer Overlay	May 7, 1997	Feb 6, 2013
263	X	GBSP 51	Pipe Underdrain for Structures	May 17, 2000	Jan 22, 2010
		GBSP 53	Structural Repair of Concrete	Mar 15, 2006	Apr 1, 2016
		GBSP 55	Erection of Curved Steel Structures	June 1, 2007	
		GBSP 56	Setting Piles in Rock	Nov 14, 1996	Apr 1, 2016
		GBSP 59	Diamond Grinding and Surface Testing Bridge Sections	Dec 6, 2004	Jan 3, 2014
		GBSP 60	Containment and Disposal of Non-Lead Paint Cleaning Residues	Nov 25, 2004	Apr 22, 2016
		GBSP 61	Slipform Parapet	June 1, 2007	Apr 22, 2016
		GBSP 67	Structural Assessment Reports for Contractor's Means and Methods	Mar 6, 2009	Oct 5, 2015
		GBSP 71	Aggregate Column Ground Improvement	Jan 15, 2009	Oct 15, 2011
		GBSP 72	Bridge Deck Fly Ash or GGBF Slag Concrete Overlay	Jan 18, 2011	Jun 24, 2015
		GBSP 73	Cofferdams	Oct 15, 2011	
		GBSP 75	Bond Breaker for Prestressed Concrete Bulb-T Beams	April 19, 2012	
		GBSP 76	Granular Backfill for Structures	April 19, 2012	Oct 30, 2012
264	X	GBSP 77	Weep Hole Drains for Abutments, Wingwalls, Retaining Walls And Culverts	April 19, 2012	Oct 22, 2013
		GBSP 78	Bridge Deck Construction	Oct 22, 2013	Apr 1, 2016
		GBSP 79	Bridge Deck Grooving (Longitudinal)	Dec 29, 2014	Apr 1, 2016
		GBSP 84	Precast, Prestressed Concrete Beams	Oct 5, 2015	
		GBSP 85	Micropiles	Apr 19, 1996	Oct 5, 2015
		GBSP 86	Drilled Shafts	Oct 5, 2015	Apr 1, 2016
		GBSP 87	Lightweight Cellular Concrete Fill	Nov 11, 2011	Apr 1, 2016
		GBSP 88	Corrugated Structural Plate Structures	Apr 22, 2016	

LIST ANY ADDITIONAL SPECIAL PROVISIONS BELOW

The following Guide Bridge Special Provisions have been incorporated into the 2016 Standard Specifications:

File Name	Title	Std Spec Location
GBSP32	Temporary Sheet Piling	522
GBSP38	Mechanically Stabilized Earth Retaining Walls	522
GBSP42	Drilled Soldier Pile Retaining Wall	522
GBSP43	Driven Soldier Pile Retaining Wall	522
GBSP44	Temporary Soil Retention System	522
GBSP46	Geotextile Retaining Walls	522
GBSP57	Temporary Mechanically Stabilized Earth Retaining Walls	522
GBSP62	Concrete Deck Beams	504
GBSP64	Segmental Concrete Block Wall	522
GBSP65	Precast Modular Retaining Wall	522
GBSP74	Permanent Steel Sheet Piling (LRFD)	522
GBSP80	Fabric Reinforced Elastomeric	1028

The following Guide Bridge Special Provisions have been discontinued or have been superseded:

File Name	Title	Disposition:
GBSP70	Braced Excavation	Use TSRS per Sec 522

STATE OF ILLINOIS SPECIAL PROVISIONS

The following Special Provisions supplement the specifications listed in the table below, which apply to and govern the proposed improvement designated as FAP 0335 (IL Route 60) and Academy Drive, Section Number 14-f3000-03-BT, Project Number 61101-0124-786 in Lake County and in case of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and govern.

SPECIFICATION	ADOPTED/DATED
Standard Specifications for Road and Bridge Construction	April 1, 2016
Manual on Uniform Traffic Control Devices for Streets and Highways Illinois Supplement	Latest Edition
Supplemental Specifications, Recurring Special Provisions, and BDE Special Provisions (indicated on sheets included herein)	April 1, 2016
Standard Specifications for Water & Sewer main Construction in Illinois	Latest Edition
Manual of Test Procedures for Materials	Latest Edition

Contract No. 61C39

LOCATION OF IMPROVEMENT

This improvement is located at IL Route 60 and Academy Drive, in the City of Lake Forest, Lake County, Illinois. The total gross length of the improvement is 3,335.5 feet (0.63 miles); the total net length is 2,868.9' (0.54 Miles).

DESCRIPTION OF IMPROVEMENT

The work consists of a 8 foot bike path, a 6 foot grass shoulder on each side of the path, tree removal, earth excavation, erosion control, pcc sidewalks, curb and gutter removal, storm sewers, relocation of traffic signals, proposed pedestrian bridge, mobilization, traffic control and protection, as well as all incidental and collateral work necessary to complete the project as shown in the plans and described herein.

CONCRETE WASHOUT FACILITY

Description: The Contractor shall take sufficient precautions to prevent pollution of streams, lakes, reservoirs, and wetlands with fuels, oils, bitumens, calcium chloride, or other harmful materials according to Article 107.23 of the “Standard Specifications”.

General: To prevent pollution by residual concrete and/or the byproduct of washing out the concrete trucks, concrete washout facilities shall be constructed and maintained. The concrete washout shall be constructed, maintained, and removed according to this special provision and details included in these plans. Concrete washout facilities shall be required regardless of the

need for NPDES permitting. On projects requiring NPDES permitting, concrete washout facilities shall also be addressed in the Storm Water Pollution Prevention Plan.

The concrete washout facility shall be constructed on the job site according to details included in these plans. The Contractor may elect to use a pre-fabricated portable concrete washout structure. The Contractor shall submit a plan for the concrete washout facility, to the Engineer for approval, a minimum of 10 calendar days before the first concrete pour. The working concrete washout facility shall be in place before any delivery of concrete to the site. The Contractor shall limit all concrete washout activities to the designated area.

The concrete washout facility shall be located no closer than 50 feet from any environmentally sensitive areas, such as water bodies, wetlands, and/or other areas indicated on the plans. Adequate signage shall be placed at the washout facility and elsewhere as necessary to clearly indicate the location of the concrete washout facility to the operators of concrete trucks.

The concrete washout facility shall be adequately sized to fully contain the concrete washout needs of the project. The contents of the concrete washout facility shall not exceed 75% of the facility capacity. Once the 75% capacity is reached, concrete placement shall be discontinued until the facility is cleaned out. Hardened concrete shall be removed and properly disposed of outside the right-of-way. Slurry shall be allowed to evaporate, or shall be removed and properly disposed of outside the right-of-way. The Contractor shall immediately replace damaged basin liners or other washout facility components to prevent leakage of concrete waste from the washout facility. Concrete washout facilities shall be inspected by the Contractor after each use. Any and all spills shall be reported to the Engineer and cleaned up immediately. The Contractor shall remove the concrete washout facility when it is no longer needed.

Basis of Payment: The cost of all materials required and all labor necessary to comply with the above will not be paid for separately, but shall be considered as included in the cost of MOBILIZATION, and no additional compensation will be allowed.

SURVEY CONTROL POINTS

The Contractor shall furnish the Engineer with the materials required to establish survey control points according to Article 105.09 of the “Standard Specifications” and the following:

Paint: The Contractor shall furnish, at their expense, white, pink or purple pavement marking paint in aerosol cans, for use by the Engineer. The quality of the marking paint shall be as manufactured by Aervoe-Pacific Co. (distributed by Municipal Marking Distributors, Inc., Dundee, IL) or approved equal.

The Contractor and subcontractors shall only use white, pink or purple colors for their own markings. At no time will the Contractor use any of the J.U.L.I.E. utility colors listed in Article 107.31 of the “Standard Specifications”.

Hubs: The Contractor shall furnish, at their expense, hubs for use by the Engineer according to the following:

1. Shall be 1 3/8" x 7/8" x 18" (actual dimension).
2. Shall be furnished in securely banded (on each end) bundles of 25 pieces.
3. The material shall be kiln dried Douglas fir, oak or maple and surfaced on the 2 larger sides and without splits, pitch pockets, wane, knots or decayed wood.
4. The tapered end on each hub shall be pencil point tapered.

Lath: The Contractor shall furnish, at their expense, lath for use by the Engineer according to the following:

1. Shall be 1 1/8" x 1/2" x 48" (actual dimension).
2. Shall be furnished in securely banded (on each end) bundles of 50 pieces.
3. The material shall be kiln dried Douglas fir, oak or maple and surfaced on the 2 larger sides and without splits, pitch pockets, wane, knots or decayed wood.
4. The tapered end may be saw-cut tapered or pencil tapered.

The cost of this work shall be considered as included in the cost of MOBILIZATION, and no additional compensation will be allowed.

PUBLIC CONVENIENCE AND SAFETY

The Contractor shall limit public inconveniences safety conflicts according to Article 107.09 of the "Standard Specifications" and the following:

Keeping Roads Open to Traffic: All roads shall remain open to traffic. The Contractor may close one (through traffic) lane because of construction only between the hours of 9:00 AM and 3:00 PM. The Contractor shall maintain one-way traffic during these restricted hours on two lane highways with the use of signs and flaggers as shown on the applicable Traffic Control Standard. On multi-lane highways the Contractor shall maintain at least one (through traffic) lane in each direction with the use of signs, barricades, and arrow boards as shown on the Traffic Control Standards. All lanes of traffic will be maintained between 3:00 PM and 9:00 AM and when no construction activities are being carried out.

The restricted lane closure time may be adjusted by the Resident Engineer. The Contractor shall provide a start and end time and a procedure plan 48 hours prior to the lane(s) to be closed. The Resident Engineer will notify the Contractor 24 hours in advance with the decision.

If the Contractor fails to provide notification or disregards the decision by the Resident Engineer the Traffic Control Deficiency Charge will be applied as stated in the Special Provisions for Traffic Control and Protection.

Safety and Convenience: The Contractor shall maintain entrances along the proposed improvement. Interference with traffic movements and inconvenience to owners of abutting property and the public shall be kept to a minimum. Any delays or inconveniences caused by the Contractor, by complying with these requirements shall be considered included in the cost of the applicable traffic control pay items and no additional compensation will be allowed.

Contractors shall plan their work so that there will be no open holes in the pavement and that all barricades will be removed from the roadway during non-working hours, except where required for public safety.

PROTECTION AND RESTORATION OF PROPERTY

The Contractor shall protect and restore property according to Article 107.20 of the “Standard Specifications” and the following:

Trees and Shrubs: Extra care shall be exercised when operating equipment around trees or shrubs. Injured branches or roots shall be pruned in a manner satisfactory to the Engineer and shall be painted where the cut was made. Roots exposed during excavating operations shall be neatly pruned and covered with topsoil. This work shall be done as soon as possible and shall be considered as included in the cost of the contract, and no additional compensation will be allowed.

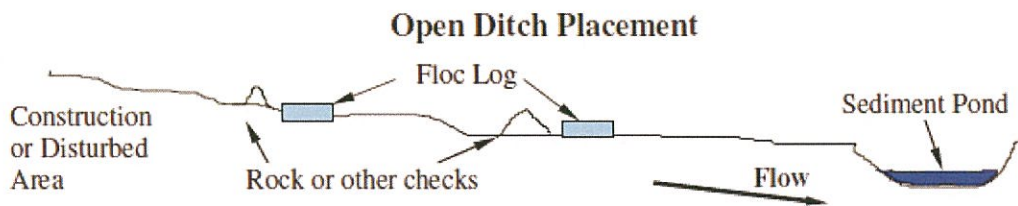
STORMWATER TREATMENT: DEWATERING/TREATMENT DITCHES

The Floc Logs are designed for use in flowing conditions for treating turbid water to remove suspended sediment. Stormwater Treatment Ditches are used to introduce site-specific polymers to turbid waters in such a manner to facilitate mixing and reaction between the polymer and the suspended particles. Collection of the flocculated particulate that forms will greatly reduce turbidity in stormwater.

A ditch is created, either by digging out the bed or building up the walls, and lined with plastic or geosynthetic fabric to prevent erosion. Floc Logs are secured along the ditch, allowing the water to mix with the site-specific polymer blend and begin reacting with the suspended sediment. Checks can be placed along the ditch, forcing the water to flow over and around them, to increase turbulence and mixing with the Floc Logs. The ditch is lined with jute or similar matting to provide surface area for the flocculated sediment to adhere to and help remove fine particulate from the water.

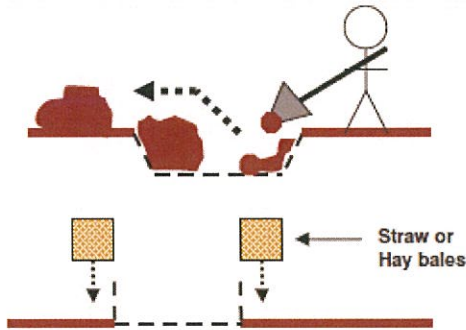
- i. This application can be used for dewatering applications, recirculation treatment, or continuous flow treatment systems.
- ii. Cover the exposed soil with jute matting and apply Silt Stop powder to prevent erosion. With highly erosive soils protection with geotextile or plastic sheeting may be necessary.

- iii. Ensure only turbid water is entering the ditch. The turbidity of the water flowing through the system should not exceed 4% solids. If the sediment load of the water is above this limit, a grit pit or settling tank may need to be installed to encourage primary settling before treatment.
- iv. Make sure that the logs are not resting in mud or buried by sediment; drive rebar or wooden "feet" into the logs to raise them slightly if needed.
- v. Logs should be placed in a series, one after another. The number of logs is determined by the flow rate of the water and the length of the mixing ditch is determined by the reaction time required for the polymer.
- vi. Particle collection can be accomplished using jute matting in the ditch, as outlined here, or by using another method of particle collection as outlined in the next section.



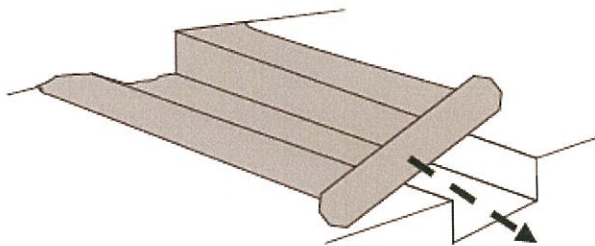
Polymer Enhanced BMP Application Guide

Step-by-Step Dewatering / Treatment Ditch



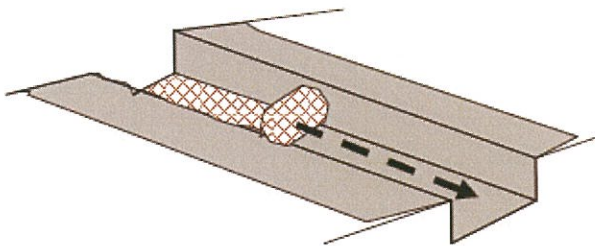
Step 1: Create ditch.

The ditch can be dug into the ground, or created by building up the walls.



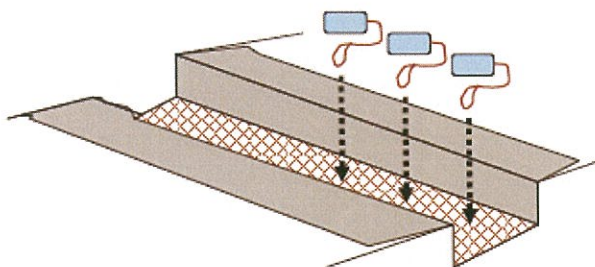
Step 2: Line with Plastic.

The plastic sheeting is used to prevent the water being treated from picking up sediment and causing erosion.



Step 3: Lay Jute Matting.

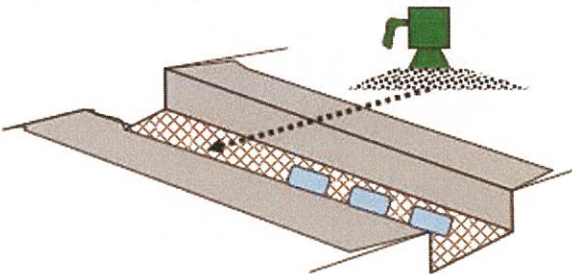
The jute matting provides a surface for the particulate formed during treatment to adhere onto.



Step 4: Place Floc Logs.

The Floc Logs are positioned in a line at the top of the ditch, allowing the water to flow over and around them.

Polymer Enhanced BMP Application Guide



Step 5: Apply Silt Stop powder.
Sprinkling the correct site-specific Silt Stop powder over the jute matting in the bottom portion of the ditch will assist in final water clarification.



Here is the water being pumped into the treatment ditch. Note the light brown color and turbidity.



The clarified water as it is leaving the site can be discharged directly to riparian waters.

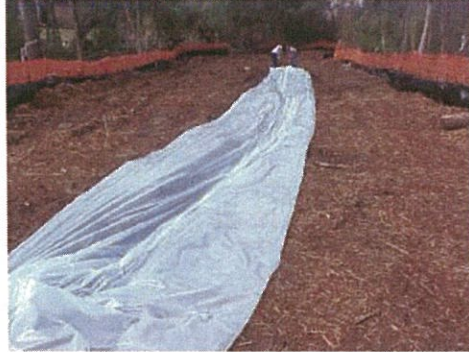
Polymer Enhanced BMP Application Guide

**Application Example: Treatment Ditch
Dewatering Operation**

1) Dig ditch



2) Line with plastic



3) Lay jute matting



4) Place Floc Logs (upstream end)



5) Apply Silt Stop (downstream end)



6) Ready for pumping



AGGREGATE BASE COURSE, TYPE B

Description: This work shall be done in accordance with Section 351 of the Standard Specifications except as modified herein. Aggregate materials shall be CA-6, Type B, in conformance with IDOT Standard Specification Article 1004.01.

General: This work shall consist of furnishing all materials, equipment, and labor and performance of all required operations for the installation of the aggregate base course for construction of the proposed trail and as specified in the Contract Documents. No aggregate base course shall be placed until the subgrade has been proof rolled or otherwise tested for stability and approved by the Engineer.

The Contractor shall establish all grades to achieve the minimum thickness indicated in the Contract Documents prior to ordering delivery of granular base material. Owner shall not be responsible for any costs associated with the delivery of surplus granular material.

Aggregate base course shall be placed with a paver box or other method approved by Engineer to ensure uniform width, depth, crown, and final surface smoothness. Placement of the aggregate base shall closely follow the horizontal alignment as staked in the field. The paver box operator shall possess sufficient skills and experience to perform the work.

Aggregate base course shall be compacted half the trail width at a time to preserve the specified crown. Compaction shall be to a minimum of ninety-five percent (95%) Standard Proctor in accordance with the IDOT Standard Specifications. Any portion of the proposed trail without the required crown after compaction will not be accepted by the Engineer and the contractor will be required to take whatever steps necessary to provide the required crown. All irregularities in the trail base course shall be smoothed out. Depressions shall be filled, high points cut down and the entire aggregate base course edge shall be trimmed and finished uniformly.

The Contractor shall perform a proof roll of the aggregate base course with the Owner or Engineer present for approval. Any failures of the base course, as determined by Owner or Engineer, that occur during the proof rolling shall be immediately repaired and subjected to retesting until all areas have passed the testing or proof rolling.

Method of Measurement: This work shall be measured for payment in place in square yards, complete per the Contract Documents. Measurements for length shall be taken along the centerline of the trail. Measurements for width shall be one foot (1') greater than the specified width of the trail or sidewalk.

Basis of Payment: This work shall be paid for at the contract unit price per Square Yard for AGGREGATE BASE COURSE, TYPE B 4", or AGGREGATE BASE COURSE, TYBE B 5".

AGGREGATE SURFACE COURSE, TYPE B, 3” (SPECIAL)

Description: This work shall be done in accordance with Section 402 of the Standard Specifications except as modified herein. Aggregate materials shall be in conformance with IDOT Standard Specification Article 1003.01 gradation FA-21. Screenings shall consist of 100% crushed native material and buff in color as typically found in the Fox River valley of Northern Illinois and Southern Wisconsin. Limestone screenings are not acceptable. Furnished material shall be obtained from one of the following locations:

Meyer Material Company
Dyer Lake, Wisconsin Quarry
815-385-4920

Thelen Sand and Gravel
Route 173 (North Pit)
Antioch, Illinois
Prime Bike Path Mix
847-395-3313

Payne & Dolan, Inc.
28327 W. Route 173
Antioch, IL 60002
Prime Bike Path Mix
847-838-3700

General: This work shall consist of furnishing all materials, equipment, and labor and performance of all required operations for the installation of the aggregate surface course for construction of the proposed trail.

No surface course shall be placed until the base course has been approved by the Owner or Engineer.

Aggregate surface course shall be placed with a paver box or other method approved by Engineer to ensure uniform width, depth, crown, and final surface smoothness.

The paver box operator shall possess sufficient skills and experience to perform the work.

Trail surface course shall be compacted half the trail width at a time, to preserve the crown, except where plans indicate a trail cross slope. Compaction shall be to a minimum of ninety-five percent (95%) Standard Proctor in accordance with the IDOT Standard Specifications. Any portion of the proposed trail without the required crown after compaction will not be accepted by the Engineer and the contractor will be required to take whatever steps necessary to provide the required crown. All irregularities in the trail surface shall be smoothed out. Depressions shall be filled and the entire trail surface shall be trimmed and finished uniformly.

Method of Measurement: This work shall be measured for payment in place in square yards, complete per the Contract Documents. Measurements for length shall be taken along the centerline of the trail. The specified width of the trail or sidewalk on the plans shall be used.

Basis of Payment: This work shall be paid for at the contract unit price per Square Yard for AGGREGATE SURFACE COURSE, TYPE B, 3” (SPECIAL).

CHAIN LINK FENCE REMOVAL (SPECIAL)

Description: This work shall consist of the removal and disposal of an existing fence from the project site regardless of the fence type.

General: The Contractor shall remove all components of the existing fence including any concrete used to anchor fence posts, bracing, guy wires, posts, and/or gates. All removed materials shall be disposed of outside the limits of the right-of-way according to Article 202.03 of the “Standard Specifications” and/or as directed by the Engineer.

Method of Measurement: This work will be measured for payment in feet, along the top of the existing fence, from center to center of end posts, including the length occupied by gates.

Basis of Payment: This work will be paid for at the contract unit price per foot for CHAIN LINK FENCE REMOVAL (SPECIAL).

CLEARING AND GRUBBING

Description: This work shall consist of the removal and disposal of existing vegetation and root systems at the direction of the Engineer. This work shall be done in accordance with Section 201 of the “Standard Specifications” except as modified herein.

Execution: Prior to any removal, the Contractor shall discuss the area of trees and vegetation to be removed with the Engineer. Until the Contractor and the Engineer have agreed upon a quantity for the area to be removed, no work may continue in that particular area. The Contractor shall not be entitled to an additional compensation associated with a delay of this nature.

This item shall be used by the Contractor for the removing of all trees, brush and root systems, that by their presence inhibits the removal of items designated for such on the plans for this contract. All brush and trees that are removed shall be chipped and shredded and then stockpiled on the site for future use. The area to be used for stockpiling this material shall be designated by the Engineer. Once the material has been stockpiled, the Contractor shall relinquish control of this material to the Engineer. This work shall be considered as incidental to the cost of this pay item.

Contractor shall hire a qualified Arborist and complete the Compliance Agreement from Illinois Department of Agriculture. Licensee will handle any infected material in accordance with the

EAB Compliance Agreement and the Applicable to State or Federal Cooperative Domestic Quarantines for the Emerald Ash Borer pursuant to the Insect Pest and Plant Disease Act (505 Illinois compiled Statutes 90/1 et seq.)

Method of Measurement: This work will be measured for payment in square yard.

Basis of Payment: This work will be paid for at the contract unit price per square yard of CLEARING AND GRUBBING. The unit price shall include all equipment, materials and labor required.

CURB REMOVAL AND REPLACEMENT

Description: This work shall consist of removal, replacement of the curb or combination concrete curb and gutter as shown on the plans.

General: This work shall be performed in accordance with Section 440 and Section 606 of the “Standard Specifications”, Standard Drawing 606001, and Design Standard Drawing BD-24.

Basis of Payment: This work will be paid for at the contract unit price per foot for CURB REMOVAL AND REPLACEMENT regardless of the size or type of curb or curb and gutter to be replaced, which price shall include all labor, equipment and materials necessary to complete the work. Earthwork and subbase work associated with curb or curb and gutter removal and replacement shall not be paid for separately but shall be included in the unit cost of the CURB REMOVAL AND REPLACEMENT.

DETECTABLE WARNINGS

Description: This work shall consist of furnishing and installing detectable warnings in accessibility ramps.

Materials: The detectable warnings shall be cast iron panels of the sizes shown on the plans and shall meet the following material specification:

The detectable warning plate shall be constructed of gray iron meeting the requirements of Article 1006.14 of the “Standard Specifications” and ASTM A48, CLASS 35B; or cast ductile iron meeting the requirements of Article 1006.15 of the “Standard Specifications”.

The coating system shall consist of a rust inhibiting epoxy primer and a finish coat.

The epoxy primer shall have the following properties:

Property	Test Method	Performance
Humidity	ASTM D1735	1000 Hours Minimum
Water Immersion	ASTM D870	250 Hours Minimum
Corrosion Resistance (Salt Spray)	ASTM B117	1000 Hours Minimum

Cold Rolled Steel Lab Panels

The finish coat shall be a powder coat and shall have the following properties:

Property	Test Method	Performance
Color	---	Federal Yellow
Corrosion Resistance (Salt Spray)	ASTM B117	1000 Hours Minimum

Cold Rolled Steel Lab Panels

The gray iron plate (concrete ramps only) shall be supplied from one of the following manufacturers:

Neenah Foundry
 545 Kimberly Drive
 Carol Stream, IL 60188
 Phone # 630-653-5440
<http://www.neenahfoundry.com/>

East Jordan Iron Works
 310 Garnet Drive
 New Lenox, IL 60451-3502
 Phone # 1-800-626-4653
<http://www.ejiw.com>

Detectile Corporation
 603 Mallard Lane
 Oak Brook, IL 60523
 Phone # 1-630-734-0277
<http://www.detectile.com>

General: The installation of detectable warnings shall meet the requirements of Article 424.09 of the “Standard Specifications”. Grey iron plates shall be installed in concrete accessibility ramps only. Ductile iron plates may be installed in either concrete or hot-mix asphalt (HMA) accessibility ramps.

Method of Measurement: This work will be measured for payment in place installed, in square feet. The concrete area under the detectable warnings will be measured for payment as PORTLAND CEMENT CONCRETE SIDEWALK of the thickness specified, with no deductions made for the detectable warnings panels located within the ramp.

Basis of Payment: This work will be paid for at the contract unit price per square foot of DETECTABLE WARNINGS. The unit price shall include all equipment, materials and labor required to install the panels.

DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED

Description: This work shall consist of adjusting existing structures at the direction of the Engineer.

General: This work shall be performed in accordance with the Section 602 of the “Standard Specifications”.

Method of Measurement: This work will be measured for payment as each structure to be adjusted.

Basis of Payment: This work will be paid for at the contract unit price each for DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED regardless of the structure type and diameter. The unit price shall include all labor, equipment and materials necessary to complete the work.

DRAINAGE & UTILITY STRUCTURES TO BE REMOVED

Description: This work shall consist of removing existing structures at the direction of the Engineer.

General: This work shall be performed in accordance with the Section 605 of the “Standard Specifications” except as modified herein. Existing inlets within the original path corridor are to be removed prior to final grading.

Method of Measurement: This work will be measured for payment as each structure to be removed.

Basis of Payment: This work will be paid for at the contract unit price each for DRAINAGE & UTILITY STRUCTURES TO BE REMOVED regardless of the structure type and diameter. The unit price shall include all labor, equipment and materials necessary to complete the work.

DRY RUBBLE STONE OR BROKEN CONCRETE TREE WELLS

Description: This work shall be done in accordance with LCDOT Standard Detail Number LC1015, “Dry Rubble Stone or Broken Concrete Tree Wells”, included in the plans, and the following:

General: The outside limit of the 8” lift of bedding stone, the limit filter fabric, and the placement of the lateral drain and the vent drains shall be to the drip line of the tree or to limits set by the Engineer. An approximate diameter of the drip line in relation to the diameter of the tree trunk is included on the detail. It is intended to assist the contractor in estimating quantities. The 8” (200 mm) lift of bedding stone is placed on top of the existing ground area under the crown of the tree as shown on the detail. The bedding stone and filter fabric shall extend from the outside edge of the stone out to the drip line or to limits set by the Engineer. The bedding stone shall be placed in accordance with Section 282 of the “Standard Specifications”. The material shall be limited to class A-3. Limestone will not be allowed.

The 4” (100 mm) diameter perforated lateral vents and drains shall be installed in accordance with Section 601 of the “Standard Specifications” except that the material shall be limited to (a) Polyvinyl Chloride (PVC) Pipe with a Smooth Interior [1040.03] or (c) Perforated Corrugated PVC with a Smooth Interior . The pipe shall be wrapped with a fabric envelope meeting the requirements of Section 1080.01 in the “Standard Specifications”.

Method of Measurement: The tree well shall be measured in place and an average height of the stone determined. For payment, the inside diameter of the well shall be the diameter of the tree plus 2’ (600 mm). For payment, the thickness of the stone shall be 12” (300 mm). The

volume of the well shall be calculated, as the average height times the calculated area of the 12” (300 mm) thick stone, in cubic yards (cubic meters).

Basis of Payment: The work shall include all materials and labor necessary to install the tree well in accordance with the Standard Detail and this Special Provision. All pipe vents, drains, caps, and filter fabric shall be included in the pay item and shall be reflected in the contract unit price per cubic yard (cubic meter) for DRY RUBBLE STONE OR BROKEN CONCRETE TREE WELLS.

ENGINEER’S FIELD OFFICE, TYPE A (MODIFIED)

Effective: January 1, 2007

Revised: January 1, 2012

Description: This work shall consist of furnishing and maintaining in good condition, for the exclusive use of the Engineer, a weatherproof building at a location approved by the Engineer.

General: The field office shall meet the requirements of Article 670.02 of the “Standard Specifications”, and the following:

The field office and the required equipment, supplies and services shall meet the approval of the Engineer.

The copy machine on site shall be capable of scanning to pdf.

An electric pencil sharpener shall be included in the field office equipment.

A hand sanitizer shall be included in the restroom facilities.

Penalty: Failure by the Contractor to meet the specified occupancy date for any field office shall be grounds for assessment of a penalty of **\$100** per day for each calendar day thereafter that such facility remains incomplete in any respect. Failure by the Contractor to equip, heat, cool, power, supply or clean the field office shall be grounds for assessment of a penalty of **\$100** per day for each calendar day that the field office remains incomplete after receipt of written notification from the Engineer. Such penalty shall be deducted from monies due or to become due the Contractor under the Contract.

Basis of Payment: This item will be paid for at the contract unit price per calendar month for ENGINEER’S FIELD OFFICE, TYPE A (MODIFIED). The unit price shall include all supplies, equipment, materials and labor required to furnish and maintain the field office.

ENTRANCE SIGN

Description: This work shall consist of all labor, equipment, and materials required for providing and installing the architectural precast core, caps, surrounds, masonry, concrete foundation, flashing and caulking in accordance with the details on the plans.

Submittals: Contractor shall submit precast shop drawings and Masonry Product data/ cut sheets.

General Requirements: This work is to be done in accordance with the details on the plans. Precast and masonry is to be installed by a qualified installer who employs experienced stonemasons and stone fitters. During construction, at the end of each day's work, tops of walls, projection, and sills are to be covered with waterproof sheeting. Cover partially completed segments when construction is not in progress.

Architectural precast concrete core, caps and surrounds are to be constructed as shown in the details. Dirty or stained stone surfaced are to be cleaned by removing soil, stains, and foreign materials before setting. Precast panels are to be set in locations indicated with edged and faces aligned according to established relationships and indicated tolerances. Uniform joint widths are to be maintained.

Caulk Edge is to be provided where indicated.

Basis of Payment:

Architectural precast concrete core, caps, surrounds, masonry and concrete foundation will be paid for at the contract lump sum price for ENTRANCE SIGN, as specified, which price shall include all equipment, labor, and materials necessary to complete the work as specified herein.

EXPLORATION TRENCH, SPECIAL

Description: This work shall be done in accordance with Section 213 of the Standard Specifications except as modified herein. This item shall consist of excavating a trench at the locations directed by the Engineer for the purpose of locating existing TILE LINES, GAS LINES, and other UTILITIES within the construction limits of the proposed improvement.

General: The trench shall be deep enough to expose the utility, and the width of the trench shall be sufficient to allow proper investigation to determine if the utility needs to be replaced.

The exploration trench shall be backfilled with trench backfill at the direction of the Engineer meeting the requirements of the Standard Specifications. This shall be paid for at the contract unit price for trench backfill.

Method of Measurement: An estimated length of exploration trench has been shown in the summary of quantities to establish a unit price only, and payment shall be based on the actual length of trench explored without a change in unit price because of adjustment in plan quantities.

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

FLOCCULATION LOGS; FLOCCULATION POWDER

Description: This work shall consist of furnishing and applying Flocculation Logs and/or Flocculation Powder on the project site to minimize soil erosion, bind soil particles, remove suspended particles, and act as a construction aide.

Materials: The polymer shall be a water soluble anionic polyacrylamide (PAM). PAMs are manufactured in various forms to be used on specific soil types. Using the wrong PAM may result in performance failures. All site specific soils shall be tested by a Certified Professional in Erosion and Sediment Control (CPESC) each time a PAM is used. The following measures shall be adhered to:

- a) Toxicity: All vendors and suppliers of PAM, PAM mix, or PAM blends, shall supply a written toxicity report, which verifies that the PAM, PAM mix or PAM blends, exhibits acceptable toxicity parameters which meet or exceed the requirements for the State and Federal Water Quality Standards. **Cationic formulations of PAM, PAM blends, polymers or Chitosan are not allowed.**
- b) Performance: All vendors and suppliers of PAM, PAM mix or PAM blends shall supply written “site specific” testing results, demonstrating that a performance of 95% or greater of nephelometric turbidity units (NTU) or total suspended solids (TSS) is achieved from samples taken. In addition to soil testing, a CPESC shall design the installation plan for the polymers based on mix time and point of entry.
- c) Safety: PAM shall be mixed and/or applied in according to all Occupational Safety and Health Administration (OSHA) material safety data sheet (MSDS) requirements and the manufacturer’s recommendations for the specified use.

Construction Requirements:

Flocculation Powder Dry Form Application: Dry form powder may be applied by hand spreader or mechanical spreader. Pre-mixing of dry form PAM into fertilizer, seed or other soil amendments is allowed when approved by the CPESC. The application method shall insure uniform coverage of the target area. Application rates typically range from 10 – 18 pounds per acre.

Flocculation Powder Hydraulically Applied Application: PAM is typically used as part of hydraulically applied slurry containing at least mulch and seed to quickly establish vegetation (temporary or permanent). When used without seed, PAM provides temporary erosion protection for cut & fill surfaces. Application rates typically range from 10 - 18 pounds per acre.

Flocculation Powder Installation constraints: Flocculation Powder shall be applied to non-frozen soil surfaces, only. An unfrozen soil surface is defined as any exposed soil surface free of snow, standing water, ice crystals, etc., which is comprised of discrete soil particles unbound to one

another by surface or instestacy ice. The temperature shall be at least 40° F, when hydraulically applying the Flocculation Powder

Flocculation Log Installation: A Flocculation Log is a semi-hydrated polyacrylamide block that is placed within storm water and/or construction site drainage to remove fine particles and reduce NTU values. Placement of Flocculation Logs should be as close to the source of particle suspension as possible. Ideal performance of the Flocculation Logs occurs when the product is used in conjunction with other best management practices (BMPs). Each Flocculation Log is specifically formulated for the soil and water chemistry at the site. Soil and water samples will determine which formula Flocculation Log is needed. The samples will also aid in determining proper placement.

Flocculation Products Maintenance plan: As with any other BMP, this system will need to have a maintenance plan in place. The Contractor shall perform the following items as directed by the Engineer:

1. Reapplication of Flocculation Powder to disturbed areas
2. Reapplication of Flocculation Powder to temporary areas
3. Replacement of Flocculation Logs
4. Adjustments to the Storm Water Pollution Prevention Plan

Method of Measurement: An estimated quantity of Flocculation Logs is included in the summary of quantities to establish a unit price only. A typical dry log weighs about 10 pounds and is approximately 5" x 4" x 12". Payment will be made based on the actual number of logs used. An estimated quantity of Flocculation Powder is included in the summary of quantities to establish a unit price only. Payment will be made based on the actual quantity (weight) of powder applied.

Basis of Payment: FLOCCULATION LOGS will be paid for at the contract unit price per each. FLOCCULATION POWDER will be paid for at the contract unit price per pound. Payment will be based on the actual number of logs and/or the actual weight of the powder used without a change in unit price because of adjustment in plan quantities, and no extra compensation will be allowed for any delays, inconveniences or damage sustained by the Contractor in performing the work. The unit price shall include all equipment, materials and labor required to furnish and apply flocculation logs and/or flocculation powder.

FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)

Description: This work shall consist of adjusting existing structures at locations indicated on the plans.

General: This work shall be performed in accordance with the Bureau of Design Standard for Frames and Lids Adjustment with Milling (BD-8) and Section 602 of the Standard Specifications.

Method of Measurement: This work will be measured for payment as each structure to be adjustment.

Basis of Payment: This work will be paid for at the contract unit price per each for FRAMES AND LIDS TO BE ADJUSTED (SPECIAL) which price shall include all labor, equipment, and materials necessary to perform said work.

GEOTEXTILE FILTER FABRIC

Description: This work shall be done in accordance with Section 210 of the Standard Specifications except as modified herein.

General: Geotextile fabric shall be non-woven; needle punched polypropylene staple fiber that is UV stabilized and resistant to chemicals, mildew and insects.

The following criteria must be met:

Grab Tensile Strength	215 lbs
Elongation	50%
Puncture	60 lbs
Permittivity	1.3 sec ⁻¹

Method of Measurement: This work shall be measured for payment in square yards.

Basis of Payment: This work shall be paid for at the contract unit price per square yard as GEOTEXTILE FILTER FABRIC.

HEAVY DUTY EROSION CONTROL BLANKET, SPECIAL

Description: This work shall consist of furnishing, placing and removing erosion control mat along with a flocculation powder application as a temporary erosion control measure along the project limits at ditch outfalls.

General: The work shall be performed according to Article 251.04 of the “Standard Specifications” and the manufacturer’s recommendations.

Materials: The erosion control mat shall be limited to jute fabric according to the following:

The erosion control mat shall be a woven fabric of a uniform open weave of single jute yarn. The jute yarn shall be of loosely twisted construction with an average twist of not less than 1½ turns per 1”. The average size of the warp and weft yarns shall be approximately the same. The woven fabric shall be supplied in rolled strips with a certificate of compliance certifying that the jute fabric erosion mat conforms to the following:

- That the erosion control mat is a minimum 48” wide with a tolerance of minus 1”.
- That the erosion control mat has 78 warp ends, +/- 1 for each 48” of width.

- That the erosion control mat has 45 weft yarns, +/- 2, per linear yard of length.
- That the erosion control mat weighs 92 pounds per 100-square yards +/- 10 percent, measured under average atmospheric conditions.
- That the erosion control mat is non-toxic to vegetation.

Method of Measurement: This work will be measured for payment per square yard of material placed. Each installation of the erosion control mat shall be measured for payment. The flocculation powder will be measured separately according to the special provision for FLOCCULATION POWDER contained herein.

Basis of Payment: This work will be paid for at the contract unit price per square yard for HEAVY DUTY EROSION CONTROL BLANKET, SPECIAL. The unit price shall include all labor, equipment and materials necessary for installation, removal and disposal of the erosion control mat. The flocculation powder will be paid for separately according to the special provision for FLOCCULATION POWDER contained herein.

METAL END SECTIONS

Description: This work shall be done in accordance with Article 542 of the Standard Specifications except as modified herein.

General: The galvanized material used in the fabrication of the end sections shall conform to the applicable material requirements of AASHTO M 218 or ASTM A 929. All fabrication of the product shall occur within the United States of America. The end sections shall be manufactured to show careful finished workmanship. There shall be no loosely formed seams or ragged shear edges. The markings on the sheets as received from the steel supplier shall be legible. The metallic coating on the end section shall not be bruised, broken or otherwise damaged. If there is damage to the coating it shall be repaired in accordance with ASTM A 780.

Metal end sections will match the diameter of the CSP extension when being used with HDPE pipe. Where metal end sections are connected directly to HDPE pipe, the metal end section will typically be one diameter larger.

Method of Measurement: This work shall be measured for payment as each as counted in place.

Basis of Payment: This work shall be paid for at the contract unit price per each as METAL END SECTIONS 15”.

ORNAMENTAL FENCE

Description: This work shall consist of furnishing and installing a steel fence, gates and accessories as shown on the plans.

Materials:

- A. The steel material for the fence framework (i.e., tubular pickets, rails and posts) shall meet the following:
- I. Galvanized after forming:
 - a. Conform to the requirements of ASTM A1011/1011M
 - b. Minimum yield strength of 50,000 psi.
 - c. The exterior shall be hot-dip galvanized with a 0.45 oz/ft² minimum zinc weight.
 - d. The interior surface shall be coated with a minimum 81% normal zinc pigmented coating, 0.3 mils minimum thickness.
 - II. Galvanized prior forming
 - a. Conform to the requirements of ASTM A924/A924M
 - b. Minimum yield strength of 50,000 psi.
 - c. The steel shall be hot-dip galvanized to meet the requirements of ASTM A653/A653M with a minimum zinc coating weight of 0.90 oz/ft², Coating Designation G-90.
- B. The manufactured galvanized framework shall be subjected to a thermal stratification coating process (high-temperature, in-line, multi-stage, multi-layer) including as a minimum, a six-stage pretreatment/wash (with zinc phosphate), an electrostatic spray application of an epoxy base, and a separate electrostatic spray application of a polyester finish. The base coat shall be a zinc-rich thermosetting epoxy powder coating (gray in color) with a minimum thickness of 2 mils. The topcoat shall be a “no-mar” TGIC polyester powder coat finish with a minimum thickness of 2 mils. The color shall be as specified on the standard drawing included in the plans. The stratification-coated framework shall be capable of meeting the performance requirements for each quality characteristic shown in the following table.

Quality Characteristics	ASTM Test Method	Performance Requirements
<i>Adhesion</i>	<i>D3359 – Method B</i>	<i>Adhesion (Retention of Coating) over 90% of test area (Tape and knife test).</i>
<i>Corrosion Resistance</i>	<i>B117 & D1654</i>	<i>Corrosion Resistance over 3,500 hours (Scribed per D1654; failure mode is accumulation of 1/8" coating loss from scribe or medium #8 blisters).</i>
<i>Impact Resistance</i>	<i>D2794</i>	<i>Impact Resistance over 60 inch lb. (Forward impact using 0.625" ball).</i>
<i>Weathering Resistance</i>	<i>D822, D2244, D523 (60° Method)</i>	<i>Weathering Resistance over 1,000 hours (Failure mode is 60% loss of gloss or color variance of more than 3 delta-E color units).</i>

Table 1 – Coating Performance Requirements

- C. The material for the fence pickets shall be 1” square x 16 gauge tubing. The cross-sectional shape of the rails shall conform to the manufacturer’s design with outside cross section dimensions of 1.75” square and a minimum thickness of 14 gauge. Picket holes in the horizontal rail shall be spaced 4.98” on center. The picket retaining rods shall be made of 0.125” diameter galvanized steel. The minimum post size shall be 2½” square x 12 gauge. High quality PVC grommets shall be supplied to seal all picket-to-rail intersections.

The manufacturer's literature (or shop drawings and specifications) shall be submitted to the Engineer prior to ordering the fence. The ornamental fence, as shown on LCDOT standards LC6601 and as specified herein, is an industrial quality ornamental steel fence system. The drawings and dimensions were furnished by one manufacturer. An equivalent fence system may be proposed for substitution. The Engineer is the sole judge of what is an equivalent substitution.

General: Installation of the fence shall be according to the applicable portions of Section 664 [Chain Link Fence] of the “Standard Specifications”, except as follows:

1. Dimensions and design details are as shown on the plans.
2. At some locations, the fencing shall be attached to concrete retaining walls. The attachment methods shall conform to the requirements of the “AASHTO LRFD (Load and Resistance Factor Design) Bridge Design Specifications” (AASHTO 2007) Section 13, “Railings”. The fence shall be attached using mounting brackets and anchors.
3. Fence post installation in soil shall be done using concrete footings as shown on the plans.

Fence Fabrication:

- A. The pickets, rails and posts shall be pre-cut to specified lengths. The horizontal rails shall be pre-punched to accept the pickets.
- B. The grommets shall be inserted into the pre-punched holes in the rails and the pickets shall be inserted through the grommets so that the pre-drilled picket holes align with the internal upper raceway of the horizontal rails. (Note: This can best be accomplished by using an alignment template.) Retaining rods shall be inserted into each horizontal rail so that they pass through the predrilled holes in each picket completing the panel assembly.
- C. The completed panels shall be capable of supporting a 600lb load (applied at midspan) without any permanent deformation. Panels with rings shall be biasable to a 12.5% change in grade. Panels without rings shall be biasable to a 25% change in grade.
- D. Gates shall be fabricated using the same components as the fence system. The panel material and gate ends will have the same outside cross section dimensions as the

horizontal rail. All rail and upright intersections shall be joined by welding. Picket and rail intersections shall be joined by welding or the same retaining rod used for the panel assembly.

Installation:

The fence posts shall be set according to the spacing shown in Table 2, ±½“, depending on the nominal span specified.

Span	6' Nominal (67¾" Rail)				8' Nominal (92⅝" Rail)			
Post Size	2½"	3"	2½"	3"	2½"	3"	2½"	3"
Bracket Type	Standard (BB301)		Angle (BB304)		Standard (BB301)		Angle (BB304)	
Post Settings ± ½" o.c.	71½"	72"	73"	73½"	96"	96½"	97½"	98"

Table 2 – Post Spacing Requirements

For installations that must be raked to follow sloping grades, the post spacing dimension must be measured along the grade. Fence panels shall be attached to posts with brackets supplied by the manufacturer. For fencing installed in soil, posts shall be set in concrete footings having a minimum depth of 36" as shown on LCDOT standards LC6000, LC6601 or LC6602 included in the plans.

For fence installed on top of a concrete retaining wall, posts shall be set by methods such as plated posts or grouted core-drilled footings. The anchor method shall conform to the requirements of the "AASHTO LRFD (Load and Resistance Factor Design) Bridge Design Specifications" (AASHTO 2007), Section 13, "Railings". The Contractor shall provide shop drawings of the anchor method to the Engineer for review and approval.

FENCE INSTALLATION MAINTENANCE

When cutting/drilling rails or posts adhere to the following steps to seal the exposed surfaces:

- 1) Remove all metal shavings from cut area.
- 2) Apply custom finish paint matching fence color.

GATE INSTALLATION

Gates shall be installed at the locations indicated in the contract plans. Gate posts shall be spaced according to the manufacturers' gate drawings, dependent on standard out to out gate leaf dimensions and gate hardware selected. Type and quantity of gate hinges shall be based on the application; weight, height, and number of gate cycles. The manufacturers' gate drawings shall identify the necessary gate hardware required for the application. Gate hardware shall be provided by the manufacture of the gate and shall be installed per manufacturer's recommendations

The fence panels shall be attached to the posts using mechanically fastened panel brackets supplied by the manufacturer.

Method of Measurement: Ornamental Fence will be measured for payment in feet along the top of the fence from center to center of the end posts.

Basis of Payment: This work will be paid for at the contract unit price per foot for ORNAMENTAL FENCE. *The unit price shall include furnishing and installing the fence, including all fence connections, connection to a retaining wall (where required), concrete foundations, fence openings and gates (where indicated) and electric grounding. The unit price shall also include all equipment, materials and labor required to install the fence.*

OUTLOOK RAILING

Description: This work shall consist of all labor, equipment, and materials required providing and installing the architectural precast railing around the top of the retaining wall in accordance with the details on the plans.

Submittals: Contractor shall submit precast shop drawings.

General Requirements: This work is to be done in accordance with the details on the plans. Precast is to be installed by a qualified installer who employs experienced stonemasons and stone fitters. During construction, at the end of each day's work, tops of walls, projection, and sills are to be covered with waterproof sheeting. Cover partially completed segments when construction is not in progress.

Architectural precast concrete core, caps and surrounds are to be constructed as shown in the details. Precast panels are to be set in locations indicated with edges and faces aligned according to established relationships and indicated tolerances. Uniform joint widths are to be maintained.

Method of Measurement: The outlook railing will be measured for payment in feet along the top of the railing from end to end along the centerline of railing. Cap on railing will not be paid for separately but shall be included in the cost of Outlook Railing.

Basis of Payment: Architectural precast railing and caps will be paid for at the contract unit price per foot for OUTLOOK RAILING as specified, which price shall include all equipment, labor, and materials necessary to complete the work as specified herein.

PEDESTRIAN BENCH, FURNISH AND INSTALL

Description: This work shall consist of all labor, equipment, and materials required providing and installing the architectural precast bench for the overlook in accordance with the details on the plans.

Submittals: Contractor shall submit precast shop drawings.

General Requirements: This work is to be done in accordance with the details on the plans. Precast is to be installed by a qualified installer who employs experienced stonemasons and stone fitters. Architectural precast bench is to be constructed as shown in the details.

Basis of Payment: Architectural precast bench will be paid for at the contract unit price each for PEDESTRIAN BENCH, FURNISH AND INSTALL as specified, which price shall include all equipment, labor, and materials necessary to complete the work as specified herein.

PERIMETER EROSION BARRIER

Description: This work shall consist of constructing, removing and disposing of perimeter erosion barrier as part of the project’s temporary erosion control system.

General: The work shall be performed according to Section 280 of the “Standard Specifications” and the following:

The perimeter erosion barrier shall be limited to temporary silt filter fence meeting the requirements of AASHTO Standard M 288-00. This specification is applicable to the use of a geotextile as a vertical, permeable interceptor designed to remove suspended soil from overland water flow. The function of a temporary silt fence is to filter and allow settlement of soil particles from sediment-laden water. The purpose is to prevent the eroded soil from being transported off the construction site by water runoff.

All removed materials shall be disposed of outside the right-of-way according to Article 202.03 of the “Standard Specifications”.

Materials: Geotextile Requirements: The geotextile used for the temporary silt fence shall be classified as supported (with a wire or polymeric mesh backing) or unsupported (no backing). The temporary silt fence geotextile shall meet the requirements of Table 6 included below. All numeric values except Apparent Opening Size (AOS) represent Minimum Average Roll Values (MARV as defined in ASTM D4439). The values for AOS are the Maximum Average Roll Values.

Table 6 – Temporary Silt Fence Requirements

Requirements	Test Methods	Wire Backed Supported Silt Fence ^a	Unsupported Silt Fence	
			Geotextile Elongation $\geq 50\%$ ^b	Geotextile Elongation $< 50\%$ ^b
Maximum Post Spacing		4 feet	4 feet	6 feet
Grab Strength	ASTM D 4632			
Machine direction		90 lbs	124 lbs	124 lbs
X-Machine direction		90 lbs	100 lbs	100lbs
Permittivity ^c	ASTM D 4491	0.05 sec ⁻¹	0.05 sec ⁻¹	0.05 sec ⁻¹
Apparent Opening Size	ASTM D 4751	0.024in maximum average roll value		
Ultraviolet stability (retained strength)	ASTM D 4355	70% after 500 hours of exposure		

Notes:

Silt fence support shall consist of 14-gauge steel wire with a mesh backing of 6" x 6" or prefabricated polymeric mesh of equivalent strength.

As measured according to ASTM D 4632.

These default filtration property values are based on empirical evidence with a variety of sediments. For environmentally sensitive areas, a review of previous experience and/or site or regionally specific geotextile tests should be performed by the agency to confirm suitability of these requirements.

Support Posts: The support posts may be composed of wood, steel or a synthetic material. The posts shall be a minimum length of 3 feet plus the buried depth. They shall have sufficient strength to resist damage during installation and to support the applied loads due to material build up behind the silt fence.

Hardwood posts shall be a minimum of 1.2" x 1.2"

No. 2 southern pine posts shall be a minimum of 2.6" x 2.6"

Steel posts may be U, T, L, or C shape, weighing 1.3 lbs per foot.

Fence Support: The wire or polymer support fence shall be at least 30" high and strong enough to support the applied loads. Polymer support fences shall meet the same ultraviolet degradation requirements as the geotextile material (see table 6).

The wire support fence shall:

Be a minimum of 14-gauge.

Have a minimum of six horizontal wires.

The maximum vertical wire spacing shall be 6".

Construction: The silt fence shall be installed with a minimum height above ground of 30". The geotextile at the bottom of the fence shall be buried, in a "J" configuration to a minimum depth of 6", in a trench so that no flow can pass under the silt fence. The trench shall be backfilled and the soil compacted over the geotextile.

The geotextile shall be spliced together with a sewn seam or two sections of fence may be overlapped instead. The sewn seam shall be positioned only at a support post.

The Contractor must demonstrate to the satisfaction of the Engineer that the geotextile can withstand the anticipated sediment loading.

The posts shall be placed at the spacing shown on the project plans. The posts shall be driven or placed a minimum of 20" into the ground. The depth shall be increased to 24" if the fence is placed on a slope of 3:1 or greater. If the 20" depth is impossible to obtain, the posts shall be adequately secured to prevent overturning of the fence due to sediment loading.

The support fence shall be securely fastened to the upslope side of the fence post. The support fence shall extend from the ground surface to the top of the geotextile.

When un-supported fence is used, the geotextile shall be securely fastened to the fence posts.

Field monitoring shall be performed to verify that the placement of an armor system does not damage the geotextile.

Silt fences should be continuous and transverse to the flow. The silt fence should follow the contours of the site as closely as possible. The fence shall also be placed such that run off cannot flow around the end(s) of the fence.

The silt fence should be located so that the drainage area is limited to an area equivalent to 1000 square feet for each 10 feet of fence length. Caution should be used where the site slope is greater than 1:1, and/or water flow rates exceed 0.1 cubic feet per second for each 10 feet of fence length.

Maintenance: The Contractor shall inspect all temporary silt fences immediately after each rainfall and at least daily during prolonged rainfall. The Contractor shall immediately correct any deficiencies.

The Contractor shall also make a daily review of the location of silt fences in areas where construction activities have altered the natural contour and drainage runoff to ensure that the silt fences area properly located for effectiveness. Where deficiencies exist as determined by the Engineer, additional silt fence shall be installed as directed by the Engineer.

Damaged or otherwise ineffective silt fences shall be repaired or replaced promptly.

Sediment deposits shall either be removed when the deposit reaches half the height of the fence or a second silt fence shall be installed as directed by the Engineer.

The silt fence shall remain in place until the Engineer directs it to be removed. After the fence removal, the Contractor shall remove and dispose of any excess sediment accumulations, dress the area to give it a pleasing appearance, and cover with vegetation all bare areas according to the contract requirements.

The removed silt fence may be used at other locations provided the geotextile and other material requirements continue to be met to the satisfaction of the Engineer.

Method of Measurement: This work will be measured for payment in place in feet.

Basis of Payment: This work will be paid for at the contract unit price per foot for PERIMETER EROSION BARRIER. The unit price shall include all work and materials necessary to properly install and maintain the barrier and to remove and dispose of the used materials at the completion of the project.

PIPE CULVERTS

Description: This work shall be done in accordance with Article 542 of the Standard Specifications except as modified herein. This work consists of installation of Corrugated High Density Polyethylene (HDPE) pipe culverts (complete), including pipe, bedding and backfill.

General: Corrugated High Density Polyethylene (HDPE) pipe shall be constructed in accordance with AASHTO Specification M252 and M294, as applicable, or ASTM F2306. HDPE pipe shall be black, corrugated on the exterior with smooth walled interior. Pipe diameters and lengths shall be as specified on the Construction Drawings, and appropriately sized flared end sections shall be installed at each end of the pipe.

Joints for Corrugated HDPE shall be elastomeric joints in conformance with ASTM F477 and Manufacturer's Specifications.

Method of Measurement: This work shall be measured for payment complete in feet per the Contract Documents.

Basis of Payment: This work shall be paid for at the contract unit price of foot for PIPE CULVERTS, CLASS D, TYPE 1 15”.

PRECAST ORNAMENTAL CENTER PILASTER

Description: This work shall consist of all labor, equipment, and materials required providing and installing the precast ornamental center pilaster around the top of the retaining wall in accordance with the details on the plans.

Submittals: Contractor shall submit precast shop drawings.

General Requirements: This work is to be done in accordance with the details on the plans. Precast is to be installed by a qualified installer who employs experienced stonemasons and stone fitters. During construction, at the end of each day's work, tops of walls, projection, and sills are to be covered with waterproof sheeting. Cover partially completed segments when construction is not in progress.

Precast ornamental center pilaster is to be constructed as shown in the details. Precast pilaster is to be set in locations indicated with edged and faces aligned according to established relationships and indicated tolerances. Uniform joint widths are to be maintained.

Method of Measurement: Precast ornamental center pilaster will be measured for payment in place as each precast ornamental center pilaster.

Basis of Payment: Precast ornamental center pilaster will be paid for at the contract unit price per each for PRECAST ORNAMENTAL CENTER PILASTER as specified, which price shall include all equipment, labor, and materials necessary to complete the work as specified herein.

PRECAST ORNAMENTAL CORNER PILASTER

Description: This work shall consist of all labor, equipment, and materials required providing and installing the precast ornamental corner pilaster around the top of the retaining wall in accordance with the details on the plans.

Submittals: Contractor shall submit precast shop drawings.

General Requirements: This work is to be done in accordance with the details on the plans. Precast is to be installed by a qualified installer who employs experienced stonemasons and stone fitters. During construction, at the end of each day's work, tops of walls, projection, and sills are to be covered with waterproof sheeting. Cover partially completed segments when construction is not in progress.

Precast ornamental corner pilaster and cap is to be constructed as shown in the details. Precast pilaster is to be set in locations indicated with edged and faces aligned according to established relationships and indicated tolerances. Uniform joint widths are to be maintained.

Method of Measurement: Precast ornamental corner pilaster will be measured for payment in place as each precast ornamental corner pilaster. Cap on pilaster will not be paid for separately.

Basis of Payment: Precast ornamental corner pilaster will be paid for at the contract unit price per each for PRECAST ORNAMENTAL CORNER PILASTER as specified, which price shall include all equipment, labor, and materials necessary to complete the work as specified herein.

PREPARATION OF BASE

Description: This work shall be done in accordance with Section 358 of the Standard Specifications except as modified herein. Aggregate materials shall be CA-6, Type B, in conformance with IDOT Standard Specification Article 1004.01.

General: This work shall consist of furnishing all materials, equipment and labor for the final preparation of the trail base over existing gravel surfaces. Preparation shall include grading of existing gravel surfaces, leveling, profiling, filling low areas and pot holes with CA-6, cutting ridges and high points, compacting, proof rolling and testing as required.

Compaction shall be to a minimum ninety-five percent (95%) of maximum density based on a Standard Proctor (ASTM D-698).

Method of Measurement: This work shall be measured for payment in place in square yards, complete per the Contract Documents. Measurements for length for trails shall be taken along the centerline of the trail. For trails the standard width measurement shall be one foot (1') greater than the specified trail width.

Basis of Payment: This work shall be paid for at the contract unit price per square yard for PREPARATION OF BASE.

REMOVE AND REPLACE LAWN SPRINKLER SYSTEM

Description: Work under this item shall consist of removing and replacing portions of a lawn sprinkler system that is required to be replaced as a result of construction operations and not as a result of Contractor negligence.

The following criteria shall be used to determine whether payment is due to the Contractor for removing and replacing a lawn sprinkler system:

- a. If portions of an existing sprinkler system are located between the proposed sidewalk and the curb, relocation shall be paid for as Remove and Replace Lawn Sprinkler System according to the criteria described herein.
- b. If a lawn sprinkler system is located beyond the proposed sidewalk and is damaged during construction operations, it shall be replaced by the Contractor at the Contractor's expense. Replacement systems shall be approved by the Engineer prior to placement.

The Contractor shall inventory all existing lawn sprinkler systems that are due for relocation and replacement in the presence of the Engineer. The Contractor shall take all necessary precautions to protect existing lawn sprinkler systems that are to remain in place. The Contractor shall replace only that portion of the lawn sprinkler system that is required by legitimate construction operations. The replacement sections of the lawn sprinkler system shall be compatible with the existing system. The Engineer shall approve locations of the replacement appurtenances prior to demolition activities. Once the replacement sprinklers are replaced and have been tested by the Contractor in the presence of the Engineer, the item will be measured for payment.

Method of Measurement: This work shall be measured for payment in feet of sprinkler system relocated.

Basis of Payment: This work shall be paid for at the contract unit price per foot for REMOVE AND REPLACE LAWN SPRINKLER SYSTEM in accordance with the plans and as described herein for all materials (including sprinkler heads and valves) and labor necessary to complete the work.

RETAINING WALL, SPECIAL

Description: This work shall be done in accordance with Article 1004.05 of the Standard Specifications except as modified herein. This work consists of constructing boulder retaining walls and slope treatment with the installation of geotextile fabric, aggregate base, aggregate backfill and drain pipe where required.

General: Boulders shall be naturally occurring field stones which have been rounded by glaciation. The boulders shall be of mixed geologic origin, primarily granite, as typically found in the Fox River basin of northern Illinois and southern Wisconsin or in glacial deposits typically found in central Wisconsin. Boulder colors shall generally range from buff to various shades of brown and gray. The boulders shall be provided in evenly graded size ranges and proportions as specified in the Plans. Refer to the appropriate detail(s) for specific size requirements.

Execution:

SITE PREPARATION

- A. All existing topsoil in the work area which is subject to grading and construction of the stone retaining wall shall be stripped and stockpiled. The subgrade at the work area shall be cut, filled and otherwise shaped to create the required lines, grades and wall batter angle as shown on the plans. The subgrade at the base of the wall shall be excavated to form a trench to assure the proper burial depth of the first course of boulders. The trench shall be of adequate depth to accommodate any required aggregate base. The subgrade at the wall base trench shall be undisturbed clay soil or compacted to a minimum of 95% density based on a Standard Proctor (ASTM D-698). If the required compaction density cannot be achieved due to the presence of unsuitable material or conditions the Contractor shall immediately inform the Owner or Engineer to determine the appropriate method to achieve the required subgrade conditions.

BOULDER PLACEMENT

- A. The Contractor and Engineer shall meet at the work site prior to the start of construction to verify the type of boulder retaining wall and the finished appearance desired by the Engineer. The Contractor shall place the boulders to accurately reflect the dimensions, grades and batter angle as shown on the plans.

Method of Measurement: This work shall be measured for payment in place in face square feet, complete per the Contract Documents. Measurements for boulder retaining walls shall be actual lengths and corresponding heights as taken from the finished ground surface to the top of the wall.

Basis of Payment: This work shall be paid for at the contract unit price of Square Feet for RETAINING WALL, SPECIAL.

SEEDING, CLASS 2 (MODIFIED)
LCFP LOW MAINTENCE MIX

Description: This work shall consist of the preparation of the area to be seeded and placing the seed and other materials required in seeding operations in the areas indicated on the plans for this contract or as directed by the Engineer.

This work shall be done in accordance with Section 250 of the “Standard Specifications for Road and Bridge Construction” except as modified by this special provision.

Method of application shall be in accordance with 250.06.

Products:

FERTILIZER

- A. Fertilizer for all areas designated as LCFP Low Maintenance seed mix shall have a balanced nitrogen-phosphorous-potassium composition with a minimum of 50% of the nitrogen component being slow release.
- B. Provide fertilizer in original unopened bags from the manufacturer showing complete analysis of nitrogen, phosphorous, potassium, minor elements and major element source types.

WATER

- A. Water shall be free from oil, acid, alkali, salts, and other harmful substances. Water may be utilized from potable or non-potable sources such as lakes and ponds. The Owner shall not be responsible for providing water. Any available water sources located on the Owners’ property shall not be utilized without permission from the Owner.

SEED

- A. The Contractor shall provide all seed in original unopened bags as mixed by the supplier. Each bag shall bear the supplier’s guarantee of composition and percentage of purity and germination. Each bag shall list the botanical, common and cultivar names of each species, percentage of species mix, year of production and packaging, seed origin and net weight. Seed shall be protected against leakage, damage and moisture to insure viability and dormancy. No seed shall be sown until the Engineer has inspected and approved the unopened seed mix bags
- B. Seed Mixes

Seed mixes as indicated on the plans shall be as follows:

LCFP LOW MAINTENANCE MIX		
SPECIES OR MIX	RATE (LBS/A)	% +/-
Fine Fescue Mix	200	80%
Perennial Rye Mix	50	20%
TOTAL	250	100%

- a. Fine Fescue Mix shall be a blend of creeping red, chewings, hard and sheep’s fescue; acceptable commercial blends include Highlands Fescue Mix, Legend Fine Fescue Blend and Greenskeeper National Links

Mixture.

- b. Perennial Rye Mix shall be a blend of at least three improved cultivars selected for disease resistance.

Execution:

SEED BED PREPARATION (All LCFP Seed Classes)

- A. Seed bed preparation shall not begin until all other site work, topsoil spreading and finish grading have been completed.
- B. All areas to be seeded shall be inspected and approved by the Engineer prior to the sowing of seed.
- C. Surfaces to be seeded shall be loose and friable to a minimum depth of 3 inches. Hard and compacted surfaces are not acceptable and must be tilled and raked to provide a suitable seed bed. Any rocks, soil cods or other debris greater than 1 ½” in diameter that is generated shall be removed and disposed. The prepared surface shall be free from crusting and caking.

FERTALIZATION – LCFP Low Maintenance Mix

- A. The specified fertilizer shall be applied at a rate of 2 pounds of Nitrogen per 1000 square feet or 87 pounds of Nitrogen per acre using a calibrated drop spreader or other mechanical method that will result in uniform coverage. Application of the fertilizer by hand is not acceptable.
- B. Fertilizer shall be applied prior to seeding. No fertilizer shall be applied until the Engineer has inspected and approved the products.
- C. No fertilizer shall be applied in areas designated for native seed mixes.

SEEDING METHOD – LCFP Low Maintenance Mix

- A. LCFP Low Maintenance mix shall be sown with mechanical equipment which places the seed in direct contact with the soil, covers or packs the seed and rolls the seed bed to a firm condition in one continuous operation.
- B. Seed shall be sown in two passes; the second pass oriented approximately 45 degrees from the first pass. In restricted width areas, seed shall be sown in two passes of approximately the same direction.
- C. All seeding equipment shall be approved by the Engineer prior to seeding. Use of any seeding equipment which does not include a roller or cultipacker attachment will require the Contractor to perform rolling or cultipacking of the seed bed in a separate operation. Seeding equipment shall be properly calibrated to the required seeding rates.
- D. Alternate methods of seeding such as broadcasting will only be approved by the Engineer when unfavorable site conditions such as steep slopes, limited access, or where narrow dimensions occur at the seeding areas.
- E. When a broadcast seeding method is approved the seed shall be deposited using only a dedicated broadcast spreader. Hand cast seeding shall not be acceptable. The seed shall be broadcast in two passes approximately 90 degrees from each other. After all seed has been broadcast the contractor shall rake and roll the area

to assure proper seeding depth and soil contact.

SEEDING SCHEDULES – LCFP Low Maintenance Mix

- A. Seeding of LCFP Low Maintenance seed mix is recommended to be performed between April 1 and May 15 or from August 1 and September 15. The Contractor may elect to perform this seeding immediately after work progress allows; however, all responsibility for supplemental watering to stimulate germination and growth shall rest with the Contractor. Guaranty and maintenance requirements as specified herein are not changed or relieved by the timing of seeding.

WATERING

- A. Supplemental watering of seeded areas shall be performed at the discretion of Contractor. Watering may be necessary in order to conform to the guarantee requirements as described in this section.

MOWING - LCFP Low Maintenance Mix

- A. Maintain a mowed height of 3” until achieving the performance and guaranty criteria for seeded areas. Mow turf promptly when it reaches a height of 6”.
- B. All mowing shall be incidental to the project and no further payment is due.

GUARANTY

- A. Upon completion of seeding operations, the Contractor shall become responsible for protecting the seeded areas from any damage resulting from foot or vehicle traffic, vandalism or weather. When possible, isolate and contain the completed areas with temporary fencing. Erosion or soil subsidence caused by rain shall be repaired to the original grade, prepared for seed, reseeded and the appropriate erosion control product reapplied. Any damage which occurs before achieving the performance and guaranty criteria shall be repaired to original specifications by the Contractor at no expense to the Owner.
- B. Seeded areas shall have a minimum of 90% ground coverage with active growth and no bare ground greater than two square feet before final acceptance. The minimum ground coverage shall be achieved within 90 days of the original seeding, excluding the winter months of November through March. The Contractor shall promptly remove any erosion control blanket or hydro mulch and reseed the bare areas according to the specification as necessary until the minimum coverage is achieved. When weed species interfere with proper turf establishment, the contractor shall apply an appropriate herbicide to reduce the competition. After each reseeded, the Contractor shall reinstall new erosion control blanket or reapply hydro mulch as originally indicated on the plans.

Method of Measurement: This work will be measured for payment in acres of the surface area seeded.

Basis of Payment: This work will be paid for at the contract unit price per acre for SEEDING, CLASS 2 (MODIFIED).

SEEDING, CLASS 3 (MODIFIED)
 LCFP PRAIRIE MIX

Description: This work shall consist of the preparation of the area to be seeded and placing the seed and other materials required in seeding operations in the areas indicated on the plans for this contract or as directed by the Engineer.

This work shall be done in accordance with Section 250 of the “Standard Specifications for Road and Bridge Construction” except as modified by this special provision.

Method of application shall be in accordance with 250.06.

Products:

WATER

- A. Water shall be free from oil, acid, alkali, salts, and other harmful substances. Water may be utilized from potable or non-potable sources such as lakes and ponds. The Owner shall not be responsible for providing water. Any available water sources located on the Owners’ property shall not be utilized without permission from the Owner.

SEED

- A. The Contractor shall provide all seed in original unopened bags as mixed by the supplier. Each bag shall bear the supplier’s guarantee of composition and percentage of purity and germination. Each bag shall list the botanical, common and cultivar names of each species, percentage of species mix, year of production and packaging, seed origin and net weight. Seed shall be protected against leakage, damage and moisture to insure viability and dormancy. No seed shall be sown until the Engineer has inspected and approved the unopened seed mix bags
- B. Seed Mixes

Seed mixes as indicated on the plans shall be as follows:

LCFP PRAIRIE MIX

COVER CROP	RATE (LBS/A)
Annual Rye	10
Spring Oats	32
SUBTOTAL	42

NATIVE GRASSES	RATE (LBS/A)
Elymus canadensis	3.5
Panicum virgatum	1.25

Bouteloua curtipendula	3
Andropogon scoparius	1.25
Andropogon gerardii	0.5
Sorghastrum nutans	0.5
SUBTOTAL	10

NATIVE FORBS	RATE (OZ/A)
Aster laevis	0.5
Aster novae-angliae	1
Desmodium canadense	10
Echinacea pallida	14
Eupatorium purpureum	2
Liatris pycnostachya	6
Monarda fistulosa	1.9
Penstemon digitalis	1
Petalostemum purpureum	8
Pycnanthemum virginianum	0.5
Ratibida pinnata	4
Rudbeckia hirta	2
Rudbeckia subtomentosa	4
Solidago speciosa	1
Veronicastrum virginicum	0.1
SUBTOTAL	60 (3.5 LBS)

- a. For seeding after August 1, substitute 15 additional pounds of annual rye (25 pounds total) for 32 pounds of spring oats as cover crop.
- b. All native seed shall be provided as Pure Live Seed (PLS). Any seed that is not available as PLS shall be tested for purity. Any seed that is provided at less than 100% purity must be increased in quantity to achieve the required PLS seed weight.
- c. All legume species shall be provided with the appropriate bacterium inoculants.
- d. All species except Elymus canadensis shall be de-fluffed, de-hulled or otherwise cleaned as close to the bare caryopsis as possible without damaging seed viability.
- e. Seed shall be provided unmixed or blended and packaged according to the desired segregation of seed sizes for use with the required seed drill equipment. A minimum of two seed size classes are generally required.

Execution:

SEED BED PREPARATION (All LCFP Seed Classes)

- A. Seed bed preparation shall not begin until all other site work, topsoil spreading and finish grading have been completed.
- B. All areas to be seeded shall be inspected and approved by the Engineer prior to the sowing of seed.
- C. Surfaces to be seeded shall be loose and friable to a minimum depth of 3 inches. Hard and compacted surfaces are not acceptable and must be tilled and raked to provide a suitable seed bed. Any rocks, soil cods or other debris greater than 1 ½” in diameter that is generated shall be removed and disposed. The prepared surface shall be free from crusting and caking.

SEEDING METHOD – LCFP Prairie Mix

- A. LCFP Prairie mix may be sown by broadcast method or with a mechanical seeder.
- B. When a broadcast seeding method is used the seed shall be deposited using only a dedicated broadcast spreader. Hand cast seeding shall not be acceptable. The seed shall be broadcast in two passes approximately 90 degrees from each other. The Engineer may require that the seed be segregated by size or species and broadcast in separate passes. A carrier material such as sand may be required to be mixed with very fine seeds to improve distribution. When seed is broadcast prior to October 1, after all seed has been broadcast the contractor shall rake and roll the area to assure proper seeding depth and soil contact.
- C. When mechanical drill seeders are used, they shall be of the type specifically designed for native seed installation (such as those by Truax, Tye or John Deere) which utilizes multiple seed boxes to segregate seed species by size and places the various seeds at the proper planting depth. The seeder shall be equipped with separate drop tubes for each seed size, discs to open the seed furrows and a packer assembly to compact the soil directly over the seed.
- D. All seeding shall be done at a right angle to the surface drainage. After seeding, if the seed bed remains loose such that foot traffic creates indentions of ½” or deeper, the Contractor shall further pack the seed bed with a cultipacker.

SEEDING SCHEDULES – LCFP Prairie Mix

- A. Seeding of LCFP Prairie seed mix is recommended to be performed between March 1 and June 1 or between October 1 and November 1 when seeding the cover crop and native grasses and forbs during a single operation. For seeding between June 1 and October 1, only the cover crop should be sown, with the native grasses and forbs sown during a second drilling operation after October 1. The Contractor may elect to perform this seeding immediately after work progress allows; however, all responsibility for supplemental watering to stimulate germination and growth shall rest with the Contractor. Guaranty and maintenance requirements as specified herein are not changed or relieved by the timing of seeding.

WATERING

- A. Supplemental watering of seeded areas shall be performed at the discretion of Contractor. Watering may be necessary in order to conform to the guarantee

requirements as described in this section.

MOWING - LCFP Prairie Mix

- A. Mow to a height of 6” when cover crop species or weeds reach 10-12” in height until achieving the performance and guaranty criteria for seeded areas.
- B. All mowing shall be incidental to the project and no further payment is due.

GUARANTY

- A. Upon completion of seeding operations, the Contractor shall become responsible for protecting the seeded areas from any damage resulting from foot or vehicle traffic, vandalism or weather. When possible, isolate and contain the completed areas with temporary fencing. Erosion or soil subsidence caused by rain shall be repaired to the original grade, prepared for seed, reseeded and the appropriate erosion control product reapplied. Any damage which occurs before achieving the performance and guaranty criteria shall be repaired to original specifications by the Contractor at no expense to the Owner.
- B. Cover crop species shall have a minimum of 90% ground coverage with active growth and no bare ground greater than two square feet before final acceptance. This minimum ground coverage shall be achieved within 60 days of the original seeding. Native species shall have a minimum ground coverage of 75% after one winter (November through March) followed by 6 months of warm season growth, with no areas larger than 100 square feet with less than 50% ground coverage. Not less than 50% of the native species shall be present at the time of final acceptance.

Method of Measurement: This work will be measured for payment in acres of the surface area seeded.

Basis of Payment: This work will be paid for at the contract unit price per acre for SEEDING, CLASS 3 (MODIFIED).

SEEDING, CLASS 4 (MODIFIED)
LCFP PARKLAND MIX

Description: This work shall consist of the preparation of the area to be seeded and placing the seed and other materials required in seeding operations in the areas indicated on the plans for this contract or as directed by the Engineer.

This work shall be done in accordance with Section 250 of the “Standard Specifications for Road and Bridge Construction” except as modified by this special provision.

Method of application shall be in accordance with 250.06.

Products:
FERTILIZER

- A. Fertilizer for all areas designated as LCFP Parkland seed mix shall have a balanced nitrogen-phosphorous-potassium composition with a minimum of 50% of the nitrogen component being slow release.
- B. Provide fertilizer in original unopened bags from the manufacturer showing complete analysis of nitrogen, phosphorous, potassium, minor elements and major element source types.

WATER

- A. Water shall be free from oil, acid, alkali, salts, and other harmful substances. Water may be utilized from potable or non-potable sources such as lakes and ponds. The Owner shall not be responsible for providing water. Any available water sources located on the Owners’ property shall not be utilized without permission from the Owner.

SEED

- A. The Contractor shall provide all seed in original unopened bags as mixed by the supplier. Each bag shall bear the supplier’s guarantee of composition and percentage of purity and germination. Each bag shall list the botanical, common and cultivar names of each species, percentage of species mix, year of production and packaging, seed origin and net weight. Seed shall be protected against leakage, damage and moisture to insure viability and dormancy. No seed shall be sown until the Engineer has inspected and approved the unopened seed mix bags
- B. Seed Mixes

Seed mixes as indicated on the plans shall be as follows:

LCFP PARKLAND MIX

SPECIES OR MIX	RATE (LBS/A)	% +/-
Kentucky Bluegrass Mix	155	70%
Improved Creeping Red Fescue	45	20%
Perennial Rye Mix	20	10%
TOTAL	220	100%

- a. Kentucky Bluegrass Mix shall be a blend of at least three improved cultivars selected for low maintenance applications.
- b. Improved Creeping Red Fescue shall be an improved cultivar or blend of cultivar.
- c. Perennial Rye Mix shall be a blend of at least three improved cultivars selected for disease resistance.

Execution:

SEED BED PREPARATION (All LCFP Seed Classes)

- A. Seed bed preparation shall not begin until all other site work, topsoil spreading and finish grading have been completed.
- B. All areas to be seeded shall be inspected and approved by the Engineer prior to

- the sowing of seed.
- C. Surfaces to be seeded shall be loose and friable to a minimum depth of 3 inches. Hard and compacted surfaces are not acceptable and must be tilled and raked to provide a suitable seed bed. Any rocks, soil cods or other debris greater than 1 ½” in diameter that is generated shall be removed and disposed. The prepared surface shall be free from crusting and caking.

FERTALIZATION – LCFP Parkland Mix

- A. The specified fertilizer shall be applied at a rate of 2 pounds of Nitrogen per 1000 square feet or 87 pounds of Nitrogen per acre using a calibrated drop spreader or other mechanical method that will result in uniform coverage. Application of the fertilizer by hand is not acceptable.
- B. Fertilizer shall be applied prior to seeding. No fertilizer shall be applied until the Engineer has inspected and approved the products.
- C. No fertilizer shall be applied in areas designated for native seed mixes.

SEEDING METHOD – LCFP Parkland Mix

- A. LCFP Low Maintenance mix shall be sown with mechanical equipment which places the seed in direct contact with the soil, covers or packs the seed and rolls the seed bed to a firm condition in one continuous operation.
- B. Seed shall be sown in two passes; the second pass oriented approximately 45 degrees from the first pass. In restricted width areas, seed shall be sown in two passes of approximately the same direction.
- C. All seeding equipment shall be approved by the Engineer prior to seeding. Use of any seeding equipment which does not include a roller or cultipacker attachment will require the Contractor to perform rolling or cultipacking of the seed bed in a separate operation. Seeding equipment shall be properly calibrated to the required seeding rates.
- D. Alternate methods of seeding such as broadcasting will only be approved by the Engineer when unfavorable site conditions such as steep slopes, limited access, or where narrow dimensions occur at the seeding areas.
- E. When a broadcast seeding method is approved the seed shall be deposited using only a dedicated broadcast spreader. Hand cast seeding shall not be acceptable. The seed shall be broadcast in two passes approximately 90 degrees from each other. After all seed has been broadcast the contractor shall rake and roll the area to assure proper seeding depth and soil contact.

SEEDING SCHEDULES – LCFP Parkland Mix

- A. Seeding of LCFP Low Maintenance seed mix is recommended to be performed between April 1 and May 15 or from August 1 and September 15. The Contractor may elect to perform this seeding immediately after work progress allows; however, all responsibility for supplemental watering to stimulate germination and growth shall rest with the Contractor. Guaranty and maintenance requirements as specified herein are not changed or relieved by the timing of seeding.

WATERING

- A. Supplemental watering of seeded areas shall be performed at the discretion of Contractor. Watering may be necessary in order to conform to the guarantee requirements as described in this section.

MOWING - LCFP Parkland Mix

- A. Maintain a mowed height of 3” until achieving the performance and guaranty criteria for seeded areas. Mow turf promptly when it reaches a height of 6”.
- B. All mowing shall be incidental to the project and no further payment is due.

GUARANTY

- A. Upon completion of seeding operations, the Contractor shall become responsible for protecting the seeded areas from any damage resulting from foot or vehicle traffic, vandalism or weather. When possible, isolate and contain the completed areas with temporary fencing. Erosion or soil subsidence caused by rain shall be repaired to the original grade, prepared for seed, reseeded and the appropriate erosion control product reapplied. Any damage which occurs before achieving the performance and guaranty criteria shall be repaired to original specifications by the Contractor at no expense to the Owner.
- B. Seeded areas shall have a minimum of 90% ground coverage with active growth and no bare ground greater than two square feet before final acceptance. The minimum ground coverage shall be achieved within 90 days of the original seeding, excluding the winter months of November through March. The Contractor shall promptly remove any erosion control blanket or hydro mulch and reseed the bare areas according to the specification as necessary until the minimum coverage is achieved. When weed species interfere with proper turf establishment, the contractor shall apply an appropriate herbicide to reduce the competition. After each reseeding, the Contractor shall reinstall new erosion control blanket or reapply hydro mulch as originally indicated on the plans.

Method of Measurement: This work will be measured for payment in acres of the surface area seeded.

Basis of Payment: This work will be paid for at the contract unit price per acre for SEEDING, CLASS 4 (MODIFIED).

SHRUBS (SPECIAL)

Description: This work shall consist of furnishing and planting trees in accordance with the Section 253, at locations as shown on the Erosion Control and Landscaping plans, except as described:.

General:

Prebid Review

- A. Information regarding the location and extent of the proposed plantings is shown on the plans. However, it is recommended that the Contractor or Subcontractor conduct a thorough site inspection to determine the exact scope, location and site access limitations for purposes of costing and planning the Work.

Products

Plant Materials - General

- A. All plant material shall be true genus, species, variety and / or cultivar. They shall be sound, healthy and vigorous, display the typical growth habit of that particular species or selection and shall be free of diseases and insect pests. All plant material shall be free of damage from harvesting or handling, including scarred bark, broken branches, disturbed root systems or wind burn. All plant material shall exhibit proper shape and form according to accepted nursery practices. Any plant not meeting these requirements shall be rejected and shall be replaced with specified stock at no additional cost to the Owner as per the warranty specifications found in this section.
- B. It is the Owner's intent to only accept the highest quality plant material available for each specified species and size at the time of planting or harvesting, regardless of cost. When multiple sources of any one type and size of tree are identified, the Engineer shall personally inspect the plant material at the source for approval. The Owner reserves the right to personally tag trees and other plants as needed.
- C. All plants shall be measured before pruning when their branches are in their normal position and shall possess a height and spread typical of the species. Caliper measurements for trees shall be taken at a point on the trunk six (6) inches above the natural ground line for trees up to and including four (4) inches in caliper, and twelve (12) inches above the natural ground line for trees over four (4) inches in caliper. Multi-stem trees shall be measured by height from the ground to an average of the highest growing tips. Shrubs shall be measured by height or width depending on the typical form of the species. At minimum all plants shall measure the specified size. Plants may be supplied at larger sizes without additional compensation with approval of the Engineer. Refer to the following sections for additional plant size to container size ratio requirements.
- D. No substitutions of species, size or source shall be allowed without prior approval of the Engineer.

Field-Grown Balled and Burlapped Woody Plants

- A. All field-grown trees and shrubs shall be grown and harvested from Owner-approved nurseries located within approximately 90 miles of Libertyville, Illinois unless prior approval is granted by the Owner.
- B. Field-grown balled and burlapped trees and shrubs shall be grown in native soils suitable for harvesting a firm and intact root ball. They shall be primarily clay

soils with adequate fertility for normal growth rates. Soils that are high in loose organic material or consisting of high sand content are not acceptable. All burlap and twine used for root balls shall be natural biodegradable material. Plants delivered with damaged root balls shall also be rejected. After harvesting, root balls shall be protected from freezing.

- C. All field-grown balled and burlapped trees shall have straight trunks and dominant central leader stems for trees. Primary side branches shall be well distributed along the central leader and shall not be dead, diseased or broken.
- C. All field-grown balled and burlapped trees shall have a visible root flare above the top of the ball to indicate proper soil level at harvesting. Trees with excess soil above the root flare shall be rejected. The Contractor shall direct the grower to shave excess soils off the top of the root ball before digging to meet the root ball dimensions required for that particular tree size. All graft unions, where applicable, shall be completely closed, free of visible signs of graft failure and shall be visible above the soil line.
- D. Field-grown plants shall only be harvested at the proper time required for successful transplanting according to accepted local nursery practices. Most plant species will require digging during spring from approximately March through early May, depending on annual temperature fluctuations. Certain species known to be difficult to transplant such as *Crataegus* spp., *Quercus* spp., *Amelanchier* spp., *Malus* spp. and others shall be dug only after vegetative bud swell begins. No field-grown balled and burlapped plants shall be harvested after vegetative bud opening and initial growth.
- E. Plants sourced from re-wholesale sources shall not be allowed unless inspected and approved by the Engineer. No plant harvested in a prior season and held over winter shall be accepted.

Smooth Wall Plastic Container-Grown Woody Plants

- A. Smooth wall plastic container-grown plants shall be provided in the container sizes and plant dimensions as specified. They shall have originated and been grown within approximately 150 miles from Libertyville, Illinois unless prior approval is granted by the Owner.
- B. Root systems of smooth wall plastic container-grown plants shall be vigorous and extensive such that the root / soil ball fills the entire container and stays intact when removed from the container without excessive root circling that cannot be remedied by corrective pruning. Plants which have not matured in the specified container size and severely 'root-bound' plants shall be rejected. Container sizes shall be suitable for the plant sizes specified such that the plant is provided adequate root mass volume for the plant size specified. Plants shall be provided according to the following guidelines for container size to plant size ratios:

<u>Container Size Designation</u>	<u>Plant Size</u>
3 gallon (3G)	Shrubs: 12"-18", Trees: 12"-24" ht.
5 gallon (5G)	Shrubs: 18"-36", Trees .5" dia. or 3' ht.
7 gallon (7G)	Trees: .75" dia. or 4' ht.
10 gallon (10G)	Trees: .75"-1.0" dia. or 5' ht.

15 gallon (15G) Trees: 1.0”-1.25” dia.
20 gallon (20G) Trees: 1.25”-1.5” dia.

Species that are known to produce a minimal stem growth to root mass ratio such as *Carya spp.* shall be exempt from the above requirements.

- C. The Engineer reserves the right to inspect all plants at the growing source or request photos or samples of the plants for acceptance.
- D. Copper impregnated plastic pots shall not be accepted.

Rootmaker System Container-Grown Woody Plants

- A. Plants specified to be provided under the Rootmaker System have unique requirements for provenance, propagation, culture and container size and type.
- B. Rootmaker System plants must possess a provenance or propagule place of origin within a 150 mile radius of Libertyville, Illinois unless prior approval of the Owner is granted.
- C. Rootmaker System plants shall be propagated by seed, rooted stem cutting or root cutting depending on the species. Grafted plants shall not be accepted.
- D. Rootmaker System plants shall be grown from propagule to finished plant size in Rootmaker containers under a graduated container size system which transplants the plant in increasingly larger containers when maximum container root volume is achieved. Finished plants may be delivered to the work site in standard smooth wall containers or balled and burlapped only when the source nursery has been inspected and approved by the Owner.
- E. Due to the specific growing process required under the Rootmaker System, only Certified Rootmaker nurseries approved by the Owner shall be used to source this type of plant material. Approved nurseries include:

Possibility Place Nursery
7548 W. Monee Road
Monee, Illinois 60449
(708) 534-3988
www.possibilityplace.com

Majestic Oaks
8714 Richardon Road,
Spring Grove, IL 60081
(815) 675-6240
www.majesticoaksnursery.com
Woody Warehouse Nursery Inc.
3216 W. 850 N.
Lizton, IN 46149
(866) 766-8367
www.woodywarehouse.com

- F. Root systems of Rootmaker System plants shall be vigorous and extensive such that the root / soil ball fills the entire container and stays intact when removed from the container without excessive root circling that cannot be remedied by corrective pruning. Plants which have not matured in the specified container size and severely ‘root-bound’ plants shall be rejected. Container sizes shall be suitable for the plant sizes specified such that the plant is provided adequate root mass volume for the plant size specified. Plants shall be provided according to the following guidelines for container size to plant size ratios:

Container Size Designation	Plant Size
3 gallon Molded Plastic (RMI-3, RTG II-3)	Shrubs: 12”-18”, Trees: 12”-24” ht.
5 gallon Molded Plastic (RMI-5, RTG II-5)	Shrubs: 18”-36”, Trees .5” dia./3’ ht.
10 gallon Fabric (RT II-10)	Trees .75”-1.25” or 8’ ht.
15 gallon Fabric (RT II-15)	Trees: 1.25”-1.75” dia. or 10’ ht.
20 gallon Fabric (RT II-20)	Trees: 1.5”-2.25”
30 gallon Fabric (RT II-30)	Trees: 2.0”-3.0” dia.
In-Ground Fabric 12” (FCR12)	Trees: 1.0”-1.25”
In-Ground Fabric 16-18” (FCR16-18)	Trees: 1.0”-1.5”
In-Ground Fabric 24” (FCR24)	Trees: 1.5”-2.25”

Species that are known to produce a minimal stem growth to root mass ratio such as *Carya spp.* shall be exempt from the above requirements.

Container-Grown Herbaceous Plants

- A. Herbaceous plants which are typically specified as Plugs shall be provided in either 32 count flats with individual cell dimensions of 2 ½” square by 3 ½” deep or 38 count integrated flats with cell dimensions of 2 1/8” diameter by 4 7/8” deep.
- B. Plants which have immature root systems or are severely ‘root-bound’ plants shall be rejected.

Plant Protection

- A. Tree trunk protection shall be rigid plastic mesh Tree Bark Protectors, 48” in length as available from A.M. Leonard (www.amleo.com) or Industrial Netting (www.industrialnetting.com).

- B. Tree Protection Fencing for plant protection shall be 20 gauge galvanized hexagonal poultry netting, 60” in height and with 1” openings. The fence shall be supported by galvanized steel U-posts 6’ minimum length.

Execution

Delivery, Handling and Storage

- A. Transport all plant material with protective covering to prevent dessication. During loading and unloading, plants shall be handled such that stems are not stressed, scraped or broken and that root balls are kept intact and maintain their original shape. Minimize handling by unloading plants near the planting locations.
- B. Store all plants on site at a location that is protected from sun and wind whenever possible. Both container and balled and burlapped shall be watered regularly to saturation. Any plant which will be stored for over two weeks or will be subjected to freezing conditions shall have the root systems completely covered with an appropriate mulch.

Planting Seasons

- A. All field-grown balled and burlapped trees and shrubs shall be planted within 60 days of their harvesting. They shall be spring planted only, generally between April 1 and June 30 unless authorized by the Engineer.
- B. Container-grown trees and shrubs shall be planted after the last frost of spring until October 15. The preferred planting time for container plants is between August 1 and September 30.
- C. No planting operations shall take place during extremely wet site conditions.

Layout and Utilities

- A. Unless indicated otherwise in the Contract Documents, the Engineer shall mark all planting locations and planting bed edges. Once the layout is complete, it shall be the Contractor’s responsibility to maintain the markings and replace them should they be disturbed.
- B. The Contractor shall be responsible for the location and marking of all underground utilities or other obstructions before commencement of any ground disturbance and digging. Public utilities shall be located by calling J.U.L.I.E. at 800-892-0123 or www.illinois1call.com. Private utilities shall be located by the Owner. When failure to properly mark utilities results in damage by the Contractor, the Contractor shall be solely responsible for the cost of all repairs.

Planting Area Preparation

- A. When existing herbaceous vegetation at tree and shrub planting locations is over 12” in height, the Contractor shall mow the entire area to be planted and mulched.

- B. At planting locations containing existing aggressive weed species, the Engineer may request that the area be mowed and an herbicide applied. In such cases, Glyphosate (Roundup) shall be applied at the recommended rate 14 days or more before planting. Herbicide application is described in Section 09110 and shall be paid for separately from the planting.
- C. When poor or inadequate soils are indicated or discovered during planting operations, the Engineer may request that the poor soils be excavated, removed and replaced with topsoil. In these cases the Contractor shall excavate, load and haul off-site the unsuitable soils and replace the same volume with topsoil. This work shall be measured before work is begun and paid for as Removal and Replacement of Unsuitable Soils in the unit of Cubic Yards (CY).

Soil Amendments

- A. When indicated in the Contract Documents, planting locations and plant beds may require amendment of the planting soil. In these areas the Contractor shall till the existing soil before spreading compost at a depth of 6". The compost shall then be thoroughly blended with the existing soil by tilling. This work shall be paid for as Soil Amendment at the unit of Square Yards (SY).

Planting Procedures

- A. Refer to the Planting Details for graphic instructions of plant installation.
- B. Excavation of the planting pit may be performed by hand, machine excavator or auger. If an auger is used, the Contractor shall scarify the sides of the plant pit to eliminate any soil glazing. All planting pits must be planted and backfilled the same day. Open holes shall be covered or flagged to protect the public if plant installation is not immediate.
- C. Plant pits shall be excavated at least twice the width of the root ball and with 45 degree sides sloping down to the base of the root ball. The planting pit depth shall be such that the installed plant may be set with the outer edge of the root ball level with the average elevation of the proposed grade. When the plant pit is over-excavated, soil shall be added to the bottom of the pit to achieve the correct depth and fully compacted. All topsoil shall be separated from underlying clay soils.
- D. All plastic and fabric containers must be removed prior to planting. After removal of the container, inspect the root system for circling, matted or crowded roots at the container sides and bottom. Using a sharp knife or hand pruners, prune, cut and loosen any parts of the root system requiring corrective action. For balled and burlapped trees, inspect the base of the trunk and assure that the root flare or graft union is at the top of the ball. Trees with root flares or graft unions up to two inches below the top of the ball may be remedied by cutting the burlap off the top of the root ball and shaving the excess soil to the root flare or graft union. The root ball level shall then be raised to bring the tree to the proper finished elevation. Trees having a root flare or graft union deeper than two inches from the top of the root ball shall be rejected as defective.

- E. For balled and burlapped plant material, do not cut or remove twine, burlap or wire baskets.
- F. Plants shall be set in the center of the planting pit in a level and plumb position. The plant pit shall be backfilled with the native soil previously excavated, making sure that all of the original topsoil is utilized. Thoroughly compact the lower 1/3 of backfill to assure the plant remains in place. Complete the remaining backfill in 8" lifts, tamping the topsoil to eliminate voids. Backfill to the top of the root ball and do not place any soil on top of the root ball. Excess soils shall be removed from the site.
- G. For trees measuring 1.5" caliper or 6' tall and above, loosen the existing soil surrounding the plant pit by hand or machine to a depth of at least 8" and form a tree ring 8' in diameter. Tree rings shall be uniform circles measured from the center of the plant. Form a raised soil ring 3"-4" high just outside the edge of the plant pit to facilitate watering.
- H. All plants must be watered at the time of planting. When water is not available at the planting site, the Contractor shall provide water with a truck-mounted tank. The Owner may be able to provide a water source. Thoroughly water the entire plant pit and root ball to saturation and re-tamp the surrounding soil as needed. Add additional soil if needed to the top of the root ball.
- I. Spread a 4" layer of mulch over the entire tree ring or plant bed, keeping the mulch layer 6-8" from tree stems and bark.
- J. Remove any twine, tags and flagging on the branches.

Supplemental Watering

- A. The Contractor shall perform supplemental watering for all plantings which shall be paid for separately. The Contractor shall apply water to the root ball and plant pit of each plant in such a way as to assure complete saturation of the root system and adjacent soils. Water shall be applied at a reasonable velocity and distance such as to cause no harm to the tree or displacement of mulch or soil. The Schedule of Prices indicates the allotted quantity of watering occurrences. Moisture at the root ball will be monitored by the Owner, especially during dry periods. The Engineer will request a watering and will contact the Contractor via phone or email. The Contractor shall perform the watering within five (5) days of receiving the request.
- B. The Owner is not capable of providing access to a water supply in the immediate vicinity of the tree plantings and as such it should be assumed that all watering would require a mobile water tank, hydro mulch rig or truck. The Engineer shall approve all watering equipment. Watering equipment and vehicles shall not cause undo harm to the site. The Contractor may provide water from sources independent of the Owner; however, the Owner may provide sources on the site or another forest preserve. Should the Contractor choose to utilize the Owner's

water source, the Contractor must provide 24 hour notice to the Owner prior to each use. Pumps used to access water from lakes and ponds shall be provided by the Contractor.

Plant Protection

- A. Plant protection shall be installed after all planting tasks are complete.
- B. Tree Bark Protectors shall be installed using miniature black cable ties (4” length) at the top, bottom and middle of the protector. Cut the protector to length as necessary for low branched trees.
- C. Tree Protection Fencing shall be installed in a 3’-5’ diameter circle for each plant, depending on canopy spread. At least 3 posts per fence circle shall be used. Join the ends of fencing together with galvanized wire or small cable ties.

Middlefork Savanna Planting Notes

SHRUBS

Qty	Common Name	Species	Size
6	Downy Hawthorn	Crataegus mollis	5 gal
4	American Plum	Prunus americana	5 gal
3	Iowa Crab	Malus ioensis	5 gal
2	Quaking Aspen	Populus tremuloides	5 gal
9	Hazelnut/American Filbert	Corylus Americana	3 gal
6	Smooth Rose	Rosa Blanda	3 gal
9	New Jersey Tea	Ceanothus americanus	3 gal

Method of Measurement: This work will be measured for payment per each shrub planted.

Basis of Payment: This work will be paid for at the contract unit price per each for SHRUBS (SPECIAL), which price shall include all labor, materials, and equipment necessary to perform the work herein.

SIDEWALK SPECIAL

Description: This work shall consist of constructing Portland cement concrete sidewalk at Overlook on a prepared subgrade as shown on the plans, in accordance with the applicable portions of Section 424 of the Standard Specifications. This work shall have a thickened sidewalk at all edges as detailed on the plans.

Method of Measurement: This work will be measured for payment in place and the area computed in square feet. This work is to be done in accordance with the details on the plans.

Basis of Payment: This work will be paid for at the contract unit price per square foot for SIDEWALK, SPECIAL.

SPLIT RAIL FENCE

Description: This work shall consist of 3 rail Cedar split rail fence. Fence shall be installed at locations shown on the construction drawings and/or at additional locations as specified by the engineer.

Material:

- A. Rails
 - 1. All fence rails shall be Jumbo Grade Split Western Red Cedar. Standard and Pony Grade rails shall not be accepted.
 - 2. All rails shall have a minimum girth of 14 inches and be 10 feet in length with cut tenon ends.
- B. Posts
 - 1. All fence posts shall be Standard Grade Split Western Red Cedar with a minimum girth of 18 inches.
 - 2. 2-rail fences, posts shall be a minimum of 64 inches in length;
 - 3. 3-rail fences, posts shall be a minimum of 78 inches in length.
 - 4. Posts shall be mortised for rail insertion and provided as end, line and corner posts as per the specific corresponding post location.
- C. Any fence components which do not meet these dimensional specifications, are structurally unsound, are severely misshapen or are in any way damaged, shall be replaced at no cost to the Owner.

Execution:

- A. All cedar split rail fences shall be constructed in accordance with the dimensions and burial depths as shown in the Plans. The Contractor shall utilize the proper end, line or corner posts for the appropriate post location.
- B. Post holes shall be dug to a minimum diameter of 12 inches. Post hole depth shall be set to accommodate the finished dimensions as shown in the Plans, approximately 30 inches. The bottom of the post hole shall be undisturbed or compacted to minimize settlement.
- C. Any open post holes remaining at the end of each work day shall be covered or protected in such a manner as to minimize hazard to people, property and / or equipment.
- D. Posts shall be set plumb and in a straight alignment where indicated on the Plans. No posts shall be located on adjacent private or public properties.

- E. Posts shall be backfilled with the soils previously excavated or granular material in six-inch layers with each layer thoroughly compacted by tamping. All excess material shall be removed from the site.
- F. The Contractor shall guarantee the fence installation, including any movement of the posts from a plumb position and subsidence of the backfill, for a period of twelve (12) months from the date of acceptance.

Method of Measurement: This work shall be measured for payment in place per foot.

Basis of Payment: This work will be paid for at the contract unit price per foot of SPLIT RAIL FENCE. The unit price shall also include all equipment, materials and labor required to construct the fence and appurtenances.

STABILIZED CONSTRUCTION ENTRANCE

Description: The contractor shall construct and maintain aggregate surface course for temporary access to the construction site according to Article 402.07 and as directed by the engineer. The aggregate materials shall be angular crushed stone meeting the requirements of CA-1, also known locally as 3” stone, in conformance with IDOT Standard Specification Article 1004.01. Temporary Culverts (if required) shall be installed to maintain site access.

General: This work shall consist of furnishing all materials, equipment, and labor and performance of all required operations for the site access shall be limited to the designated locations either shown on the plans or otherwise designated by the Engineer.

1. Install stabilized construction entrance at the location indicated on the plans.
2. If the Contractor utilizes any other location(s) for construction access, a stabilized construction entrance must be installed where the construction entrance(s) access public right-of-ways, streets, or any paved surfaces. Any such additional construction entrances must be approved by the Engineer, the jurisdictional authority and Designated Erosion Control Inspector (DECI). The cost of any additional construction entrances shall be based on the unit price established in the Schedule of Prices.
3. Aggregate must be underlain by the specified geotextile fabric in all areas; using full width rolls with end seams overlapped a minimum of 4 feet.
4. Any sediment reaching paved surfaces shall be removed immediately.
5. The Contractor shall maintain the stabilized construction entrance in good working condition, including but not limited to replacement of rock and removal of accumulated sediment, throughout the duration of the project until removal.
6. Stabilized construction entrance shall be removed by the Contractor at the end of the project or as otherwise directed by the DECI. Ground beneath stabilized construction entrance and any incidental disturbed areas shall be restored

Method of Measurement: This work shall be measured for payment in square yard per the Contract Documents. Final payment shall be made upon Owners’ final approval of each restored entrance location.

Basis of Payment: This work shall be paid for at the contract unit price of Square Yard for STABILIZED CONSTRUCTION ENTRANCE.

STONE RIPRAP, CLASS A3 (SPECIAL)

Description: This work shall be done in accordance with Article 281.04a of the IDOT Standard Specifications for stone riprap except as modified herein.

General: The riprap shall be natural field stone cobbles and boulders reasonably graded from eight (8) to twelve (12) inches in diameter or the gradation specified in the drawings, whichever is the greater size. The cobbles shall be of mixed geologic origin primarily granite, as is typically found in the Fox River basin of northern Illinois and southern Wisconsin, or glacial deposits typically occurring in central Wisconsin. Crushed limestone riprap is not acceptable and will not be approved. Samples of the specified material shall be submitted for approval to the Engineer prior to delivery and placement. Riprap shall include appropriate geotextile fabric when specified on the construction plans.

Method of Measurement: This work shall be measured for payment in square yards.

Basis of Payment: This work shall be paid for at the contract unit price per square yard as STONE RIPRAP, CLASS A3 (SPECIAL).

TEMPORARY ACCESS ROAD (SPECIAL)

Description: The contractor shall construct and maintain aggregate surface course for temporary access to the construction site according to Article 402.07 and as directed by the engineer. The aggregate materials shall be angular crushed stone meeting the requirements of CA-1, also known locally as 3" stone, in conformance with IDOT Standard Specification Article 1004.01. Temporary Culverts (if required) shall be installed to maintain site access. The Contractor shall, at its' sole expense, procure and furnish all bonds required by other agencies and jurisdictions in order to access the work site.

General: This work shall consist of furnishing all materials, equipment, and labor and performance of all required operations for the site access shall be limited to the designated locations either shown on the plans or otherwise designated by the Engineer. Under no circumstances shall the Contractor attempt to access the site from an unauthorized public right-of-way without expressed permission or permit from the Engineer and the appropriate jurisdiction.

The Contractor shall work within construction limits as designated by the Engineer. The Engineer reserves the right to reduce construction limits to avoid damage to environmentally sensitive areas. Material storage and construction parking may occur only in those areas designated by the Engineer. Do not unreasonably encumber the site with materials or equipment. All haul roads which are located outside of the immediate construction zone or shall impact the

site in any way shall be approved by the Engineer before put in use. All site impacts caused by material storage, access and transportation shall be restored to their original conditions as specified in this Contract.

When the project requires a specific construction sequence, the work shall follow construction sequencing as shown on the plans or otherwise indicated by the Engineer and the Contractor shall not be allowed to begin work on the next project phase until the previous phase has been fully completed and approved by the Engineer. Once a phase has been completed and approved, the Contractor shall completely barricade off the work area with 4-foot high orange construction fence to prevent construction traffic and the general public from entering completed phase. Any changes to the sequencing shown on the construction plans shall be approved in writing by the Engineer.

This project is being constructed on public lands, and as such, portions of the site outside of the construction limits may remain open to the public. Under no circumstances shall the Contractor utilize any part of the site which is open to the public for any purpose without direct permission from the Engineer.

All construction facilities and temporary controls shall be maintained in a secure, safe and useful condition until removed from the Work Site. The Contractor shall be solely responsible for any material losses due to vandalism, theft, weather occurrences or Acts of God. The Contractor shall provide a daily inspection of Work Area and shall take whatever measures are necessary to protect the safety of the public, workmen, and materials, and provide for the security of the Work Site, both day and night. Any and all security or construction fencing will be the responsibility of the Contractor. If present, the Contractor shall be responsible for locking and unlocking gates of the Engineer.

TEMPORARY CULVERT (IF REQUIRED)

Corrugated High Density Polyethylene Pipe shall be constructed in accordance with AASHTO Specification M252 and M294, as applicable, or ASTM F2306. HDPE pipe shall be black, corrugated on the exterior with smooth walled interior. Appropriately sized flared end sections shall be installed at each end of the pipe.

Joints for Corrugated HDPE shall be elastomeric joints in conformance with ASTM F477 and Manufacturer's Specifications.

Geotextile fabric for the culvert bedding shall be non-woven, needle punched polypropylene staple fiber that is UV stabilized and resistant to chemicals, mildew and insects shall meet the following criteria:

Grab Tensile Strength 215 lbs
Elongation 50%
Puncture 600 lbs
Permittivity 1.3 sec⁻¹

C. Pipe size and type for temporary crossing shall be as indicated on the plans.

UTILITIES

The Engineer will not provide any utility services unless specifically authorized by the Owner. The Contractor shall provide and pay all costs for necessary temporary electrical, heat, and water. The Contractor shall provide water for all construction and testing purposes. The Contractor shall provide all temporary piping, hoses, etc., required to transport water to the point of usage.

Method of Measurement: This work shall not be measured for payment but shall be paid for according to the following schedule. The amount which a Contractor shall be paid for Temporary Access Road (Special) for the schedule below is limited to three percent (3%) of the original contract amount. Should the bid for site access exceed three percent, the amount over three percent shall not be paid until the final pay application.

1. Upon execution of the contract, fifty percent (50%) of the pay item may be paid.
2. When ten percent (10%) of the original contract amount has been earned, an additional forty percent (40%) may be paid.
3. Upon completion of the contract, the remaining ten percent (10%) of the pay item may be paid, along with any amount in excess of the three percent of the original contract amount.

Basis of Payment: This work shall be paid for at the contract unit price of Lump Sum for TEMPORARY ACCESS ROAD (SPECIAL).

TEMPORARY CONSTRUCTION FENCE

Description: This work shall consist of erecting a temporary fence and removing the fence after construction. This work shall be constructed in accordance of Section 665 of the "Standard Specifications" except as modified herein.

General: The contractor shall manually erect a temporary fence per plan or as directed by the Engineer. The temporary fence shall be similar to plastic or wood lath snow fence and shall have a minimum height of four feet. Posts shall be placed with a maximum spacing of 15 feet. After completion of roadway construction, but before landscaping restoration, the fence and posts shall be removed and shall be disposed of off-site, in accordance with Article 202.03 of the "Standard Specifications".

Method of Measurement: This work shall be measured for payment by foot.

Basis of Payment: This work will be paid for at the contract unit price per foot of TEMPORARY CONSTRUCTION FENCE. The unit price shall also include all equipment, materials and labor required to construct the fence and appurtenances.

TEMPORARY DITCH CHECKS

Description: This work shall consist of constructing, maintaining, and removing temporary ditch checks.

Materials: The ditch checks shall be constructed with products from the following:

Nilex Corporation

15253 East Fremont Drive

Centennial, CO 80112

Ms. Sakia Keyes

(800) 537-4241

(303) 766-2000

Producer Number: 6218-01

Material Code: 56229

"Georidge"

<http://www.nilex.com/>

Cascade Distribution, LTD

15620-121A Avenue

Edmonton, Alberta

Canada TSV 1B5

Mr. Gil Barber

Sales Manager

(800) 565-6130

Producer Number: 6217-01

Material Code: 56230

"Enviroberm"

<http://www.cascade.ab.ca/>

Manufacturer

Triangular Silt Dike Company, Inc.

18505 E. Highway 66

Luther, OK 73054

Mr. Gary Roach

Erosion Control Specialist

(800) 290-8473

Producer Number: 5797-01

Material Code: 56226

"Triangular Silt Dike" - 10" height only

<http://www.tri-siltdike.com>

Area Representative/Dealer

GSI Geosynthetics, Inc.

428 N. Pewaukee Road

Waukesha, WI 53188

(800)444-5523

General: The work shall be performed according to Section 280 of the "Standard Specifications", LCDOT Standard Drawing LC2050 and the following:

Each silt dike section shall consist of an approximately 7 foot long triangular section of urethane foam covered with a geotextile fabric, and installed on a geotextile fabric apron. The base of the triangle shall be 16” – 20” wide and have a minimum height of 8” – 10”. Triangular Silt Dikes™ shall be installed at the locations specified on the Erosion Control Plan, and/or as directed by the Engineer. In general two silt dike sections will be used at each ditch check location. Their installation shall be according to the detail shown on the plans and the manufacturer’s recommendations.

The geotextile fabric shall conform to Article 1080.05 of the “Standard Specifications”, for Geotechnical Fabric for French Drains.

The temporary ditch checks shall be remain in place until just before placing the erosion control blanket and performing the seeding operations in the ditch area. The Contractor shall not remove the temporary ditch checks if it is raining and/or rain is in the immediate forecast.

The ditch checks shall become the property of the Contractor upon their removal.

Method of Measurement: Temporary Ditch Checks will be measured in place and the length calculated in feet for each ditch check section actually installed.

Basis of Payment: This work will be paid for at the contract unit price per foot for TEMPORARY DITCH CHECKS. The unit price shall include all labor, equipment and materials necessary for their installation and removal.

TEMPORARY DITCH CHECKS (SPECIAL)

Description: This work shall consist of furnishing, installing, and removing a permeable plastic berm. The plastic berm may be used in conjunction with erosion control mat, sediment bags and other components of a water treatment train and/or as a temporary ditch check while establishing final landscaping.

For this project the Permeable Plastic Berms shall be used for:

- A component of a water treatment train
- A temporary ditch check while establishing final landscaping

Materials: The permeable plastic berm shall be constructed from the following: limited to GeoRidge®, as manufactured by Nilex.

Enviro-Pro, Geosynthetic Ltd.
53169
RR 225 Sherwood Park

Alberta T8A 4T3
Jeff Prodahl
VP Sales / Marketing
(780) 417)1980
(780) 417-7628
"Enviro-Ridge"
<http://www.enviro-pro.ca>

Nilex Corporation
15253 East Fremont Drive
Centennial, CO 80112
Ms. Sakia Keyes
(800) 537-4241
(303) 766-2000
Producer Number: 6218-01
Material Code: 56229
"Georidge"
<http://www.nilex.com/>

Cascade Distribution, LTD
15620-121A Avenue
Edmonton, Alberta
Canada T5V 1B5
Mr. Gil Barber
Sales Manager
(800) 565-6130
Producer Number: 6217-01
Material Code: 56230
"Enviroberm"
<http://www.cascade.ab.ca/>

General: The work shall be performed according to Section 280 of the "Standard Specifications", Detail LC2050, and the manufacturer's recommendations.

Water Treatment Train:

The permeable plastic berm shall be used in conjunction with the erosion control mat, flocculation powder and other components to form a water treatment train as directed by the Engineer. The permeable plastic berm shall become the property of the Contractor upon the dismantling and removal of the water treatment train.

Temporary Ditch Check: The permeable plastic berm shall be used as a temporary ditch check in ditch lines where the erosion control blanket has been placed and the seeding operations performed. The permeable plastic berms shall be placed in the locations of the Temporary Ditch Checks and/or as directed by the Engineer. Their installation shall be according to the detail shown on the plans and the manufacturer's recommendations.

After the final landscaping has been established to the satisfaction of the Engineer the permeable plastic berm shall be removed by the Contractor. The permeable plastic berm shall become the property of the Contractor upon removal.

Method of Measurement:

Water Treatment Train: A contingency quantity of permeable plastic berm is included in the summary of quantities to establish a unit price only. The permeable plastic berm will be measured for payment in feet for the actual length used in a water treatment train.

Temporary Ditch Check: The Permeable Plastic Berm will be measured in place and the length calculated in feet for each permeable plastic berm actually installed.

Basis of Payment: This work will be paid for at the contract unit price per foot for TEMPORARY DITCH CHECKS (SPECIAL). The unit price shall include all labor, equipment and materials necessary for the installation, maintenance, and removal of the plastic berm regardless of use.

TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH

Description: This work shall be performed in accordance with section 211 of the IDOT Standard Specifications and the plan detail.

General: This work shall comply with Section 211 of the "Standard Specification" and the "Illinois State Agency Historic Resources Preservation Act" (Public Act 86-707, effective January 1, 1990). Under this Act:

1. The Contractor shall complete an Environmental Survey Request Form for Borrow/Waste/Use Areas (Form BDE 2289 11/06 included herein), along with all required attachments, and submit them to the Engineer at the earliest possible date.
2. The Engineer shall submit the Environmental Survey Request to the Illinois Department of Transportation for review and approval. Any costs incurred associated with said review and approval will be borne by the Contractor.
3. The Contractor shall not begin work on any Topsoil/Use areas until the Environmental Survey Request has been approved.

The Contractor shall collect one representative soil sample from the proposed growing surface which shall be analyzed by an agricultural laboratory approved by the Engineer. The Contractor shall submit the proposed laboratory name and address to the Engineer at the pre-construction conference. The soils analysis shall include (but is not limited to) the recommended application rates of nitrogen phosphorus and potassium fertilizer nutrients. The cost of the soil analysis will

not be paid for, but will be included in the cost TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH.

Existing sidewalks, curbs, structures, trees and other plant materials that are to remain in place shall be protected from damage. Any damage caused by the Contractor shall be replaced at the Contractor's expense.

Excavation and grading around tree roots and plant materials shall be done by hand.

Additional material required to bring the area to grade will not be paid for separately but considered incidental to TOPSOIL FURNISH & PLACE, VARIABLE DEPTH. Additional material must meet the approval of the Engineer.

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. Compaction of the entire surface shall be made to the satisfaction of the Engineer.

All material "tracked" down the street shall be removed each day. All sidewalks, driveways, and pavements shall be left in a broom-cleaned condition

Method of Measurement: Topsoil shall be measured in place in cubic yards regardless of depth.

Basis of Payment: This work will be paid for at the contract unit price per cubic yard for TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH which price shall include all labor, equipment, and materials necessary to perform said work.

TREE PROTECTION AND PRESERVATION

Construction:

1. The Contractor shall erect a temporary fence around all trees within the construction area to establish a "tree protection zone" before any work begins or any material is delivered to the jobsite. No work is to be performed (other than root pruning), materials stored, or vehicles driven or parked within the "tree protection zone" at any time during the course of construction.
2. The exact location and establishment of the "tree protection zone" fence shall be approved by the Engineer prior to setting the fence. The fence shall be 48 inches high, plastic poly-type or any other type of highly visible barrier in an open-weave type pattern with large openings. The type, color and pattern of the fence shall be approved by the Engineer prior to erection. This fence shall be properly maintained in an upright manner and shall remain up until final restoration, unless the Engineer directs removal otherwise. Tree fence shall be supported using T-Post style fence posts with a maximum of 8' spacing. T-posts must be at least six

feet in length, two feet of which must be set in the ground. The fence shall be attached to posts and secured with a minimum of three nylon locking ties per post. **Utilizing re-bar as a fence post will not be permitted.**

3. The fence shall be installed parallel to the curb and between the curb and sidewalk unless otherwise directed by the Engineer. Fence shall be erected on a minimum of three sides with the fourth sidewalk side being optional. Fence shall be installed at the drip-line of the tree or as listed in the following guidelines:
 - a. Establish the diameter of the tree at a point four and a half feet above the ground, (referred to as diameter breast height or DBH)
 - i.. Trees with diameters 10 inches and under require root zone protection a minimum of five feet in all directions from the center of the tree.
 - ii. Trees 10 to 19 inches in diameter shall have a minimum root zone protection of 10 feet in all directions from the center of the tree.
 - iii. Trees greater than 19 inches in diameter shall have a minimum root zone protection of 15 feet in all directions from the center of the tree.
4. Parking or maneuvering of machinery, stockpiling of materials or any other use will not be allowed upon unpaved areas within 3 m (10 ft) of the root protection zone of trees or plants designated to be protected.
6. All work within the “tree protection zone” shall have the Engineer’s prior approval. All slopes and other areas not re-graded should be avoided so that unnecessary damage is not done to the existing turf, tree root system or ground cover.
7. The grade within the “tree protection zone” shall not be changed unless approved by the Engineer prior to making said changes or performing the work.

Basis of Payment: Tree Protection and Preservation will be paid for at the contract unit price per each for as TEMPORARY CONSTRUCTION FENCE and TREE ROOT PRUNING which price shall include all labor, materials, and equipment necessary to perform the work herein

TREES (SPECIAL)

Description: This work shall consist of furnishing and planting trees in accordance with the Section 253, at locations as shown on the Erosion Control and Landscaping plans, except as described:.

General:

Prebid Review

- A. Information regarding the location and extent of the proposed plantings is shown on the plans. However, it is recommended that the Contractor or Subcontractor conduct a thorough site inspection to determine the exact scope, location and site access limitations for purposes of costing and planning the Work.

Products

Plant Materials - General

- A. All plant material shall be true genus, species, variety and / or cultivar. They shall be sound, healthy and vigorous, display the typical growth habit of that particular species or selection and shall be free of diseases and insect pests. All plant material shall be free of damage from harvesting or handling, including scarred bark, broken branches, disturbed root systems or wind burn. All plant material shall exhibit proper shape and form according to accepted nursery practices. Any plant not meeting these requirements shall be rejected and shall be replaced with specified stock at no additional cost to the Owner as per the warranty specifications found in this section.
- B. It is the Owner's intent to only accept the highest quality plant material available for each specified species and size at the time of planting or harvesting, regardless of cost. When multiple sources of any one type and size of tree are identified, the Owner shall personally inspect the plant material at the source for approval. The Owner reserves the right to personally tag trees and other plants as needed.
- C. All plants shall be measured before pruning when their branches are in their normal position and shall possess a height and spread typical of the species. Caliper measurements for trees shall be taken at a point on the trunk six (6) inches above the natural ground line for trees up to and including four (4) inches in caliper, and twelve (12) inches above the natural ground line for trees over four (4) inches in caliper. Multi-stem trees shall be measured by height from the ground to an average of the highest growing tips. Shrubs shall be measured by height or width depending on the typical form of the species. At minimum all plants shall measure the specified size. Plants may be supplied at larger sizes without additional compensation with approval of the Engineer. Refer to the following sections for additional plant size to container size ratio requirements.
- D. No substitutions of species, size or source shall be allowed without prior approval of the Owner.

Field-Grown Balled and Burlapped Woody Plants

- A. All field-grown trees and shrubs shall be grown and harvested from Owner-approved nurseries located within approximately 90 miles of Libertyville, Illinois unless prior approval is granted by the Owner.

- B. Field-grown balled and burlapped trees and shrubs shall be grown in native soils suitable for harvesting a firm and intact root ball. They shall be primarily clay soils with adequate fertility for normal growth rates. Soils that are high in loose organic material or consisting of high sand content are not acceptable. All burlap and twine used for root balls shall be natural biodegradable material. Plants delivered with damaged root balls shall also be rejected. After harvesting, root balls shall be protected from freezing.
- C. All field-grown balled and burlapped trees shall have straight trunks and dominant central leader stems for trees. Primary side branches shall be well distributed along the central leader and shall not be dead, diseased or broken.
- C. All field-grown balled and burlapped trees shall have a visible root flare above the top of the ball to indicate proper soil level at harvesting. Trees with excess soil above the root flare shall be rejected. The Contractor shall direct the grower to shave excess soils off the top of the root ball before digging to meet the root ball dimensions required for that particular tree size. All graft unions, where applicable, shall be completely closed, free of visible signs of graft failure and shall be visible above the soil line.
- D. Field-grown plants shall only be harvested at the proper time required for successful transplanting according to accepted local nursery practices. Most plant species will require digging during spring from approximately March through early May, depending on annual temperature fluctuations. Certain species known to be difficult to transplant such as *Crataegus* spp., *Quercus* spp., *Amelanchier* spp., *Malus* spp. and others shall be dug only after vegetative bud swell begins. No field-grown balled and burlapped plants shall be harvested after vegetative bud opening and initial growth.
- E. Plants sourced from re-wholesale sources shall not be allowed unless inspected and approved by the Owner. No plant harvested in a prior season and held over winter shall be accepted.

Smooth Wall Plastic Container-Grown Woody Plants

- A. Smooth wall plastic container-grown plants shall be provided in the container sizes and plant dimensions as specified. They shall have originated and been grown within approximately 150 miles from Libertyville, Illinois unless prior approval is granted by the Owner.
- B. Root systems of smooth wall plastic container-grown plants shall be vigorous and extensive such that the root / soil ball fills the entire container and stays intact when removed from the container without excessive root circling that cannot be remedied by corrective pruning. Plants which have not matured in the specified container size and severely 'root-bound' plants shall be rejected. Container sizes shall be suitable for the plant sizes specified such that the plant is provided adequate root mass volume for the plant size specified. Plants shall be provided according to the following guidelines for container size to plant size ratios:
Container Size Designation Plant Size
3 gallon (3G) Shrubs: 12"-18", Trees: 12"-24" ht.
5 gallon (5G) Shrubs: 18"-36", Trees .5" dia./3' ht.

- 7 gallon (7G) Trees: .75” dia. or 4’ ht.
- 10 gallon (10G) Trees: .75”-1.0” dia. or 5’ ht.
- 15 gallon (15G) Trees: 1.0”-1.25” dia.
- 20 gallon (20G) Trees: 1.25”-1.5” dia.

Species that are known to produce a minimal stem growth to root mass ratio such as *Carya spp.* shall be exempt from the above requirements.

- C. The Owner reserves the right to inspect all plants at the growing source or request photos or samples of the plants for acceptance.
- D. Copper impregnated plastic pots shall not be accepted.

Rootmaker System Container-Grown Woody Plants

- A. Plants specified to be provided under the Rootmaker System have unique requirements for provenance, propagation, culture and container size and type.
- B. Rootmaker System plants must possess a provenance or propagule place of origin within a 150 mile radius of Libertyville, Illinois unless prior approval of the Engineer is granted.
- C. Rootmaker System plants shall be propagated by seed, rooted stem cutting or root cutting depending on the species. Grafted plants shall not be accepted.
- D. Rootmaker System plants shall be grown from propagule to finished plant size in Rootmaker containers under a graduated container size system which transplants the plant in increasingly larger containers when maximum container root volume is achieved. Finished plants may be delivered to the work site in standard smooth wall containers or balled and burlapped only when the source nursery has been inspected and approved by the Engineer.
- E. Due to the specific growing process required under the Rootmaker System, only Certified Rootmaker nurseries approved by the Owner shall be used to source this type of plant material. Approved nurseries include:

Possibility Place Nursery
7548 W. Monee Road
Monee, Illinois 60449
(708) 534-3988
www.possibilityplace.com

Woody Warehouse Nursery Inc
3216 W. 850 N.
Lizton, IN 46149
(866) 766-8367
www.woodywarehouse.com

Majestic Oaks
8714 Richardon Road,
Spring Grove, IL 60081
(815) 675-6240
www.majesticoaksnursery.com

- F. Root systems of Rootmaker System plants shall be vigorous and extensive such that the root / soil ball fills the entire container and stays intact when removed from the container without excessive root circling that cannot be remedied by corrective pruning. Plants which have not matured in the specified container size and severely ‘root-bound’ plants shall be rejected. Container sizes shall be suitable for the plant sizes specified such that the plant is provided adequate root mass volume for the plant size specified. Plants shall be provided according to the following guidelines for container size to plant size ratios:

<u>Container Size Designation</u>	<u>Plant Size</u>
3 gallon Molded Plastic (RMI-3, RTG II-3)	Shrubs: 12”-18”, Trees: 12”-24” ht.
5 gallon Molded Plastic (RMI-5, RTG II-5)	Shrubs: 18”-36”, Trees .5” dia./3’ ht.
10 gallon Fabric (RT II-10)	Trees .75”-1.25” or 8’ ht.
15 gallon Fabric (RT II-15)	Trees: 1.25”-1.75” dia. or 10’ ht.
20 gallon Fabric (RT II-20)	Trees: 1.5”-2.25”
30 gallon Fabric (RT II-30)	Trees: 2.0”-3.0” dia.
In-Ground Fabric 12” (FCR12)	Trees: 1.0”-1.25”
In-Ground Fabric 16-18” (FCR16-18)	Trees: 1.0”-1.5”
In-Ground Fabric 24” (FCR24)	Trees: 1.5”-2.25”

Species that are known to produce a minimal stem growth to root mass ratio such as *Carya spp.* shall be exempt from the above requirements.

Container-Grown Herbaceous Plants

- A. Herbaceous plants which are typically specified as Plugs shall be provided in either 32 count flats with individual cell dimensions of 2 ½” square by 3 ½” deep or 38 count integrated flats with cell dimensions of 2 1/8” diameter by 4 7/8” deep.
- B. Plants which have immature root systems or are severely ‘root-bound’ plants shall be rejected.

Plant Protection

- A. Tree trunk protection shall be rigid plastic mesh Tree Bark Protectors, 48” in length as available from A.M. Leonard (www.amleo.com) or Industrial Netting (www.industrialnetting.com).

- B. Tree Protection Fencing for plant protection shall be 20 gauge galvanized hexagonal poultry netting, 60” in height and with 1” openings. The fence shall be supported by galvanized steel U-posts 6’ minimum length.

Execution

Delivery, Handling and Storage

- A. Transport all plant material with protective covering to prevent dessication. During loading and unloading, plants shall be handled such that stems are not stressed, scraped or broken and that root balls are kept intact and maintain their original shape. Minimize handling by unloading plants near the planting locations.
- B. Store all plants on site at a location that is protected from sun and wind whenever possible. Both container and balled and burlapped shall be watered regularly to saturation. Any plant which will be stored for over two weeks or will be subjected to freezing conditions shall have the root systems completely covered with an appropriate mulch.

Planting Seasons

- A. All field-grown balled and burlapped trees and shrubs shall be planted within 60 days of their harvesting. They shall be spring planted only, generally between April 1 and June 30 unless authorized by the Owner.
- B. Container-grown trees and shrubs shall be planted after the last frost of spring until October 15. The preferred planting time for container plants is between August 1 and September 30.
- C. No planting operations shall take place during extremely wet site conditions.

Layout and Utilities

- A. Unless indicated otherwise in the Contract Documents, the Engineer shall mark all planting locations and planting bed edges. Once the layout is complete, it shall be the Contractor’s responsibility to maintain the markings and replace them should they be disturbed.
- B. The Contractor shall be responsible for the location and marking of all underground utilities or other obstructions before commencement of any ground disturbance and digging. Public utilities shall be located by calling J.U.L.I.E. at 800-892-0123 or www.illinois1call.com. Private utilities shall be located by the Owner. When failure to properly mark utilities results in damage by the Contractor, the Contractor shall be solely responsible for the cost of all repairs.

Planting Area Preparation

- A. When existing herbaceous vegetation at tree and shrub planting locations is over 12” in height, the Contractor shall mow the entire area to be planted and mulched.

- B. At planting locations containing existing aggressive weed species, the Engineer may request that the area be mowed and an herbicide applied. In such cases, Glyphosate (Roundup) shall be applied at the recommended rate 14 days or more before planting. Herbicide application is described in Section 09110 and shall be paid for separately from the planting.
- C. When poor or inadequate soils are indicated or discovered during planting operations, the Engineer may request that the poor soils be excavated, removed and replaced with topsoil. In these cases the Contractor shall excavate, load and haul off-site the unsuitable soils and replace the same volume with topsoil. This work shall be measured before work is begun and paid for as Removal and Replacement of Unsuitable Soils in the unit of Cubic Yards (CY).

Soil Amendments

- A. When indicated in the Contract Documents, planting locations and plant beds may require amendment of the planting soil. In these areas the Contractor shall till the existing soil before spreading compost at a depth of 6". The compost shall then be thoroughly blended with the existing soil by tilling. This work shall be paid for as Soil Amendment at the unit of Square Yards (SY).

Planting Procedures

- A. Refer to the Planting Details for graphic instructions of plant installation.
- B. Excavation of the planting pit may be performed by hand, machine excavator or auger. If an auger is used, the Contractor shall scarify the sides of the plant pit to eliminate any soil glazing. All planting pits must be planted and backfilled the same day. Open holes shall be covered or flagged to protect the public if plant installation is not immediate.
- C. Plant pits shall be excavated at least twice the width of the root ball and with 45 degree sides sloping down to the base of the root ball. The planting pit depth shall be such that the installed plant may be set with the outer edge of the root ball level with the average elevation of the proposed grade. When the plant pit is over-excavated, soil shall be added to the bottom of the pit to achieve the correct depth and fully compacted. All topsoil shall be separated from underlying clay soils.
- D. All plastic and fabric containers must be removed prior to planting. After removal of the container, inspect the root system for circling, matted or crowded roots at the container sides and bottom. Using a sharp knife or hand pruners, prune, cut and loosen any parts of the root system requiring corrective action. For balled and burlapped trees, inspect the base of the trunk and assure that the root flare or graft union is at the top of the ball. Trees with root flares or graft unions up to two inches below the top of the ball may be remedied by cutting the burlap off the top of the root ball and shaving the excess soil to the root flare or graft union. The root ball level shall then be raised to bring the tree to the proper finished elevation. Trees having a root flare or graft union deeper than two inches from the top of the root ball shall be rejected as defective.

- E. For balled and burlapped plant material, do not cut or remove twine, burlap or wire baskets.
- F. Plants shall be set in the center of the planting pit in a level and plumb position. The plant pit shall be backfilled with the native soil previously excavated, making sure that all of the original topsoil is utilized. Thoroughly compact the lower 1/3 of backfill to assure the plant remains in place. Complete the remaining backfill in 8" lifts, tamping the topsoil to eliminate voids. Backfill to the top of the root ball and do not place any soil on top of the root ball. Excess soils shall be removed from the site.
- G. For trees measuring 1.5" caliper or 6' tall and above, loosen the existing soil surrounding the plant pit by hand or machine to a depth of at least 8" and form a tree ring 8' in diameter. Tree rings shall be uniform circles measured from the center of the plant. Form a raised soil ring 3"-4" high just outside the edge of the plant pit to facilitate watering.
- H. All plants must be watered at the time of planting. When water is not available at the planting site, the Contractor shall provide water with a truck-mounted tank. The Owner may be able to provide a water source. Thoroughly water the entire plant pit and root ball to saturation and re-tamp the surrounding soil as needed. Add additional soil if needed to the top of the root ball.
- I. Spread a 4" layer of mulch over the entire tree ring or plant bed, keeping the mulch layer 6-8" from tree stems and bark.
- J. Remove any twine, tags and flagging on the branches.

Supplemental Watering

- A. The Contractor shall perform supplemental watering for all plantings which shall be paid for separately. The Contractor shall apply water to the root ball and plant pit of each plant in such a way as to assure complete saturation of the root system and adjacent soils. Water shall be applied at a reasonable velocity and distance such as to cause no harm to the tree or displacement of mulch or soil. The Schedule of Prices indicates the allotted quantity of watering occurrences. Moisture at the root ball will be monitored by the Owner, especially during dry periods. The Owner will request a watering and will contact the Contractor via phone or email. The Contractor shall perform the watering within five (5) days of receiving the request.
- B. The Owner is not capable of providing access to a water supply in the immediate vicinity of the tree plantings and as such it should be assumed that all watering would require a mobile water tank, hydro mulch rig or truck. The Owner shall approve all watering equipment. Watering equipment and vehicles shall not cause undo harm to the site. The Contractor may provide water from sources independent of the Owner; however, the Owner may provide sources on the site or another forest preserve. Should the Contractor choose to utilize the Owner's

water source, the Contractor must provide 24 hour notice to the Owner prior to each use. Pumps used to access water from lakes and ponds shall be provided by the Contractor.

Plant Protection

- A. Plant protection shall be installed after all planting tasks are complete.
- B. Tree Bark Protectors shall be installed using miniature black cable ties (4" length) at the top, bottom and middle of the protector. Cut the protector to length as necessary for low branched trees.
- C. Tree Protection Fencing shall be installed in a 3'-5' diameter circle for each plant, depending on canopy spread. At least 3 posts per fence circle shall be used. Join the ends of fencing together with galvanized wire or small cable ties.

Middlefork Savanna Planting Notes

TREES

Qty	Common Name	Species	Caliper Size
10	Burr Oak	Quercus macrocarpa	1 ¼"
7	Hill's Oak	Quercus ellipsoidalis 'Hills	1 ¼"
6	Red Oak	Quercus rubra	1 ¼"

Notes:

1. All oaks shall be seed propagated from source trees within 250 miles of Lake County, Illinois. All production shall be container-based using specialized air pruning or root constriction containers to form a fibrous, non-circling root system. Production methods shall include transplanting up to larger containers when root growth has filled the container. The final container size shall be 15 gallon, or a minimum of 18" in diameter and 15" in height. The final container may be plastic or fabric. The plant shall have actively grown in the final container either above or below ground, for a minimum of six months before delivery to the site.
2. Hill's Oak, *Quercus ellipsoidalis*, may be substituted for Scarlet Oak.
3. Each tree shall be mulched with a fine shredded or ground organic mulch to a depth of 4" and a diameter of 6 feet. No weed barrier fabric is required.
4. All oaks shall be planted between September 1 and November 1.
5. Tree care shall be according to 253.15 of the Std. Specs.

Method of Measurement: This work will be measured for payment per each tree planted.

Basis of Payment: This work will be paid for at the contract unit price per each for TREES (SPECIAL), which price shall include all labor, materials, and equipment necessary to perform the work herein.

AGGREGATE SUBGRADE IMPROVEMENT (D1)

Effective: February 22, 2012
Revised: April 1, 2016

Add the following Section to the Standard Specifications:

“SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT

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

303.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate	1004.07
(b) Reclaimed Asphalt Pavement (RAP) (Notes 1, 2 and 3)	1031

Note 1. Crushed RAP, from either full depth or single lift removal, may be mechanically blended with aggregate gradation CS 01 but shall not exceed 40 percent by weight 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 gradation CS 01 is used in lower lifts. When RAP is blended with any of the coarse aggregates, the blending shall be done with mechanically calibrated feeders. The final product shall not contain more than 40 percent by weight of RAP.

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. The calibration for the mechanical feeders shall have an accuracy of ± 2.0 percent of the actual quantity of material delivered.

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 gradation CS 01 shall be 24 in. (600 mm).

303.06 Capping Aggregate. The top surface of the aggregate subgrade shall consist of a minimum 3 in. (75 mm) of aggregate gradations CA 06 or CA 10. When 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:

“ **1004.07 Coarse Aggregate for Aggregate Subgrade Improvement.** The aggregate shall be according to Article 1004.01 and the following.

- (a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete. The top 12 inches of the aggregate subgrade improvement shall be 3 inches of capping material and 9 inches of crushed gravel, crushed stone or crushed concrete. In applications where greater than 36 inches of subgrade material is required, rounded gravel, meeting the CS01 gradation, may be used beginning at a depth of 12 inches below the bottom of pavement.
- (b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials. Non-mechanically blended RAP may be allowed up to a maximum of 5.0 percent.
- (c) Gradation.
 - (1) The coarse aggregate gradation for total subgrade thicknesses of 12 in. (300 mm) or greater shall be CS 01.

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

COARSE AGGREGATE SUBGRADE GRADATIONS (Metric)					
Grad No.	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

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

COARSE 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) may be 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 ± 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

FRICITION AGGREGATE (D-1)

Effective: January 1, 2011
 Revised: April 29, 2016

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

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

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

Use	Mixture	Aggregates Allowed
Class A	Seal or Cover	<u>Allowed Alone or in Combination</u> ^{5/} : Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete
HMA Low ESAL	Stabilized Subbase or Shoulders	<u>Allowed Alone or in Combination</u> ^{5/} : Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{1/} Crushed Concrete
HMA High ESAL Low ESAL	Binder IL-19.0 or IL-19.0L SMA Binder	<u>Allowed Alone or in Combination</u> ^{5/ 6/} : Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete ^{3/}

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

Use	Mixture	Aggregates Allowed	
		50% Dolomite ^{2/}	Any Mixture E aggregate
		75% Dolomite ^{2/}	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone
		75% Crushed Gravel ^{2/} 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/ 6/} :	
		Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.	
		<u>Other Combinations Allowed:</u>	
		<i>Up to...</i>	<i>With...</i>
		50% Crushed Gravel ^{2/} , 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 (limestone) and/or crushed gravel 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.”
- 6/ Combining different types of aggregate will not be permitted in SMA Ndesign 80.”

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

Effective: June 26, 2006

Revised: April 1, 2016

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 5)1031”

Add the following note to 1030.02 of the Standard Specifications:

Note 5. 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.

HEAT OF HYDRATION CONTROL FOR CONCRETE STRUCTURES (D-1)

Effective: November 1, 2013

Article 1020.15 shall not apply.

HMA MIXTURE DESIGN REQUIREMENTS (D-1)

Effective: January 1, 2013
 Revised: April 1, 2016

1) Design Composition and Volumetric Requirements

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

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

Revise the 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 ^{7/}	7.5	9.5 ^{7/}	4	6	7	9 ^{7/}
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.

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

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

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

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.

Add to the end of Article 1030.05 (d) (2) a. of the Standard Specifications:

“During production, the Contractor shall test SMA mixtures for draindown according to AASHTO T305 at a frequency of 1 per day of production.”

Delete last sentence of the second paragraph of Article 1102.01(a) (4) b. 2.

Add to the end of Article 1102.01 (a) (4) b. 2.:

“As an option, collected dust (baghouse) may be used in lieu of manufactured mineral filler according to the following:

(a.) Sufficient collected dust (baghouse) is available for production of the SMA mix for the entire project.

(b.) A mix design was prepared based on collected dust (baghouse).

2) Design Verification and Production

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

“(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 first paragraph of 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”.

Add the following after the sixth paragraph in Article 1030.06 (a) of the Standard Specifications:

“The Hamburg Wheel test shall also be conducted on all HMA mixtures from a sample taken 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. 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”

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 fourth paragraph of Article 406.14 of the Standard Specifications with the following:

“Stone matrix asphalt will be paid for at the contract unit price per ton (metric ton) for POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, of the mixture composition and N_{design} specified; and POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, STONE MATRIX ASPHALT, of the mixture composition and N_{design} specified.”

MAINTENANCE OF ROADWAYS

Effective: September 30, 1985

Revised: November 1, 1996

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

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

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

Effective: November 1, 2012

Revise: April 2, 2016

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 in. (75 mm) 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 test 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)	$\pm 6 \%$
No. 8 (2.36 mm)	$\pm 5 \%$
No. 30 (600 μm)	$\pm 5 \%$
No. 200 (75 μm)	$\pm 2.0 \%$

Asphalt Binder	± 0.3 %
Gmm	± 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 ITP, “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	
	FRAP	RAS
% Passing: ^{1/}		
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 homogeneous, 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 laboratory prequalified by the Department for the specified testing. The consultant laboratory shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample to the Bureau of Materials and Physical Research Aggregate Lab for MicroDeval Testing, according to ITP 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 the 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 percent 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 ^{1/2/4/}	Maximum % ABR		
	Binder/Leveling Binder	Surface	Polymer Modified ^{3/}
30L	50	40	30
50	40	35	30
70	40	30	30
90	40	30	30
4.75 mm N-50			40
SMA N-80			30

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the percent asphalt binder replacement shall not exceed 50 % of the total asphalt binder in the mixture.
- 2/ When the binder replacement exceeds 15 % 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 % 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 %, the required virgin asphalt binder grade shall be PG64-28.
- 3/ When the ABR for SMA or IL-4.75 is 15 % 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/ When FRAP or RAS is used alone, the maximum percent asphalt binder replacement designated on the table shall be reduced by 10 %.

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 (0.1 metric 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 Wedge Shoulders, Type B.
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 shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, “Reclaimed Asphalt Pavement (RAP) for Aggregate Applications”.
- (b) Gradation. The RAP material shall meet the gradation requirements for CA 6 according to Article 1004.01(c), except the requirements for the minus No. 200 (75 µm) sieve shall not apply. The sample for the RAP material shall be air dried to constant weight prior to being tested for gradation.”

STATUS OF UTILITIES (D-1)

Effective: June 1, 2016

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

UTILITIES TO BE ADJUSTED

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

No conflicts to be resolved in any stage.

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

Agency/Company Responsible to Resolve Conflict	Name of contact	Address	Phone	e-mail address
Com Ed	Ms. Terri Bleck Manager, Public Relocation Group Northeast Region	1500 Franklin Blvd. Libertyville, IL 60048	847.816.5239	terri.bleck@ComEd.com
Comcast	Mr. Robert Schulter Manager	688 Industrial Drive Elmhurst, IL 60126	630.600.6347	Bob_schulter@cable.comcast.com

AT&T	Legal Mandate Engineering	1000 Commerce Drive, Floor 2 Oak Brook, IL 60523	630.573.5703	hg2929@att.com
North Shore Gas	Mr. Jay Hammer	3001 Grand Avenue Waukegan, IL 60085	847.263.4678	jrhammer@integrysgroup.com
North Shore Sanitary	Bill Stoltz Supervisor Design & Construction	P.O. Box 750 William Koepsel Dr Gurnee, IL 60031	847.623.6060	bistoltz@northshoresanitary.org
Rogers Telecom Gabe's Technical Service	Ms. Vickie Moran	4804 N 40 th St Sheboygan, WI 53083	303.914.7848	vmoran@gabes.com
Sprint	Mr. Jim Burton OSP Engineer II	5600 N. River Rd., Suite 300 Rosemont, IL 60018	847.737.1273	James.m.burton@sprint.com
TDS Metrocom	Mr. Michael Johnson Asst. Mgr. Network Implementation	20875 Crossroads Circle, Suite 800 Waukesha, WI 53186	262.754.3052	Michael.johnson@tdstelecom.com

UTILITIES TO BE WATCHED AND PROTECTED

The areas of concern noted below have been identified by following the suggested staging plan included for the contract. The information provided is not a comprehensive list of all remaining utilities, but those which during coordination were identified as ones which might require the Department's contractor to take into consideration when making the determination of the means and methods that would be required to construct the proposed improvement. In some instances

the contractor will be responsible to notify the owner in advance of the work to take place so necessary staffing on the owners part can be secured.

All Stages

STAGE / LOCATION	TYPE	DESCRIPTION	OWNER	ACTION
Sta. 98+75 to Sta. 112+00 East side	Electric Transmission lines	Overhead transmission lines have No anticipated conflicts	Com Ed	Transmission lines shall be protected from damage by the contractor during construction
Sta. 98+75 to Sta. 101+00 both sides	Telecommunication transmission lines	Overhead and underground transmission lines No anticipated conflicts	Comcast	Transmission lines shall be protected from damage by the contractor during construction
Sta. 98+75 to Sta. 101+00 both sides	Telecommunication transmission lines	Overhead and underground transmission lines No anticipated conflicts	AT&T	Transmission lines shall be protected from damage by the contractor during construction
Sta. 98+75 to Sta. 101+00 both sides	Natural Gas transmission lines	Underground transmission lines No anticipated conflicts	North Shore Gas	Transmission lines shall be protected from damage by the contractor during construction
Sta. 98+75 to Sta. 101+00 both sides	Sanitary transmission lines	Underground transmission lines No anticipated conflicts	North Shore Sanitary	Transmission lines shall be protected from damage by the contractor during construction
Sta. 98+75 to Sta. 101+00 both sides	Telecommunication transmission lines	Overhead and underground transmission lines No anticipated conflicts	Rogers Telecom	Transmission lines shall be protected from damage by the contractor during construction
Sta. 98+75 to Sta. 101+00 both sides	Telecommunication transmission lines	Overhead and underground transmission lines No anticipated conflicts	Sprint	Transmission lines shall be protected from damage by the contractor during construction

Sta. 98+75 to Sta. 101+00 both sides	Telecommuni cation transmission lines	Overhead and underground transmission lines No anticipated conflicts	TDS Metrocom	Transmission lines shall be protected from damage by the contractor during construction
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The following contact information is what was used during the preparation of the plans as provided by the owner of the facility.

Agency/Company Responsible to Resolve Conflict	Name of contact	Address	Phone	e-mail address
Com Ed	Ms. Terri Bleck Manager, Public Relocation Group Northeast Region	1500 Franklin Blvd. Libertyville, IL 60048	847.816.5239	terri.bleck@ComEd.com
Comcast	Mr. Robert Schulter Manager	688 Industrial Drive Elmhurst, IL 60126	630.600.6347	Bob_schulter@cable.comcast.com
AT&T	Legal Mandate Engineering	1000 Commerce Drive, Floor 2 Oak Brook, IL 60523	630.573.5703	hg2929@att.com
North Shore Gas	Mr. Jay Hammer	3001 Grand Avenue Waukegan, IL 60085	847.263.4678	jrhammer@integrysgroup.com
North Shore Sanitary	Bill Stoltz Supervisor Design & Construction	P.O. Box 750 William Koepsel Dr Gurnee, IL 60031	847.623.6060	bistoltz@northshoresanitary.org

Rogers Telecom Gabe's Technical Service	Ms. Vickie Moran	4804 N 40 th St Sheboygan, WI 53083	303.914.7848	vmoran@gabes.com
Sprint	Mr. Jim Burton OSP Engineer II	5600 N. River Rd., Suite 300 Rosemont, IL 60018	847.737.1273	James.m.burton@sprint.com
TDS Metrocom	Mr. Michael Johnson Asst. Mgr. Network Implementation	20875 Crossroads Circle, Suite 800 Waukesha, WI 53186	262.754.3052	Michael.johnson@tdstelecom.com

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

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

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

TEMPORARY INFORMATION SIGNING

Effective: November 13, 1996

Revised: January 2, 2007

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

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

	<u>Item</u>	<u>Article/Section</u>
a.)	Sign Base (Notes 1 & 2)	1090
b.)	Sign Face (Note 3)	1091
c.)	Sign Legends	1092
d.)	Sign Supports	1093
e.)	Overlay Panels (Note 4)	1090.02

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

Note 2. Type A sheeting can be used on the plywood base.

Note 3. All sign faces shall be Type A except all orange signs shall meet the requirements of Article 1106.01.

Note 4. The overlay panels shall be 0.08 inch (2 mm) thick.

GENERAL CONSTRUCTION REQUIRMENTS

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

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

Signs which are placed on overhead bridge structures shall be fastened to the handrail with stainless steel bands. These signs shall rest on the concrete parapet where possible. The Contractor shall furnish mounting details for approval by the Engineer.

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

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

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

TRAFFIC CONTROL AND PROTECTION (ARTERIALS)

Effective: February 1, 1996

Revised: March 1, 2011

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

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

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

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

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

TRAFFIC CONTROL PLAN

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

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

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

STANDARDS:

- 701001 -02 Off -Rd Operations, 2L, 2W, More than 15' (4.5 m) Away
- 701006 -05 Off -Rd Operations, 2L, 2W, 15' (4.5 m) to 24" (600 mm) From Edge of Pavement
- 701011-05 Moving Operations, 2L, 2W, Day Only
- 701106-02 Off-Rd Operations, Multilane, More than 15' (4.5m) Away
- 701421-07 Lane Closure, multilane, day operations only, for speeds \geq 45 MPH TO 55 MPH
- 701426-08 Lane Closure, Multilane, Intermittent or Moving Oper., for Speeds \geq 45 MPH
- 701701 -10 Urban Lane Closure, Multilane Intersection
- 701801 -06 Sidewalk, Corner or Crosswalk Closure
- 701901 -04 Traffic Control Devices

DISTRICT DETAILS:

- TC-10 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
- TC-13 TYPICAL PAVEMENT MARKINGS
- TC-22 ARTERIAL ROAD INFORMATION SIGN

SPECIAL PROVISIONS:

- LRS #3 Work Zone Traffic Control
 - Public Convenience and Safety (D-1)
 - Maintenance of Roadways
 - Temporary Information Signing
- BDE 80350 Retroreflective Sheeting for Highway Signs (BDE)
- BDE 80354 Sidewalk, Corner, or Crosswalk Closure (BDE)
- RCS CS#33 Pavement marking removal (BDE Recurring SP CS #33)

TRAFFIC SIGNAL GENERAL REQUIREMENTS

Effective: May 22, 2002

Revised: March 25, 2016

800.01TS

These Traffic Signal Special Provisions and the "District One Standard Traffic Signal Design Details" supplement the requirements of the State of Illinois "Standard Specifications for Road and Bridge Construction." The intent of these Special Provisions is to prescribe the materials and construction methods commonly used for traffic signal installations.

- All material furnished shall be new unless otherwise noted herein.
- Traffic signal construction and maintenance work shall be performed by personnel holding current I June 30, 2016
- MSA Traffic Signal Technician Level II certification. A copy of the certification shall be immediately available upon request of the Engineer.
- The work to be done under this contract consists of furnishing, installing and maintaining all traffic signal work and items as specified in the Plans and as specified herein in a manner acceptable and approved by the Engineer.

Definitions of Terms.

Add the following to Section 101 of the Standard Specifications:

101.56 Vendor. Company that sells a particular type of product directly to the contractor or the Equipment Supplier.

101.57 Equipment supplier. Company that supplies, represents and provides technical support for IDOT District One approved traffic signal controllers and other related equipment. The Equipment Supplier shall be located within IDOT District One and shall:

- Be full service with on-site facilities to assemble, test and trouble-shoot traffic signal controllers and cabinet assemblies.
- Maintain an inventory of IDOT District One approved controllers and cabinets.
- Be staffed with permanent sales and technical personnel able to provide traffic signal controller and cabinet expertise and support.
- Technical staff shall hold current IMSA Traffic Signal Technician Level III certification and shall attend traffic signal turn-ons and inspections with a minimum 14 calendar day notice.

Submittals.

Revise Article 801.05 of the Standard Specifications to read:

All material approval requests shall be submitted electronically through the District's SharePoint System unless directed otherwise by the Engineer. Electronic material submittals shall follow the District's Traffic Operations Construction Submittals guidelines. General requirements include:

1. All material approval requests shall be made prior to or no later than the date of the preconstruction meeting. A list of major traffic signal items can be found in Article 801.05. Material or equipment which is similar or identical shall be the product of the same manufacturer, unless necessary for system continuity. Traffic signal materials and equipment shall bear the U.L. label whenever such labeling is available.
2. Product data and shop drawings shall be assembled by pay item. Only the top sheet of each pay item submittal will be stamped by the Department with the review status, except shop drawings for mast arm pole assemblies and the like will be stamped with the review status on each sheet.
3. Original manufacturer published product data and shop drawing sheets with legible dimensions and details shall be submitted for review.
4. When hard copy submittals are necessary, four complete copies of the manufacturer's descriptive literatures and technical data for the traffic signal materials shall be submitted. For hard copy or electronic submittals, the descriptive literature and technical data shall be adequate for determining whether the materials meet the requirements of the plans and specifications. If the literature contains more than one item, the Contractor shall indicate which item or items will be furnished.
5. When hard copy submittals are necessary for structural elements, four complete copies of the shop drawings for the mast arm assemblies and poles, and the combination mast arm assemblies and poles showing, in detail, the fabrication thereof and the certified mill analyses of the materials used in the fabrication, anchor rods, and reinforcing materials shall be submitted.
6. Partial or incomplete submittals will be returned without review.
7. Certain non-standard mast arm poles and special structural elements will require additional review from IDOT's Central Office. Examples include ornamental/decorative, non-standard length mast arm pole assemblies and monotube structures. The Contractor shall account for the additional review time in his schedule.
8. The contract number or permit number, project location/limits and corresponding pay code number must be on each sheet of correspondence, catalog cuts and mast arm poles and assemblies drawings.
9. Where certifications and/or warranties are specified, the information submitted for approval shall include certifications and warranties. Certifications involving inspections, and/or tests of material shall be complete with all test data, dates, and times.
10. After the Engineer reviews the submittals for conformance with the design concept of the project, the Engineer will stamp the drawings indicating their status as 'Approved', 'Approved-As-Noted', 'Disapproved', or 'Incomplete'. Since the Engineer's review is for conformance with the design concept only, it is the Contractor's responsibility to coordinate the various items into a working system as specified. The Contractor shall not be relieved from responsibility for errors or omissions in the shop, working, layout drawings, or other documents by the Department's approval thereof. The Contractor must still be in full compliance with contract and specification requirements.
11. The Contractor shall secure approved materials in a timely manner to assure construction schedules are not delayed.
12. All submitted items reviewed and marked 'APPROVED AS NOTED', 'DISAPPROVED', or 'INCOMPLETE' are to be resubmitted in their entirety, unless

otherwise indicated within the submittal comments, with a disposition of previous comments to verify contract compliance at no additional cost to the contract.

13. Exceptions to and deviations from the requirements of the Contract Documents will not be allowed. It is the Contractor's responsibility to note any deviations from Contract requirements at the time of submittal and to make any requests for deviations in writing to the Engineer. In general, substitutions will not be acceptable. Requests for substitutions must demonstrate that the proposed substitution is superior to the material or equipment required by the Contract Documents. No exceptions, deviations or substitutions will be permitted without the approval of the Engineer.
14. Contractor shall not order major equipment such as mast arm assemblies prior to Engineer approval of the Contractor marked proposed traffic signal equipment locations to assure proper placement of contract required traffic signal displays, push buttons and other facilities. Field adjustments may require changes in proposed mast arm length and other coordination.

Marking Proposed Locations.

Revise "Marking Proposed Locations for Highway Lighting System" of Article 801.09 to read "Marking Proposed Locations for Highway Lighting System and Traffic Signals."

Add the following to Article 801.09 of the Standard Specifications:

It shall be the contractor's responsibility to verify all dimensions and conditions existing in the field prior to ordering materials and beginning construction. This shall include locating the mast arm foundations and verifying the mast arms lengths.

Inspection of Electrical Systems.

Add the following to Article 801.10 of the Standard Specifications:

- (c) All cabinets including temporary traffic signal cabinets shall be assembled by an approved equipment supplier in District One. The Department reserves the right to request any controller and cabinet to be tested at the equipment supplier's facility prior to field installation, at no extra cost to this contract.

Maintenance and Responsibility.

Revise Article 801.11 of the Standard Specifications to read:

- a. Existing traffic signal installations and/or any electrical facilities at all or various locations may be altered or reconstructed totally or partially as part of the work on this Contract. The Contractor is hereby advised that all traffic control equipment, presently installed at these locations, may be the property of the State of Illinois, Department of Transportation, Division of Highways, County, Private Developer, Municipality or Transit Agency in which they are located. Once the Contractor has begun any work on any portion of the project, all traffic signals within the limits of this contract or those which have the item "Maintenance of Existing Traffic Signal Installation," "Temporary Traffic Signal Installation(s)" and/or "Maintenance of Existing Flashing Beacon Installation," shall become the full

responsibility of the Contractor. The Contractor shall supply the Engineer, Area Traffic Signal Maintenance and Operations Engineer, IDOT ComCenter and the Department's Electrical Maintenance Contractor with two 24-hour emergency contact names and telephone numbers.

- b. Automatic Traffic Enforcement equipment such as red lighting running and railroad crossing camera systems are owned and operated by others and the Contractor shall not be responsible for maintaining this equipment.
- c. Regional transit, County and other agencies may also have equipment connected to existing traffic signal or peripheral equipment such as PTZ cameras, switches, transit signal priority (TSP and BRT) servers and other devices that shall be included with traffic signal maintenance at no additional cost to the contract.
- d. When the project has a pay item for "Maintenance of Existing Traffic Signal Installation," "Temporary Traffic Signal Installation(s)" and/or "Maintenance of Existing Flashing Beacon Installation," the Contractor must notify both the Area Traffic Signal Maintenance and Operations Engineer at (847) 705-4424 and the Department's Electrical Maintenance Contractor, of their intent to begin any physical construction work on the Contract or any portion thereof. This notification must be made a minimum of seven (7) working days prior to the start of construction to allow sufficient time for inspection of the existing traffic signal installation(s) and transfer of maintenance to the Contractor. The Department will attempt to full-fill the Contractor's inspection date request(s), however workload and other conditions may prevent the Department from accommodating specific dates or times. The Contractor shall not be entitled to any other compensation if the requested inspection date(s) cannot be scheduled by the Department. If work is started prior to an inspection, maintenance of the traffic signal installation(s) will be transferred to the Contractor without an inspection. The Contractor will become responsible for repairing or replacing all equipment that is not operating properly or is damaged at no cost to the owner of the traffic signal. Final repairs or replacement of damaged equipment must meet the approval of the Engineer prior to or at the time of final inspection otherwise the traffic signal installation will not be accepted.
- e. The Contractor is advised that the existing and/or temporary traffic signal installation must remain in operation during all construction stages, except for the most essential down time. Any shutdown of the traffic signal installation, which exceeds fifteen (15) minutes, must have prior approval of the Engineer. Approval to shut down the traffic signal installation will only be granted during the period extending from 10:00 a.m. to 3:00 p.m. on weekdays. Shutdowns shall not be allowed during inclement weather or holiday periods.
- f. The Contractor shall be fully responsible for the safe and efficient operation of the traffic signals and other equipment noted herein. Any inquiry, complaint or

request by the Department, the Department's Electrical Maintenance Contractor or the public, shall be investigated and repairs begun within one hour. Failure to provide this service will result in liquidated damages of \$1000 per day per occurrence. In addition, the Department reserves the right to assign any work not completed within this timeframe to the Electrical Maintenance Contractor. All costs associated to repair this uncompleted work shall be the responsibility of the Contractor. Failure to pay these costs to the Electrical Maintenance Contractor within one month after the incident will result in additional liquidated damages of \$1000 per month per occurrence. Unpaid bills will be deducted from the cost of the Contract. The Department may inspect any signaling device on the Department's highway system at any time without notification.

- g. Any proposed activity in the vicinity of a highway-rail grade crossing must adhere to the guidelines set forth in the current edition of the Manual on Uniform Traffic Control Devices (MUTCD) regarding work in temporary traffic control zones in the vicinity of highway-rail grade crossings which states that lane restrictions, flagging, or other operations shall not create conditions where vehicles can be queued across the railroad tracks. If the queuing of vehicles across the tracks cannot be avoided, a uniformed law enforcement officer or flagger shall be provided at the crossing to prevent vehicles from stopping on the tracks, even if automatic warning devices are in place.
- h. The Contractor shall be responsible to clear snow, ice, dirt, debris or other condition that obstructs visibility of any traffic signal display or access to traffic signal equipment.
- i. The Contractor shall maintain the traffic signal in normal operation during short or long term loss of utility or battery back-up power at critical locations designated by the Engineer. Critical locations may include traffic signals interconnected to railroad warning devices, expressway ramps, intersection with an SRA route, critical corridors or other locations identified by the Engineer. Temporary power to the traffic signal must meet applicable NEC and OSHA guidelines and may include portable generators and/or replacement batteries. Temporary power to critical locations shall not be for separately but shall be included in the contract.

Damage to Traffic Signal System.

Add the following to Article 801.12(b) of the Standard Specifications to read:

Any traffic signal control equipment damaged or not operating properly from any cause shall be replaced with new equipment meeting current District One traffic signal specifications and provided by the Contractor at no additional cost to the Contract and/or owner of the traffic signal system, all as approved by the Engineer. Final replacement of damaged equipment must meet the approval of the Engineer prior to or at the time of final inspection otherwise the traffic signal installation will not be accepted. Cable splices are only allowed at the bases pf post and mast arms.

Temporary replacement of damaged or knockdown of a mast arm pole assembly shall require construction of a full or partial span wire signal installation or other method approved by the Engineer to assure signal heads are located overhead and over traveled pavement. Temporary replacement of mast arm mount signals with post mount signals will not be permitted.

Automatic Traffic Enforcement equipment, such as Red Light Enforcement cameras, detectors, and peripheral equipment, damaged or not operating properly from any cause, shall be the responsibility of the municipality or the Automatic Traffic Enforcement company per Permit agreement.

Traffic Signal Inspection (TURN-ON).

Revise Article 801.15(b) of the Standard Specifications to read:

It is the intent to have all electric work completed and equipment field tested by the Equipment Supplier prior to the Department's "turn-on" field inspection. If in the event the Engineer determines work is not complete and the inspection will require more than two (2) hours to complete, the inspection shall be canceled and the Contractor will be required to reschedule at another date. The maintenance of the traffic signals will not be accepted until all punch list work is corrected and re-inspected.

When the road is open to traffic, except as otherwise provided in Section 850 of the Standard Specifications, the Contractor may request a turn-on and inspection of the completed traffic signal installation at each separate location. This request must be made to the Area Traffic Signal Maintenance and Operations Engineer at (847) 705-4424 a minimum of seven (7) working days prior to the time of the requested inspection. The Department will attempt to fulfill the Contractor's turn-on and inspection date request(s), however workload and other conditions may prevent the Department from accommodating specific dates or times. The Contractor shall not be entitled to any other compensation if the requested turn-on and inspection date(s) cannot be scheduled by the Department. The Department will not grant a field inspection until written or electronic notification is provided from the Contractor that the equipment has been field tested and the intersection is operating according to Contract requirements. The Contractor must invite local fire department personnel to the turn-on when Emergency Vehicle Preemption (EVP) is included in the project. When the contract includes the item RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, OPTIMIZE TRAFFIC SIGNAL SYSTEM, or TEMPORARY TRAFFIC SIGNAL TIMINGS, the Contractor must notify the SCAT Consultant of the turn-on/detour implementation schedule, as well as stage changes and phase changes during construction.

The Contractor must have all traffic signal work completed and the electrical service installation connected by the utility company prior to requesting an inspection and turn-on of the traffic signal installation. The Contractor shall be responsible to provide a police officer to assist with traffic control at the time of testing.

The Contractor shall provide a representative from the control equipment vendor's office who is knowledgeable of the cabinet design and controller functions to attend the traffic signal inspection for both permanent and temporary traffic signal turn-ons.

Upon demonstration that the signals are operating and all work is completed in accordance with the Contract and to the satisfaction of the Engineer, the Engineer will then allow the signals to be placed in continuous operation. The Agency that is responsible for the maintenance of each traffic signal installation will assume the maintenance upon successful completion of this inspection.

The District requires the following Final Project Documentation from the Contractor at traffic signal turn-ons in electronic format in addition to hard copies where noted. A CD/DVD shall be submitted with separate folders corresponding to each numbered title below. The CD/DVD shall be labelled with date, project location, company and contract or permit number. Record Drawings, Inventory and Material Approvals shall be submitted prior to traffic signal turn-on for review by the Department as described here-in.

Final Project Documentation:

1. Record Drawings. Signal plans of record with field revisions marked in red ink. One hard copy set of 11"x17" record drawings shall also be provided.
2. Inventory. Inventory of new and existing traffic signal equipment including cabinet types and devices within cabinets in an Excel spread sheet format. One hard copy shall also be provided.
3. Pictures. Digital pictures of a minimum 12M pixels of each intersection approach showing all traffic signal displays and equipment. Pictures shall include controller cabinet equipment in enough detail to clearly identify manufacture and model of major equipment.
4. Field Testing. Written notification from the Contractor and the equipment vendor of satisfactory field testing with corresponding material performance measurements, such as for detector loops and fiber optic systems (see Article 801.13). One hard copy of all contract required performance measurement testing shall also be provided.
5. Materials Approval. The material approval letter. A hard copy shall also be provided.
6. Manuals. Operation and service manuals of the signal controller and associated control equipment. One hard copy shall also be provided.
7. Cabinet Wiring Diagram and Cable Logs. Five (5) hard copies 11" x 17" of the cabinet wiring diagrams shall be provided along with electronic pdf and dgn files of the cabinet wiring diagram. Five hard copies of the cable logs and electronic excel files shall be provided with cable #, number of conductors and spares, connected device/signal head and intersection location.
8. Controller Programming Settings. The traffic signal controller's timings; backup timings; coordination splits, offsets, and cycles; TBC Time of Day, Week and Year Programs; Traffic Responsive Program, Detector Phase Assignment, Type and Detector Switching; and any other functions programmable from the

keyboard. The controller manufacturer shall also supply a printed form, not to exceed 11" x 17" for recording that data noted above. The form shall include a location, date, manufacturer's name, controller model and software version. The form shall be approved by the Engineer and a minimum of three (3) copies must be furnished at each turn-on. The manufacturer must provide all programming information used within the controller at the time of turn-on.

9. Warrantees and Guarantees. All manufacturer and contractor warrantees and guarantees required by Article 801.14.
10. GPS coordinate of traffic signal equipment as describe in the Record Drawings section herein.

Acceptance of the traffic signal equipment by the Department shall be based upon inspection results at the traffic signal "turn on", completeness of the required documentation and successful operation during a minimum 72 hour "burn-in" period following activation of the traffic signal. If approved, traffic signal acceptance shall be verbal at the "turn on" inspection followed by written correspondence from the Engineer. The Contractor shall be responsible for all traffic signal equipment and associated maintenance thereof until Departmental acceptance is granted.

All equipment and/or parts to keep the traffic signal installation operating shall be furnished by the Contractor. No spare traffic signal equipment is available from the Department.

All punch list work shall be completed within two (2) weeks after the final inspection. The Contractor shall notify the Electrical Maintenance Contractor to inspect all punch list work. Failure to meet these time constraints shall result in liquidated damage charges of \$500 per month per incident.

All cost of work and materials required to comply with the above requirements shall be included in the pay item bid prices, under which the subject materials and signal equipment are paid, and no additional compensation will be allowed. Materials and signal equipment not complying with the above requirements shall be subject to removal and disposal at the Contractor's expense.

Record Drawings.

The requirements listed for Electrical Installation shall apply for Traffic Signal Installations in Article 801.16. 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 reduced-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. If the contract consists of multiple intersections, each intersection shall be saved as an individual PDF file with TS# and location name in its file name.

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 the pay item either by filename or PDF Table of Contents referencing the respective pay item number for multi-item PDF files. Specific part or model numbers of items which have been selected shall be clearly visible.”

As part of the record drawings, the Contractor shall inventory all traffic signal equipment, new or existing, on the project and record information in an Excel spreadsheet. The inventory shall include equipment type, model numbers, software manufacturer and version and quantities.

Add the following to Article 801.16 of the Standard Specifications:

“In addition to the specified record drawings, the Contractor shall record GPS coordinates of the following traffic signal components being installed, modified or being affected in other ways by this contract:

- All Mast Arm Poles and Posts
- Traffic Signal Wood Poles
- Rail Road Bungalow
- UPS
- Handholes
- Conduit roadway crossings
- Controller Cabinets
- Communication Cabinets
- Electric Service Disconnect locations
- CCTV Camera installations
- Fiber Optic Splice Locations
- Conduit Crossings

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:

- File shall be named: TSXXX-YY-MM-DD (i.e. TS22157_15-01-01)
- Each intersection shall have its own file
- Row 1 should have the location name (i.e. IL 31 @ Klausen)
- Row 2 is blank
- Row 3 is the headers for the columns
- Row 4 starts the data
- Column A (Date) – should be in the following format: MM/DD/YYYY
- Column B (Item) – as shown in the table below
- Column C (Description) – as shown in the table below
- Column D and E (GPS Data) – should be in decimal form, per the IDOT special provisions

Examples:

Date	Item	Description	Latitude	Longitude
01/01/2015	MP (Mast Arm Pole)	NEQ, NB, Dual, Combination Pole	41.580493	-87.793378
01/01/2015	HH (Handhole)	Heavy Duty, Fiber, Intersection, Double	41.558532	-87.792571
01/01/2015	ES (Electrical Service)	Ground mount, Pole mount	41.765532	-87.543571
01/01/2015	CC (Controller Cabinet)		41.602248	-87.794053
01/01/2015	RSC (Rigid Steel Crossing)	IL 31 east side crossing south leg to center HH at Klausen	41.611111	-87.790222
01/01/2015	PTZ (PTZ)	NEQ extension pole	41.593434	-87.769876
01/01/2015	POST (Post)		41.651848	-87.762053
01/01/2015	MCC (Master Controller Cabinet)		41.584593	-87.793378
01/01/2015	COMC (Communication Cabinet)		41.584600	-87.793432
01/01/2015	BBS (Battery Backup System)		41.558532	-87.792571
01/01/2015	CNCR (Conduit Crossing)	4-inch IL 31 n/o of Klausen	41.588888	-87.794440

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 1 foot. 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 1 foot 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.”

Delete the last sentence of the 3rd paragraph of Article 801.16.

Locating Underground Facilities.

Revise Section 803 to the Standard Specifications to read:

IDOT traffic signal facilities are not part of any of the one-call locating service such as J.U.L.I.E or Digger. If this Contract requires the services of an Electrical Contractor, the Contractor shall be responsible at his/her own expense for locating existing IDOT electrical facilities prior to

performing any work. If this Contract does not require the services of an Electrical Contractor, the Contractor may request one free locate for existing IDOT electrical facilities from the District One Electrical Maintenance Contractor prior to the start of any work. Additional requests may be at the expense of the Contractor. The location of underground traffic facilities does not relieve the Contractor of their responsibility to repair any facilities damaged during construction at their expense.

The exact location of all utilities shall be field verified by the Contractor before the installation of any components of the traffic signal system. For locations of utilities, locally owned equipment, and leased enforcement camera system facilities, the local Counties or Municipalities may need to be contacted: in the City of Chicago contact Digger at (312) 744-7000 and for all other locations contact J.U.L.I.E. at 1-800-892-0123 or 811.

Restoration of Work Area.

Add the following article to Section 801 of the Standard Specifications:

801.17 Restoration of work area. Restoration of the traffic signal work area shall be included in the related pay items such as foundation, conduit, handhole, underground raceways, etc. All roadway surfaces such as shoulders, medians, sidewalks, pavement, etc. shall be replaced in kind. All damage to mowed lawns shall be replaced with an approved sod, and all damage to unmowed fields shall be seeded. All brick pavers disturbed in the work area shall be restored to their original configuration as directed by the Engineer. All damaged brick pavers shall be replaced with a comparable material approved by the Engineer. Restoration of the work area shall be included in the contract without any extra compensation allowed to the Contractor.

Bagging Signal Heads.

Light tan colored traffic and pedestrian signal reusable covers shall be used to cover dark/un-energized signal sections and visors. Covers shall be made of outdoor fabric with urethane coating for repelling water, have elastic fully sewn around the cover ends for a tight fit over the visor, and have a minimum of two straps with buckles to secure the cover to the backplate. A center mesh strip allows viewing without removal for signal status testing purposes. Covers shall include a message indicating the signal is not in service.

RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM

Effective: May 22, 2002

Revised: July 1, 2015

800.03TS

Description.

This work shall consist of re-optimizing a closed loop traffic signal system according to the following Levels of work.

LEVEL I applies when improvements are made to an existing signalized intersection within an existing closed loop traffic signal system. The purpose of this work is to integrate the improvements to the subject intersection into the signal system while minimizing the impacts to the existing system operation. This type of work would be commonly associated with the addition of signal phases, pedestrian phases, or improvements that do not affect the capacity at an intersection.

LEVEL II applies when improvements are made to an existing signalized intersection within an existing closed loop traffic signal system and detailed analysis of the intersection operation is desired by the engineer, or when a new signalized or existing signalized intersection is being added to an existing system, but optimization of the entire system is not required. The purpose of this work is to optimize the subject intersection, while integrating it into the existing signal system with limited impact to the system operations. This item also includes an evaluation of the overall system operation, including the traffic responsive program.

For the purposes of re-optimization work, an intersection shall include all traffic movements operated by the subject controller and cabinet.

After the signal improvements are completed, the signal shall be re-optimized as specified by an approved Consultant who has previous experience in optimizing Closed Loop Traffic Signal Systems for District One of the Illinois Department of Transportation. The Contractor shall contact the Traffic Signal Engineer at (847) 705-4424 for a listing of approved Consultants. Traffic signal system optimization work, including fine-tuning adjustments of the optimized system, shall follow the requirements stated in the most recent IDOT District 1 SCAT Guidelines, except as note herein.

A listing of existing signal equipment, interconnect information, phasing data, and timing patterns may be obtained from the Department, if available and as appropriate. The existing SCAT Report is available for review at the District One office and if the Consultant provides blank computer discs, copies of computer simulation files for the existing optimized system and a timing database will be made for the Consultant. The Consultant shall confer with the Traffic Signal Engineer prior to optimizing the system to determine if any extraordinary conditions exist that would affect traffic flows in the vicinity of the system, in which case, the Consultant may be instructed to wait until the conditions return to normal or to follow specific instructions regarding the optimization.

(a) LEVEL I Re-Optimization

1. The following tasks are associated with LEVEL I Re-Optimization.
 - a. Appropriate signal timings shall be developed for the subject intersection and existing timings shall be utilized for the rest of the intersections in the system.
 - b. Proposed signal timing plan for the modified intersection(s) shall be forwarded to IDOT for review prior to implementation.
 - c. Consultant shall conduct on-site implementation of the timings at the turn-on and make fine-tuning adjustments to the timings of the subject intersection in the field to alleviate observed adverse operating conditions and to enhance operations. The consultant shall respond to IDOT comments and public complaints for a minimum period of 60 days from date of timing plan implementation.
2. The following deliverables shall be provided for LEVEL I Re-Optimization.
 - a. Consultant shall furnish to IDOT a cover letter describing the extent of the re-optimization work performed.
 - b. Consultant shall furnish an updated intersection graphic display for the subject intersection to IDOT and to IDOT's Traffic Signal Maintenance Contractor.

(b) LEVEL II Re-Optimization

1. In addition to the requirements described in the LEVEL I Re-Optimization above, the following tasks are associated with LEVEL II Re-Optimization.
 - a. Traffic counts shall be taken at the subject intersection(s) after the traffic signals are approved for operation by the Area Traffic Signal Operations Engineer. Manual turning movement counts shall be conducted from 6:30 a.m. to 9:30 a.m., 11:00 a.m. to 1:00 p.m., and 3:30 p.m. to 6:30 p.m. on a typical weekday from midday Monday to midday Friday and on a Saturday and/or Sunday, as directed by the Engineer, to account for special traffic generators such as shopping centers, educational institutes and special event facilities. The turning movement counts shall identify cars, and single-unit, multi-unit heavy vehicles, and transit buses.
 - b. As necessary, the intersection(s) shall be re-addressed and all system detectors reassigned in the master controller according to the current standard of District One.
 - c. Traffic responsive program operation shall be evaluated to verify proper pattern selection and lack of oscillation and a report of the operation shall be provided to IDOT.
2. The following deliverables shall be provided for LEVEL II Re-Optimization.
 - a. Consultant shall furnish to IDOT one (1) copy of a technical memorandum for the optimized system. The technical memorandum shall include the following elements:
 - (1) Brief description of the project
 - (2) Printed copies of the analysis output from Synchro (or other appropriate, approved optimization software file)
 - (3) Printed copies of the traffic counts conducted at the subject intersection

- b. Consultant shall furnish to IDOT two (2) CDs for the optimized system. The CDs shall include the following elements:
- (1) Electronic copy of the technical memorandum in PDF format
 - (2) Revised Synchro files (or other appropriate, approved optimization software file) including the new signal and the rest of the signals in the closed loop system
 - (3) Traffic counts conducted at the subject intersection(s)
 - (4) New or updated intersection(s) graphic display file for the subject intersection(s)
 - (5) The CD shall be labeled with the IDOT system number and master location, as well as the submittal date and the consultant logo. The CD case shall include a clearly readable label displaying the same information securely affixed to the side and front.

Basis of Payment.

This work shall be paid for at the contract unit price each for RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM – LEVEL I or RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM – LEVEL II, which price shall be payment in full for performing all work described herein per intersection. Following completion of the timings and submittal of specified deliverables, 100 percent of the bid price will be paid. Each intersection will be paid for separately.

GROUNDING OF TRAFFIC SIGNAL SYSTEMS

Effective: May 22, 2002

Revised: July 1, 2015

806.01TS

Revise Section 806 of the Standard Specifications to read:

General.

All traffic signal systems, equipment and appurtenances shall be properly grounded in strict conformance with the NEC. This work shall be in accordance with IDOT's District One Traffic Signal Design Details.

The grounding electrode system shall include a ground rod installed with each traffic signal controller concrete foundation and all mast arm and post concrete foundations. An additional ground rod will be required at locations where measured resistance exceeds 25 ohms. Ground rods are included in the applicable concrete foundation or service installation pay item and will not be paid for separately.

Testing shall be according to Article 801.13 (a) (4) and (5).

- (a) The grounded conductor (neutral conductor) shall be white color coded. This conductor shall be bonded to the equipment grounding conductor only at the Electric Service Installation. All power cables shall include one neutral conductor of the same size.
- (b) The equipment grounding conductor shall be green color coded. The following is in addition to Article 801.04 of the Standard Specifications.
 - 1. Equipment grounding conductors shall be bonded to the grounded conductor (neutral conductor) only at the Electric Service Installation. The equipment grounding conductor is paid for separately and shall be continuous. The Earth shall not be used as the equipment grounding conductor.
 - 2. Equipment grounding conductors shall be bonded, using a UL Listed grounding connector, to all traffic signal mast arm poles, traffic signal posts, pedestrian posts, pull boxes, handhole frames and covers, conduits, and other metallic enclosures throughout the traffic signal wiring system, except where noted herein. Bonding shall be made with a splice and pigtail connection, using a sized compression type copper sleeve, sealant tape, and heat-shrinkable cap. A UL listed electrical joint compound shall be applied to all conductors' terminations, connector threads and contact points. Conduit grounding bushings shall be installed at all conduit terminations including spare or empty conduits.
 - 3. All metallic and non-metallic raceways shall have a continuous equipment grounding conductor, except raceways containing only detector loop lead-in circuits, circuits under 50 volts and/or fiber optic cable will not be required to include an equipment grounding conductor.

4. Individual conductor splices in handholes shall be soldered and sealed with heat shrink. When necessary to maintain effective equipment grounding, a full cable heat shrink shall be provided over individual conductor heat shrinks.
- (c) The grounding electrode conductor shall be similar to the equipment grounding conductor in color coding (green) and size. The grounding electrode conductor is used to connect the ground rod to the equipment grounding conductor and is bonded to ground rods via exothermic welding, UL listed pressure connectors, and UL listed clamps.

UNDERGROUND RACEWAYS

Effective: May 22, 2002

Revised: July 1, 2015

810.02TS

Revise Article 810.04 of the Standard Specifications to read:

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

Add the following to Article 810.04 of the Standard Specifications:

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

Add the following to Article 810.04 of the Standard Specifications:

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

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

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

GROUNDING CABLE

Effective: May 22, 2002

Revised: July 1, 2015

817.01TS

The cable shall meet the requirements of Section 817 of the "Standard Specifications," except for the following:

Add the following to Article 817.02 (b) of the Standard Specifications:

Unless otherwise noted on the Plans, traffic signal grounding conductor shall be one conductor, #6 gauge copper, with a green color coded XLP jacket.

The traffic signal grounding conductor shall be bonded, using a UL Listed grounding connector to all proposed and existing traffic signal mast arm poles and traffic/pedestrian signal posts, including push button posts. The grounding conductor shall be bonded to all proposed and existing pull boxes, handhole frames and covers and other metallic enclosures throughout the traffic signal wiring system and noted herein and detailed on the plans. The grounding conductor shall be bonded to conduit terminations using rated grounding bushings. Bonding to existing handhole frames and covers shall be paid for separately.

Add the following to Article 817.05 of the Standard Specifications:

Basis of Payment.

Grounding cable shall be measured in place for payment in foot (meter). Payment shall be at the contract unit price for ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C, which price includes all associated labor and material including grounding clamps, splicing, exothermic welds, grounding connectors, conduit grounding bushings, and other hardware.

**MAINTENANCE OF EXISTING TRAFFIC SIGNAL AND FLASHING BEACON
INSTALLATION**

Effective: May 22, 2002

Revised: July 1, 2015

850.01TS

General.

1. Full maintenance responsibility shall start as soon as the Contractor begins any physical work on the Contract or any portion thereof. If Contract work is started prior to a traffic signal inspection, maintenance of the traffic signal installation(s) will be transferred to the Contractor without an inspection.
2. The Contractor shall have electricians with IMSA Level II certification on staff to provide signal maintenance. A copy of the certification shall be immediately available upon request of the Engineer.
3. This item shall include maintenance of all traffic signal equipment and other connected and related equipment such as flashing beacons, emergency vehicle pre-emption equipment, master controllers, uninterruptable power supply (UPS and batteries), PTZ cameras, vehicle detection, handholes, lighted signs, telephone service installations, communication cables, conduits to adjacent intersections, and other traffic signal equipment.
4. Regional transit, County and other agencies may also have equipment connected to existing traffic signal or peripheral equipment such as PTZ cameras, switches, transit signal priority (TSP and BRT) servers, radios and other devices that shall be included with traffic signal maintenance at no additional cost to the contract.
5. Maintenance shall not include Automatic Traffic Enforcement equipment, such as Red Light Enforcement cameras, detectors, or peripheral equipment. This equipment is operated and maintained by the local municipality and should be de-activated while on contractor maintenance.
6. The energy charges for the operation of the traffic signal installation shall be paid for by the Contractor.

Maintenance.

1. The Contractor shall check all controllers every two (2) weeks, which will include visually inspecting all timing intervals, relays, detectors, and pre-emption equipment to ensure that they are functioning properly. The Contractor shall check signal system communications and phone lines to assure proper operation. This item includes, as routine maintenance, all portions of emergency vehicle pre-emption equipment. The Contractor shall maintain in stock at all times a sufficient amount of materials and equipment to provide effective temporary and permanent repairs. Prior to the traffic signal maintenance transfer, the contractor shall supply a detailed maintenance schedule

that includes dates, locations, names of electricians providing the required checks and inspections along with any other information requested by the Engineer.

2. The Contractor is advised that the existing and/or span wire traffic signal installation must remain in operation during all construction stages, except for the most essential down time. Any shutdown of the traffic signal installation, which exceeds fifteen (15) minutes, must have prior approval of the Engineer. Approval to shut down the traffic signal installation will only be granted during the period extending from 10:00 a.m. to 3:00 p.m. on weekdays. Shutdowns shall not be allowed during inclement weather or holiday periods.
3. The Contractor shall provide immediate corrective action when any part or parts of the system fail to function properly. Two far side heads facing each approach shall be considered the minimum acceptable signal operation pending permanent repairs. When repairs at a signalized intersection require that the controller be disconnected or otherwise removed from normal operation, and power is available, the Contractor shall place the traffic signal installation on flashing operation. The signals shall flash RED for all directions unless a different indication has been specified by the Engineer. The Contractor shall be required to place stop signs (R1-1-36) at each approach of the intersection as a temporary means of regulating traffic. When the signals operate in flash, the Contractor shall furnish and equip all their vehicles assigned to the maintenance of traffic signal installations with a sufficient number of stop signs as specified herein. The Contractor shall maintain a sufficient number of spare stop signs in stock at all times to replace stop signs which may be damaged or stolen.
4. The Contractor shall provide the Engineer with 2 (two) 24 hour telephone numbers for the maintenance of the traffic signal installation and for emergency calls by the Engineer.
5. Traffic signal equipment which is lost or not returned to the Department for any reason shall be replaced with new equipment meeting the requirements of the Standard Specifications and these special provisions.
6. The Contractor shall respond to all emergency calls from the Department or others within one (1) hour after notification and provide immediate corrective action. When equipment has been damaged or becomes faulty beyond repair, the Contractor shall replace it with new and identical equipment. The cost of furnishing and installing the replaced equipment shall be borne by the Contractor at no additional charge to the contract. The Contractor may institute action to recover damages from a responsible third party. If at any time the Contractor fails to perform all work as specified herein to keep the traffic signal installation in proper operating condition or if the Engineer cannot contact the Contractor's designated personnel, the Engineer shall have the State's Electrical Maintenance Contractor perform the maintenance work. The Contractor shall be responsible for all of the State's Electrical Maintenance Contractor's costs and liquidated damages of \$1000 per day per occurrence. The State's Electrical Maintenance Contractor shall bill the Contractor for the total cost of the work. The Contractor shall pay this bill

within thirty (30) days of the date of receipt of the invoice or the cost of such work will be deducted from the amount due the Contractor. The Contractor shall allow the Electrical Maintenance Contractor to make reviews of the Existing Traffic Signal Installation that has been transferred to the Contractor for Maintenance.

7. Any proposed activity in the vicinity of a highway-rail grade crossing must adhere to the guidelines set forth in the current edition of the Manual on Uniform Traffic Control Devices (MUTCD) regarding work in temporary traffic control zones in the vicinity of highway-rail grade crossings which states that lane restrictions, flagging, or other operations shall not create conditions where vehicles can be queued across the railroad tracks. If the queuing of vehicles across the tracks cannot be avoided, a uniformed law enforcement officer or flagger shall be provided at the crossing to prevent vehicles from stopping on the tracks, even if automatic warning devices are in place.
8. Equipment included in this item that is damaged or not operating properly from any cause shall be replaced with new equipment meeting current District One traffic signal specifications and provided by the Contractor at no additional cost to the Contract and/or owner of the traffic signal system, all as approved by the Engineer. Final replacement of damaged equipment must meet the approval of the Engineer prior to or at the time of final inspection otherwise the traffic signal installation will not be accepted. Cable splices outside the controller cabinet shall not be allowed.
9. Automatic Traffic Enforcement equipment, such as Red Light Enforcement cameras, detectors, and peripheral equipment, damaged or not operating properly from any cause, shall be the responsibility of the municipality or the Automatic Traffic Enforcement Company per Permit agreement.
10. The Contractor shall be responsible to clear snow, ice, dirt, debris or other condition that obstructs visibility of any traffic signal display or access to traffic signal equipment.
11. The Contractor shall maintain the traffic signal in normal operation during short or long term loss of utility or battery back-up power at critical locations designated by the Engineer. Critical locations may include traffic signals interconnected to railroad warning devices, expressway ramps, intersection with an SRA route, critical corridors or other locations identified by the Engineer. Temporary power to the traffic signal must meet applicable NEC and OSHA guidelines and may include portable generators and/or replacement batteries. Temporary power to critical locations shall not be paid for separately but shall be included in the contract.
12. Temporary replacement of damaged or knockdown of a mast arm pole assembly shall require construction of a full or partial span wire signal installation or other method approved by the Engineer to assure signal heads are located overhead and over traveled pavement. Temporary replacement of mast arm mount signals with post mount signals will not be permitted.

Basis of Payment:

This work will be paid for at the contract unit price per each for MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION. Each intersection will be paid for separately. Maintenance of a standalone and or not connected flashing beacon shall be paid for at the contract unit price for MAINTENANCE OF EXISTING FLASHING BEACON INSTALLATION. Each flashing beacon will be paid for separately.

ELECTRIC CABLE

Effective: May 22, 2002

Revised: July 1, 2015

873.01TS

Delete “or stranded, and No. 12 or” from the last sentence of Article 1076.04 (a) of the Standard Specifications.

Add the following to the Article 1076.04(d) of the Standard Specifications:

Service cable may be single or multiple conductor cable.

TRAFFIC SIGNAL POST

Effective: May 22, 2002

Revised: July 01, 2015

875.01TS

Add the following to Article 1077.01 (c) of the Standard Specifications:

Washers for post bases shall be the same size or larger than the nut.

Revise the first sentence of Article 1077.01 (d) of the Standard Specifications to read:

All posts and bases shall be steel and hot dipped galvanized according to AASHTO M 111. If the Department approves painting, powder coating by the manufacturer will be required over the galvanization in accordance with 851.01TS TRAFFIC SIGNAL PAINTING Special Provisions.

CONCRETE FOUNDATIONS

Effective: May 22, 2002

Revised: July 01, 2015

878.01TS

Add the following to Article 878.03 of the Standard Specifications:

All anchor bolts shall be according to Article 1006.09, with all anchor bolts hot dipped galvanized a minimum of 12 in. (300 mm) at the threaded end.

Foundations used for Combination Mast Arm Poles shall provide an extra 2-1/2 inch (65 mm) raceway.

No foundation is to be poured until the Resident Engineer gives his/her approval as to the depth of the foundation.

Add the following to the first paragraph of Article 878.05 of the Standard Specifications:

The price shall include a concrete apron in front of the cabinet and UPS as shown in the plans or as directed by the engineer.

LIGHT EMITTING DIODE (LED) PEDESTRIAN SIGNAL HEAD

Effective: May 22, 2002

Revised: July 1, 2015

881.01TS

Add the following to the third paragraph of Article 881.03 of the Standard Specifications:

No mixing of different types of pedestrian traffic signals or displays will be permitted.

Add the following to Article 881.03 of the Standard Specifications:

(a) Pedestrian Countdown Signal Heads.

- (1) Pedestrian Countdown Signal Heads shall not be installed at signalized intersections where traffic signals and railroad warning devices are interconnected.

- (2) Pedestrian Countdown Signal Heads shall be 16 inch (406mm) x 18 inch (457mm), for single units with glossy yellow or black polycarbonate housings. All pedestrian head housings shall be the same color (yellow or black) at the intersection. For new signalized intersections and existing signalized intersections where all pedestrian heads are being replaced, the proposed head housings shall be black. Where only selected heads are being replaced, the proposed head housing color (yellow or black) shall match existing head housings. Connecting hardware and mounting brackets shall be polycarbonate (black). A corrosion resistant anti-seize lubricant shall be applied to all metallic mounting bracket joints, and shall be visible to the inspector at the signal turn-on.

- (3) Each pedestrian signal LED module shall be fully MUTCD compliant and shall consist of double overlay message combining full LED symbols of an Upraised Hand and a Walking Person. "Egg Crate" type sun shields are not permitted. Numerals shall measure 9 inches (229mm) in height and easily identified from a distance of 120 feet (36.6m).

Materials.

Add the following to Article 1078.02 of the Standard Specifications:

General.

1. The module shall operate in one mode: Clearance Cycle Countdown Mode Only. The countdown module shall display actual controller programmed clearance cycle and shall start counting when the flashing clearance signal turns on and shall countdown to "0" and turn off when the steady Upraised Hand (symbolizing Don't Walk) signal turns on. Module shall not have user accessible switches or controls for modification of cycle.

2. At power on, the module shall enter a single automatic learning cycle. During the automatic learning cycle, the countdown display shall remain dark.
3. The module shall re-program itself if it detects any increase or decrease of Pedestrian Timing. The counting unit will go blank once a change is detected and then take one complete pedestrian cycle (with no counter during this cycle) to adjust its buffer timer.
4. If the controller preempts during the Walking Person (symbolizing Walk), the countdown will follow the controller's directions and will adjust from Walking Person to flashing Upraised Hand. It will start to count down during the flashing Upraised Hand.
5. If the controller preempts during the flashing Upraised Hand, the countdown will continue to count down without interruption.
6. The next cycle, following the preemption event, shall use the correct, initially programmed values.
7. If the controller output displays Upraised Hand steady condition and the unit has not arrived to zero or if both the Upraised Hand and Walking Person are dark for some reason, the unit suspends any timing and the digits will go dark.
8. The digits will go dark for one pedestrian cycle after loss of power of more than 1.5 seconds.
9. The countdown numerals shall be two (2) "7 segment" digits forming the time display utilizing two rows of LEDs.
10. The LED module shall meet the requirements of the Institute of Transportation Engineers (ITE) LED purchase specification, "Pedestrian Traffic Control Signal Indications - Part 2: LED Pedestrian Traffic Signal Modules," or applicable successor ITE specifications, except as modified herein.
11. The LED modules shall provide constant light output under power. Modules with dimming capabilities shall have the option disabled or set on a non-dimming operation.
12. In the event of a power outage, light output from the LED modules shall cease instantaneously.
13. The LEDs utilized in the modules shall be AlInGaP technology for Portland Orange (Countdown Numerals and Upraised Hand) and GaN technology for Lunar White (Walking Person) indications.
14. The individual LEDs shall be wired such that a catastrophic loss or the failure of one or more LED will not result in the loss of the entire module.

Basis of Payment:

Add the following to the first paragraph of Article 881.04 of the Standard Specifications:

The price shall include furnishing the equipment described above, all mounting hardware and installing them in satisfactory operating condition.

Add the following to Article 881.04 of the Standard Specifications:

If the work consists of retrofitting an existing polycarbonate pedestrian signal head and pedestrian countdown signal head with light emitting diodes (LEDs), it will be paid for as a PEDESTRIAN SIGNAL HEAD, LED, RETROFIT, of the type specified, and of the particular kind of material, when specified. Price shall be payment in full for furnishing the equipment described above including LED modules, all mounting hardware, and installing them in satisfactory operating condition.

PEDESTRIAN PUSH-BUTTON

Effective: May 22, 2002

Revised: July 1, 2015

888.01TS

Description.

Revise Article 888.01 of the Standard Specifications to read:

This work shall consist of furnishing and installing a latching (single call) or non-latching (dual call) pedestrian push-button and a regulatory pedestrian instruction sign according to MUTCD, sign series R10-3e 9" x 15" sign with arrow(s) for a count-down pedestrian signal. The pedestrian station sign size without count-down pedestrian signals shall accommodate a MUTCD sign series R10-3b or R10-3d 9" x 12" sign with arrow(s).

Installation.

Add the following to Article 888.03 of the Standard Specifications:

A mounting bracket and/or extension shall be used to assure proper orientation when two pedestrian push buttons are required for one post. The price of the bracket and/or extension shall be included in the cost of the pedestrian push button. The contractor is not allowed to install a push-button assembly with the sign below the push-button in order to meet mounting requirements.

Materials.

Revise Article 1074.02(a) of the Standard Specifications to read:

The pedestrian push-button housing shall be constructed of aluminum alloy according to ASTM B 308 6061-T6 and powder coated yellow, unless otherwise noted on the plans. The housing shall be furnished with suitable mounting hardware.

Revise Article 1074.02(e) of the Standard Specifications to read:

Stations shall be designed to be mounted to a post, mast arm pole or wood pole. The station shall be aluminum and shall accept a 3 inch (75mm) round push-button assembly and a regulatory pedestrian instruction sign according to MUTCD, sign series R10-3e 9" x 15" sign with arrow(s) for a count-down pedestrian signal. The pedestrian station size without count-down pedestrian signals shall accommodate a MUTCD sign series R10-3b or R10-3d 9" x 12" sign with arrow(s).

Add the following to Article 1074.02 of the Standard Specifications:

- (f) Location. Pedestrian push-buttons and stations shall be mounted to a post, mast arm pole or wood pole as shown on the plans and shall be fully ADA accessible from a paved or concrete surface. See the District's Detail sheets for orientation and mounting details.

Basis of Payment.

Revise Article 888.04 of the Standard Specifications to read:

This work will be paid for at the contract unit price per each for PEDESTRIAN PUSH-BUTTON or PEDESTRIAN PUSH-BUTTON, NON-LATCHING.

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

Effective: May 22, 2002

Revised: July 1, 2015

895.02TS

Add the following to Article 895.05 of the Standard Specifications:

The traffic signal equipment which is to be removed and is to become the property of the Contractor shall be disposed of outside the right-of-way at the Contractor's expense.

All equipment to be returned to the State shall be delivered by the Contractor to the State's Traffic Signal Maintenance Contractor's main facility. The Contractor shall contact the State's Electrical Maintenance Contractor to schedule an appointment to deliver the equipment. No equipment will be accepted without a prior appointment. All equipment shall be delivered within 30 days of removing it from the traffic signal installation. The Contractor shall provide one hard copy and one electronic file of a list of equipment that is to remain the property of the State, including model and serial numbers, where applicable. The Contractor shall also provide a copy of the Contract plan or special provision showing the quantities and type of equipment. Controllers and peripheral equipment from the same location shall be boxed together (equipment from different locations may not be mixed) and all boxes and controller cabinets shall be clearly marked or labeled with the location from which they were removed. If equipment is not returned according to these requirements, it will be rejected by the State's Electrical Maintenance Contractor. The Contractor shall be responsible for the condition of the traffic signal equipment from the time Contractor takes maintenance of the signal installation until the acceptance of a receipt drawn by the State's Electrical Maintenance Contractor indicating the items have been returned in good condition.

The Contractor shall safely store and arrange for pick up or delivery of all equipment to be returned to agencies other than the State. The Contractor shall package the equipment and provide all necessary documentation as stated above.

Traffic signal equipment which is lost or not returned to the Department for any reason shall be replaced with new equipment meeting the requirements of these Specifications at no cost to the contract.

REMOVE EXISTING CONCRETE FOUNDATION

Description: This work shall consist of removal and disposal of existing concrete foundation.

CONSTRUCTION REQUIREMENTS:

Indicated foundations shall be removed with all removed materials disposed of according to Article 895.05.

Method of Measurement: This work will be measured in units of each.

Basis of Payment: This work will be paid at the contract unit price per each for REMOVE EXISTING CONCRETE FOUNDATION.

IDOT TRAINING PROGRAM GRADUATE ON-THE-JOB TRAINING SPECIAL PROVISION (TPG)

Effective: August 1, 2012

Revised: February 1, 2014

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

It is the policy of IDOT to fund IDOT pre-apprenticeship training programs throughout Illinois to provide training and skill-improvement opportunities to assure the increased participation of minority groups, disadvantaged persons and women in all phases of the highway construction industry. The intent of this IDOT Training Program Graduate (TPG) Special Provision is to place certified graduates of these IDOT funded pre-apprentice training programs on IDOT project sites when feasible, and provide the graduates with meaningful on-the-job training intended to lead to journey-level employment. IDOT and its sub-recipients, in carrying out the responsibilities of a state contract, shall determine which construction contracts shall include "Training Program Graduate Special Provisions." To benefit from the incentives to encourage the participation in the additional on-the-job training under this Training Program Graduate Special Provision, the Contractor shall make every reasonable effort to employ certified graduates of IDOT funded Pre-apprenticeship Training Programs to the extent such persons are available within a reasonable recruitment area.

Participation pursuant to IDOT's requirements by the Contractor or subcontractor in this Training Program Graduate (TPG) Special Provision entitles the Contractor or subcontractor to be reimbursed at \$15.00 per hour for training given a certified TPG on this contract. As approved by the Department, reimbursement will be made for training persons as specified herein. This reimbursement will be made even though the Contractor or subcontractor may receive additional training program funds from other sources for other trainees, provided such other source does not specifically prohibit the Contractor or subcontractor from receiving other reimbursement. For purposes of this Special Provision the Contractor is not relieved of requirements under applicable federal law, the Illinois Prevailing Wage Act, and is not eligible for other training fund reimbursements in addition to the Training Program Graduate (TPG) Special Provision reimbursement.

No payment shall be made to the Contractor if the Contractor or subcontractor fails to provide the required training. It is normally expected that a TPG will begin training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project through completion of the contract, so long as training opportunities exist in his work classification or until he has completed his training program. Should the TPG's employment end in advance of the completion of the contract, the Contractor shall promptly notify the designated IDOT staff member under this Special Provision that the TPG's involvement in the contract has ended and supply a written report of the reason for the end of the involvement, the hours completed by the TPG under the Contract and the number of hours for which the incentive payment provided under this Special Provision will be or has been claimed for the TPG.

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

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

BASIS OF PAYMENT: This work will be paid for at the contract unit price of \$15.00 per hour for certified TRAINEES TRAINING PROGRAM GRADUATE. The estimated total number of hours, unit price and total price have been included in the schedule of prices.

The Contractor shall provide training opportunities aimed at developing full journeyworker in the type of trade or job classification involved. The initial number of TPGs for which the incentive is available under this contract is 1 . During the course of performance of the Contract the Contractor may seek approval from the Department for additional incentive eligible TPGs. In the event the Contractor subcontracts a portion of the contract work, it shall determine how many, if any, of the TPGs are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this Special Provision. The Contractor shall also insure that this Training Program Graduate Special Provision is made applicable to such subcontract if the TPGs are to be trained by a subcontractor and that the incentive payment is passed on to each subcontractor.

For the Contractor to meet the obligations for participation in this TPG incentive program under this Special Provision, the Department has contracted with several entities to provide screening, tutoring and pre-training to individuals interested in working in the applicable construction classification and has certified those students who have successfully completed the program and are eligible to be TPGs. A designated IDOT staff member, the Director of the Office of Business and Workforce Diversity (OBWD), will be responsible for providing assistance and referrals to the Contractor for the applicable TPGs. For this contract, the Director of OBWD is designated as the responsible IDOT staff member to provide the assistance and referral services related to the placement for this Special Provision. For purposes of this Contract, contacting the Director of OBWD and interviewing each candidate he/she recommends constitutes reasonable recruitment.

Prior to commencing construction, the Contractor shall submit to the Department for approval the TPGs to be trained in each selected classification. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. No employee shall be employed as a TPG in any classification in which he/she has successfully completed a training course leading to journeyman status or in which he/she has been employed as a journeyman. Notwithstanding the on-the-job training purpose of this TPG Special Provision, some offsite training is permissible as long as the offsite training is an integral part of the work of the contract and does not comprise a significant part of the overall training.

Training and upgrading of TPGs of IDOT pre-apprentice training programs is intended to move said TPGs toward journeyman status and is the primary objective of this Training Program Graduate Special Provision. Accordingly, the Contractor shall make every effort to enroll TPGs by recruitment through the IDOT funded TPG programs to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that it has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance and entitled to the Training Program Graduate Special Provision \$15.00 an hour incentive.

The Contractor or subcontractor shall provide each TPG with a certificate showing the type and length of training satisfactorily completed.

The pedestrian bridge installation on this project is crossing the Class I railroad, commonly known as, and referred to hereafter as, Metra.

“The Commuter Rail Division of the Regional Transportation Authority, a division of an Illinois municipal corporation, and its affiliated separate public corporation known as the Northeast Illinois Regional Commuter Railroad Corporation, both operating under the service mark Metra, as now exists or may hereafter be constituted or acquired, and the Regional Transportation Authority, an Illinois municipal corporation.”

Railroad Right of Entry

This section includes the Metra Special Provisions and requirements for working near, over, or under the railroad.

In addition to railroad protective liability insurance, any contractors working on Metra right of way will need to apply for a right-of-entry permit and pay the fee. The prime contractor would apply for this permit and all subcontractors and subconsultants will be covered under the prime's policy and permit. This is only required in instances where the contract will require work on the Metra right of way.

It is the contractor's sole responsibility to coordinate with Metra railroad (The Commuter Rail Division of the Regional Transportation Authority) whenever construction activity is within 25 feet of the railroad ROW. The contractor shall retain flagmen employed and designated by the Metra railroad to monitor on-coming train traffic, and advise contractor personnel when activity on or near the railroad right-of-way may proceed. This item will be paid according to article 107.12 and will be reimbursed according to article 109.05. The Contractor must contact Milwaukee District director of engineering, at (312) 322-4101 at least 72 hours prior to work start up to arrange for railroad flagging, protection etc.

There is a window from 2:00 AM until 5:00 AM where there are no scheduled passenger trains, and CP Rail run freight trains 24 hours a day 7 days a week. Anything that will require both Main Tracks to be shut down at the same time shall be coordinated through Metra.

Method of Measurement

There will be no separate measurement or payment for fulfilling the requirements described herein, and all costs, direct or indirect, shall be included in the prices for other items.



Application for Right of Entry

(Attach any pertinent Plans or approval correspondence when returning this Application)

Date: Company Name:
(Legal name of party to occupy Metra Property)

Company Address:

Contact Person/Title:

Telephone: E-Mail:

Metra District:

Milwaukee West
Milwaukee North
Rock Island
South West Service
Electric

Location:
(Distance from nearest street or railroad mile post)

Purpose: (This must be detailed & complete; if applicable, attach engineering plans & details to support)
Note: Describe only the portion of the project related to this request to enter Metra property

Does work on Metra property include:

- Soil Borings – to what depth:
- Excavation – to what depth:
- Construction
- Demolition: Describe
- Bridge Inspection
- Bridge Repair
- Other (explain)

Will equipment will be used on Metra property?

(If yes, explain)

Does access to property require crossing Metra tracks?

(If yes, how/where) At public crossing

Other
(Explain)

Will equipment overhang Metra track or property at any time?

(If yes, explain)

Expected length of time needed on Metra property:

List all sub-contractors, if applicable, needing access to Metra property in conjunction with this project:

Submit Right of Entry Application to:
Mr. Donald Whistler
Right of Way Administrator
Real Estate & Contract Management
547 W. Jackson Boulevard
Chicago, IL 60661-5717
Office: (312) 322-8016
E-Mail: dwhistler@metrarr.com

January 28, 2016

Mr. Jeff Sloat
Lake County Forest Preserves
1899 W. Winchester Road
Libertyville, IL 60048

Re: Completed Pedestrian & Bike Path Easement Agreement N01853/North of Highway 60 (Kennedy Road) in Lake Forest

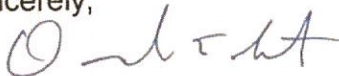
Mr. Sloat:

Attached for the records of the Lake County Forest Preserve District is a fully executed original of Pedestrian & Bike Path Easement Agreement N01853. This agreement allows for the installation of a grade separated pedestrian and bike path bridge structure spanning Metra controlled right of way and tracks.

Prior to any construction allowed on Metra property, your contractor will need to submit a right of entry agreement to be processed and approved by Metra. The contractor will also need to contact Tim Pitzen at Metra engineering (312-322-6924) before work begins in order to discuss construction activities, methods as well as flagging requirements.

If you have any questions, please contact me at (312)-322-8016.

Sincerely,



Donald Whistler, Right of Way Administrator
Real Estate & Contract Management

Enclosure

**PEDESTRIAN AND BIKE
PATH EASEMENT**

After recording return to:

Commuter Rail Division
547 West Jackson Boulevard
Chicago, Illinois 60661
Attn: Director, Real Estate and
Contract Management
Phone: (312) 322-8006
Fax: (312) 322-7098

PIN: (portion of) 12-31-300-006

(Above Space for Recorder's Use Only)

PEDESTRIAN AND BIKE PATH EASEMENT AGREEMENT

THIS AGREEMENT is entered into by and between the Commuter Rail Division of the Regional Transportation Authority, a division of an Illinois municipal corporation ("**Metra**"), and the Lake County Forest Preserve District, with offices located at 1899 West Winchester Road, Libertyville, Illinois 60048 ("**Grantee**"). Metra and Grantee are hereinafter sometimes individually referred to as a "Party" and jointly referred to as the "Parties."

NOW, THEREFORE, for and in consideration of the covenants and agreements hereinafter stated, Metra hereby grants to Grantee an easement ("**Easement**") to construct and install along and over that portion of Metra's owned or controlled right of way and tracks located near MP 30.57, just north of Highway 60 (Kennedy Road), on Metra's Milwaukee North Line identified as a portion of PIN No. 12-31-300-006, delineated and legally described on the map attached to and made a part of this Agreement as **Exhibit "A"** ("**Premises**"), a grade separated pedestrian and bike path bridge structure, spanning the Metra owned or controlled right of way and tracks ("**Pathway**"); and thereafter to maintain, repair, replace, and operate the same during the continuance of this Easement.

This Easement is granted upon the following express conditions, terms and covenants to be observed, kept, and performed by Grantee:

1. As one of the considerations for this Easement, Grantee agrees to pay to Metra the sum of \$1,500 for the cost of preparing this Easement, payable in advance.

2. Said Pathway shall be constructed in accordance with the specifications and notes set forth on page 2 of Exhibit "A." The construction and installation of said Pathway, including but not limited to the grading of the Premises and the time and manner of doing all of the work or of any maintenance, repairs, or replacements upon the Premises, shall be as directed by Metra's authorized representatives. Grantee shall construct the Pathway in a manner so as not to interfere with the existing drainage of the Premises or any other adjacent Metra property ("Property") and shall clean and extend existing highway culverts as required by Metra or any other governmental entity having jurisdiction over the Premises or Property to insure proper drainage of the Premises and the Property. Prior to commencement of the public's use of the Pathway, Grantee shall construct a fence sufficient to prevent the public from entering onto the Property and separating the Pathway from any track areas on Metra's right of way and shall also provide gates, to be locked with Metra controlled locks, at locations required by Metra to allow Metra access to its facilities on the Premises or the Property. Additionally, if at any future time Metra determines that additional fencing or gates, with Metra controlled locks, are required, Grantee shall provide such fencing and/or gates at the locations specified by Metra. Grantee agrees to construct and install and at all times maintain, repair, replace, and operate the Pathway so as to protect any and all improvements now or hereinafter located on the Premises or the Property. All of said work shall be done at Grantee's sole cost and expense, in a good and workmanlike manner, and in accordance with the requirements of the plans, specifications, and profiles to be prepared by Grantee and submitted for approval to Metra's authorized representative(s), and until such approval is given, said work shall not be commenced by Grantee.

3. Upon completion of the initial construction and installation of the Pathway, and upon completion of any subsequent maintenance, repair, replacement, or operation of the Pathway following its construction and installation, Grantee, at its own cost and expense, shall remove any debris and restore, or cause to be restored to the reasonable satisfaction of Metra, any affected portion of Metra's property adjacent to the Premises as nearly as may be, to the same or better condition than that which existed immediately prior to commencement of such activities by Grantee. In the event Grantee fails to cause the Property to be restored to the reasonable satisfaction of Metra as provided for herein, Metra shall have the right to restore the Property and Grantee shall reimburse Metra for all costs and expenses incurred by Metra in its performance of the obligations imposed upon Grantee hereunder.

4. Metra shall permit Grantee reasonable right of access to the Premises for the purpose of constructing, installing, maintaining, repairing, replacing, and operating said Pathway.

5. Any rights to the Premises not specifically granted to Grantee herein are reserved to Metra and its successors and/or assigns. The Pathway shall be constructed, installed, maintained, repaired, replaced and operated in a manner so as not to interfere with efficient rail operations or any other business operations or activities being conducted by Metra or Metra's tenants or permittees on the Premises and so as not to prevent or unreasonably interfere with use and enjoyment of the Premises by Metra, its employees, agents or permittees for the purpose(s) to which the Premises is now, or may hereafter be, committed by Metra. Metra shall have the right to retain the existing

tracks and other improvements at the location of this Pathway on or adjacent to the Premises and also shall have the right at any and all times in the future to construct, maintain and operate over, under, across or parallel to said Pathway such additional track or tracks as it may from time to time elect. Nothing shall be done or caused to be done by Grantee that will in any manner impair the usefulness or safety of the tracks and other improvements of Metra, or such track or tracks and other improvements as Metra may in the future construct or cause to be constructed over, under, across, or parallel to said Pathway. This Easement is expressly subject to the rights of third parties to maintain utility and other improvements permitted by Metra on the Premises and the Property. Metra reserves the exclusive right to grant future easements over, under, across or parallel to the said Pathway.

6. Grantee agrees that it will bear and pay the entire cost of constructing; installing, maintaining, repairing, replacing and operating said Pathway.

7. Prior to entering upon the Premises, Grantee agrees to furnish insurance in form and in such amounts as required by Metra's Risk Management Department, (312)-322-7093, and shall deliver to Metra's Risk Management Department certificates of insurance or self-insurance and such other documentation acceptable to Metra's Risk Management Department evidencing the acquisition of the required insurance as delineated on **Exhibit "B"** attached to and made a part of this Agreement. The insurance or self-insurance hereinabove specified shall be in full force and effect through all periods of construction, installation, maintenance, repair, replacement, and operation of said Pathway and must show on the insurance policy or the certificate of insurance that Metra will be properly notified in writing at least thirty (30) days prior to any modification or cancellation of such policy. During the Term of this Agreement, Metra may make commercially reasonable increases in the amount of insurance required.

8. Metra shall permit Grantee reasonable right of entry to the Premises for the purpose of routine maintenance and operation of said Pathway. Grantee's contractor(s) will be required to enter into a Right of Entry Agreement with Metra prior to any access to the Premises for the purpose(s) of installation, construction, reconstruction, repair, replacement, or removal of said Pathway. An application for a Right of Entry Agreement can be found at Metra's website: (http://metrarail.com/metra/en/home/metra_business/real_estate_leasing.html) or by contacting Metra's Right of Way Administrator at 312-322-8016. Grantee shall contact Metra's Right of Way Administrator prior to performing any construction, revision, or action to the Pathway or on the Premises or Property beyond that which would be reasonably considered routine maintenance and/or operation of the Pathway. Said construction, revision, or action may require railroad flagging protection and/or revised insurance requirements depending on the scope of the work to be performed and the proximity of said work to the live tracks.

9. Grantee shall not place, keep, store, or otherwise permit to be placed, kept or stored on the Premises or the Property any equipment or materials except during such time as Grantee's employees, agents or contractors are physically present and conducting activities permitted under the terms of this Easement. Grantee agrees that it shall not operate or cause to be operated any motorized vehicle of any kind on the Premises, on any track or on the Property without prior authorization from Metra's authorized representative; provided, however, that Grantee shall not be prohibited from operating Grantee's vehicles and equipment on any public crossing of Metra's tracks

and rights of way. If deemed necessary by Metra, a flagman will be provided by Metra, the cost of such services to be paid by Grantee. The cost per flagman is currently estimated to be \$700 per day and \$1050 per night.

10. Grantee agrees that it will, immediately upon receipt of a statement showing the amount thereof, pay all costs of any and all work performed upon the right of way and tracks of Metra which shall be made necessary by the construction, installation, maintenance, repair, replacement, or operation thereon of said Pathway.

11. Grantee shall give to Metra reasonable advance written notice of the time when Grantee will commence any construction, installation, maintenance, replacement, or repair of said Pathway in order that Metra may, if it so desires, have its representative(s) present for the purpose of directing said work so that the same may be done in a manner satisfactory to Metra.

12. Grantee agrees that before and during the construction, installation, repair, replacement, or operation of said Pathway, or at any other time, Metra shall have the right to provide such safe and temporary structures as it may deem necessary for safely caring for and preserving its tracks, buildings, or other improvements and Grantee agrees to pay to Metra the entire cost of putting in or removing such temporary structures and of restoring the Premises and Property as near as may be to the same condition that existed before the commencement of said work.

13. Grantee agrees that should the construction, installation, maintenance, repair, replacement, operation, or presence of the Pathway necessitate any change or alteration in the location or arrangement of any improvements located on the Premises or the Property, the cost of such change or alteration shall be paid by Grantee within thirty (30) days of presentation of a bill by Metra. Grantee further agrees that if, at any time, Metra shall desire to change the location or grade of its track or tracks or shall desire to use or allow third party railroads to use its right of way at a point of crossing or at any point along a parallel course with the Pathway for any purpose whatsoever, including but not limited to track installations by Metra or third parties, Grantee, at its own cost and expense, shall alter, relocate or make all changes to the Pathway required by Metra. If Grantee shall fail, neglect, or refuse to relocate or make such change(s) to the Pathway for a period of ninety (90) days after the receipt of written notice from Metra, then Metra may make or cause to be made such relocation or change(s) at the expense of Grantee.

14. Grantee shall at all times construct, install, maintain, repair, replace, and operate said Pathway in a secure, safe, and sanitary condition and in accordance with all applicable laws, ordinances, rules, and regulations. Grantee shall take all reasonable safety precautions to adequately secure the Premises, warn of risks and ensure the safety of the public during periods of construction, installation, maintenance, repair, replacement, and operation of the Pathway. If the manner of constructing, installing, maintaining, repairing, replacing, or operating said Pathway shall at any time be in violation of any applicable law, rule, regulation, or ordinance, then Grantee, at no cost or expense to Metra and upon receipt of appropriate notice from a governmental agency having enforcement jurisdiction over the Premises, shall make such changes or repairs as shall be necessary. Failure or refusal of Grantee to make the required changes or repairs within the time prescribed by said agency shall terminate this Easement, provided that it shall not terminate as long as Grantee, in

good faith and by pursuit of appropriate legal or equitable remedies, enjoins, defends against, appeals from, or pursues other lawful measures to avoid the enforcement of said laws, ordinances, rules, or regulations.

15. To the fullest extent permitted by law, the Grantee hereby assumes and agrees to release, acquit and waive any rights which Grantee may have against and forever discharge Metra, the Regional Transportation Authority ("RTA") and the Northeast Illinois Regional Commuter Railroad Corporation ("NIRCRC") their respective directors, administrators, officers, employees, agents, successors, assigns and all other persons, firms and corporations acting on their behalf or with their authority, from and against any and all claims, demands or liabilities imposed upon them by law or otherwise of every kind, nature and character on account of personal injuries, including death at any time resulting therefrom, and on account of damage to or destruction of property arising out of or in any way relating to or occurring in connection with the Permitted Activities or rights granted under the terms and provisions of this Agreement or which may occur to or be incurred by the Grantee, its employees, officers, agents and all other persons acting on the Grantee's behalf while on the Premises or Property, or arising from the condition of the Premises or the Property during the term of this Agreement, whether or not such injuries, liabilities, losses, damages, costs, payments or expenses are caused by the acts, omissions, negligence, or willful misconduct of Metra, the RTA, or the NIRCRC. Notwithstanding anything in this Agreement to the contrary, the releases and waivers contained in this paragraph shall survive termination of this Agreement.

16. To the fullest extent permitted by law, the Grantee agrees to indemnify, defend and hold harmless Metra, the RTA and the NIRCRC, their respective directors, administrators, officers, agents, employees, successors, assigns and all other persons, firms and corporations acting on their behalf or with their authority, from and against any and all injuries, liabilities, losses, damages, costs, payments and expenses of every kind and nature (including, without limitation, court costs and attorneys' fees) for claims, demands, actions, suits, proceedings, judgments, settlements arising out of or in any way relating to or occurring in connection with: (i) the activities permitted under the terms and provisions of this Agreement; (ii) the condition of the Premises; (iii) the failure to investigate claims; or (iv) which may occur to or be incurred, by the Grantee, its employees, officers, agents, and all other persons acting on its behalf while on the Premises, whether or not such injuries, liabilities, losses, damages, costs, payments or expenses are caused by the acts, omissions, negligence, or willful misconduct of Metra, the RTA or the NIRCRC. Metra agrees to notify the Grantee in writing within a reasonable time of any claim of which it becomes aware which may fall within this indemnity provision. The Grantee further agrees to defend Metra, the RTA, the NIRCRC, their respective directors, administrators, officers, agents and employees against any claims, suits, actions or proceedings filed against any of them with respect to the subject matter of this indemnity provision provided, however, that Metra, the RTA and the NIRCRC, may elect to participate in the defense thereof at their own expense or may, at their own expense, employ attorneys of their own selection to appear and defend the same on behalf of Metra, the RTA, the NIRCRC, and their respective directors, administrators, officers, agents or employees. The Grantee shall not enter into any compromise or settlement of any such claims, suits, actions or proceedings without the consent of Metra, the RTA and the NIRCRC, which consent shall not be unreasonably

withheld. Notwithstanding anything to the contrary contained in this Agreement, the indemnities contained in this paragraph shall survive termination of this Agreement.

17. This Easement may be terminated by Metra upon no less than one (1) years written notice to Grantee if the Premises, or any portion thereof, is needed for any Metra or railroad purposes as determined by Metra in its sole discretion or Grantee ceases to operate or maintain the Pathway or violates any of the terms, conditions, or provisions set forth in this Easement. In case of termination, Grantee shall remove from the Premises said Pathway and shall restore said Premises to the same or better condition than that which existed prior to the construction and installation of said Pathway; or upon failure, neglect or refusal of Grantee to do so, Metra may make or cause to be made such removal and restoration, and the total cost hereof shall be paid by Grantee; or, if Metra shall so elect, it may treat the said Pathway as abandoned by Grantee and may make such disposition thereof as it may see fit.

18. This Easement and all of the terms, conditions, rights, and obligations herein contained shall inure to and be binding upon the Parties, their respective legal representatives, lessees, permittees, successors, and/or assigns whether hereinabove so stated or not; but it is distinctly agreed that Grantee shall not assign its rights under this Easement without first having received the prior written consent of Metra. Metra acknowledges that, pursuant to a grant agreement between Grantee and the Illinois Department of Transportation ("IDOT"), the Grantee intends for the Easement to be used by IDOT and/or contractors and consultants engaged by Grantee or IDOT to perform the work described in this Agreement and that such use is permitted and not prohibited by this Section. Grantee acknowledges that such use by IDOT and/or its contractors or consultants does not limit or waive its obligations under this Agreement.

19. All payments required to be made by Grantee to Metra under the terms, conditions, or provisions of this Easement shall be made within sixty (60) days of Grantee's receipt of any demand or invoice from Metra evidencing the amount of the indebtedness due. Payments not made within said sixty (60) day period shall accrue interest at a rate of one and one half percent (1 1/2%) per month or the highest amount permitted by Illinois law, whichever is less, from the date payment is due until paid.

20. All notices, demands, and elections required or permitted to be given or made by either Party upon the other under the terms of this Easement or any statute shall be in writing. Such communications shall be deemed to have been sufficiently served if sent by certified or registered mail, return receipt requested, with proper postage prepaid, facsimile transmission, or hand delivered to the respective addresses shown below or to such other party or address as either Party may from time to time furnish to the other in writing. Such notices, demands, elections, and other instruments shall be considered delivered to recipient on the second business day after deposit in the U.S. Mail, on the day of successful transmission if sent by facsimile transmission or on the day of delivery if hand delivered.

- (a) Notices to Metra shall be sent to:

Commuter Rail Division
547 W. Jackson Boulevard
Chicago, Illinois 60661
Attn: Director, Real Estate & Contract Management
Phone: (312) 322-8006
Fax: (312) 322-7098

- (b) Notices to Grantee shall be sent to:

Lake County Forest Preserve District
1899 West Winchester Road
Libertyville, Illinois 60048
Attn: Executive Director
Phone: 847-968-3338

21. This Agreement shall be governed by the internal laws of the State of Illinois. If any provision of this Agreement, or any paragraph, sentence, clause, phrase, or word or the application thereof is held invalid, the remainder of this Agreement shall be construed as if such invalid part were never included and this Agreement shall be and remain valid and enforceable to the fullest extent permitted by law provided that the Agreement, in its entirety as so reconstituted, does not represent a material change to the rights or obligations of either of the Parties. No waiver of any obligation or default of Grantee shall be implied from omission by Metra to take any action on account of such obligation or default and no express waiver shall affect any obligation or default other than the obligation or default specified in the express waiver and then only for the time and to the extent therein stated. Whenever the context requires or permits, the singular shall include the plural, the plural shall include the singular, and the masculine, feminine, and neuter shall be freely interchangeable. In the event the time for performance hereunder falls on a Saturday, Sunday, or holiday, the actual time for performance shall be the next business day. This Easement constitutes the entire agreement between the Parties with respect to the subject matter hereof.

IN WITNESS WHEREOF, the Parties hereto have duly executed this Easement as of this 28 day of January, 2016.

LAKE COUNTY FOREST PRESERVE DISTRICT:

COMMUTER RAIL DIVISION OF THE REGIONAL TRANSPORTATION AUTHORITY:

By: Ann B. Maine

Name: ANN B. MAINE

Title: PRESIDENT

By: Donald A. Orseno

Donald A. Orseno
Executive Director/CEO

Exhibit A (p. 1)

**Exhibit A:
Easement Premises**

Legend

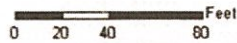
- Forest Preserve Boundary
- Metra Easement Area: 0.18 acres
- ▨ Metra ROW
- Easement Centerline Points
- Easement Centerline



Lake County Forest Preserve District
Land Preservation and Special Projects
1899 W Winchester Rd
Libertyville, Illinois 60048
847-968-3351

Courtesy Copy Only
Property boundaries indicated are provided
for general location purposes. Wetland
and flood limits shown are approximate and
should not be used to determine setbacks for
structure or as a basis for purchasing property

Prepared using information from
Lake County Department of Information
& Technology - GIS Mapping Division
18 North County Street
Waukegan, Illinois 60085-4357
847-377-2373



2014 Aerial Photo

Map Prepared 21 December 2015



CONTRACTOR SAFETY NOTES

Contractors to a railroad are governed by the provision of a Federal Regulation identified in the code of Federal Regulations Title 49 Part 214 (Roadway Worker Safety and Railroad workplace Safety Standards).

SAFETY INSTRUCTIONS

Safety of Roadway Workers (including contractors) is of paramount importance in the performance of work being performed for the railroad. No work will be performed when there is the potential of fouling a track (i.e. when an individual or equipment is within four (4) feet of a track or could be struck by a moving train or equipment) until the following items have been completed

- 1 A qualified railroad flagman (employee in charge) is present to provide necessary protection or authority.
- 2 Work (defined as inspection, testing, construction maintenance, or repair to a railroad facility) will begin only after the railroad's employee in charge has conducted a mandatory job briefing consisting of the following:
 - Name of flagman (employee in charge)
 - Name of lookout (if applicable)
 - Type of track authority (explain)
 - Track limits
 - Time limits
 - Protection if any, on adjacent tracks
 - Methods of notification for the approach of trains
 - Location to clear for trains
 - Procedures to arrange for on-track safety on other tracks, if necessary
 - Required personal protective equipment

Failure to comply with the provision established for clearing trains will result in the contractors employee(s) being banned from railroad property and/or subject to personal fines as levied by the Federal Railroad Administration

Follow-up job briefing will be conducted when:

The working conditions or procedures change
Other workers enter the working limits or;
Track authority is changed, extended, or about to be released.

If any of the above situations occur, work will cease until the follow-up job briefing is conducted

- 3 Contractors have the following responsibilities:

Work wear approved by Metra including

- Highly visible orange vest
- Steel toed safety shoes
- A.N.S.I. approved hard hat (289.1 standards)
- A.N.S.I. meets or exceeds 287.1 eyewear standards
- Hearing protection (when required)
- Respirator protection (when required)
- Fall protection (when required) as specified in FRA Regulations 49 CFR, Part 214- Railroad Workplace Safety Standards

- 4 Heavy equipment shall be equipped with audible back up warning devices
- 5 Contractors will keep the job site free from safety and health hazards
- 6 Contractors will post MSDS sheets in the construction trailer

Contractors will post these instructions in a conspicuous place in the construction trailer.

GENERAL NOTES

None of the contractor's men or equipment may work upon Metra's property without a qualified railroad flagman (employee in charge) present. Contractor may work only when authorized to do so by the flagman (employee in charge).

Metra has a very limited number of flagmen. If Metra can not furnish a flagman for a particular date, contractor will not be allowed to work on Metra's property

Copy of this drawing must be kept on the job site during all phases of construction

Contractor must contact Milwaukee District Director of Engineering, at (312) 322-4101 at least 72 hours prior to work start up to arrange for flagging protection etc.

Grantee must have railroad engineering department representative inspect work to determine if slow order protection is required and how long slow order will be in effect.

Metra Signal and Communications Departments must locate any buried cables and/or equipment before digging may begin on railroad property, and must provide protection for any such facilities during the actual construction.
Note J.U.L.I.E. and D.I.G.G.E.R. do not locate Metra / Railroad Utilities or Facilities.

Extreme care must be exercised when working under or in proximity of Metra's signal and communication pole lines and wires. Poles must be specially braced if necessary.

The pipeline shall be bored and jacked into place. When jacking operation is stopped, proper, sufficient bulk heads must be placed to preclude any danger of cave-ins. If necessary, due to soil and water conditions encountered, jacking operation must be continuous to ensure safety of railroad tracks

Any project requiring jacking pits, excavations and/or shoring must have the pit designs, shoring details and locations approved by Metra's Construction Department prior to the beginning of construction on railroad property.

All existing drainage and associated structures must be preserved or accommodated by the scope of this project's work.

No drainage condition shall be created or allowed to exist that is, or may be, adverse to Metra

Space between carrier and casing pipes shall be blown full of dry sand and ends of casing pipe sealed.

Grantee is responsible for a one year extraordinary track maintenance period. This is to cover reimbursable railroad costs expended for future track surfacing and alignment that may become necessary as a result of settlement of track.

Underground installation(s) shall be prominently marked where they enter and leave the railroad right of way

Minimum wall thicknesses shown are for pipes and conduits with protective coating and cathodic protection. Without this protection, wall thickness must be increased by 0.063 inches



EXHIBIT "A"

Page 2 of 2

EXHIBIT B
Insurance Requirements
MIDDLEFORK SAVANNA BRIDGE AND TRAIL EXTENSION

Commercial General Liability Insurance (ISO Form) of the type that normally provides coverage for general liability, or other liability insurance in a minimum amount of \$1,000,000 per occurrence and \$2,000,000 aggregated combines single limits for bodily injury or death to person or persons and property damage per occurrence.

The CGL policy shall include the following coverage limits:

Automobile Liability Insurance of the type that normally provides coverage for general liability insurance in a minimum amount of \$1,000,000 per occurrence, combines singles limit, for bodily injury or death to person or persons and property damage.

Worker's Compensation Insurance of the type that normally provides statutory coverage in a minimum amount of \$1,000,000.00.

Railroad Protective Liability Insurance The required amount is \$2M/\$6M.

The Commuter Rail Division of the Regional Transportation Authority, a division of an Illinois municipal corporation, and its affiliated separate public corporation known as the Northeast Regional Corporation, both operating under the service mark Metra, as now exists or may hereafter be constituted or acquired, and the Regional Transportation Authority, an Illinois municipal corporation shall be designated as Additional Insured on said policies.



A. Submittal Date: _____ Requesting Agency: DOH DOA Local Other: _____
 Previous survey request(s) submitted for this Yes No Addendum # _____
 Date(s) of prior submittal(s): _____

B. Route: _____ Marked: _____ County(ies): _____ District: _____
 Section: _____ Project No.: _____
 Job No.: P- _____ C- _____ Contract No.: _____

C. Borrow Location:
 Legal Description – indicate section, sub-section, township, range, and street address, if available:

 Limits staked in field: Yes No
 GPS/UTM Coordinates:
 NAD Zone _____ Easting _____ Northing _____
 Specify if Staked Corners Approximate Center

D. _____ yds³ (0.00 m³) borrow from this area. Borrow Area Size: _____ acres (0.00 ha)
 Current Land Use (Check each which applies.): Timber Row Crops Pasture Other (Describe):

E. Name of Contractor: _____
 Contact Person: _____ Phone: _____
 Address: _____
 Name of District/Local Resident Engineer: _____ Phone: _____
 E-mail: _____

F. Has the site been cleared by IDOT for cultural resources within the past 5 years?
 Yes No Unknown

G. This request is number _____ of _____ requests for this project.

(LEAVE THIS SPACE BLANK)

ATTACHMENTS REQUIRED:

1. Ground Level Color Photos
2. U.S.G.S. 7.5' Topo. Quad. Map
3. Aerial Photo
4. Landowner Agreement (See page 2)
5. Sketched Map with Landmarks



To whom it may concern:

I (we), said property owner(s), _____
(Name and Address of Property Owner)

do hereby grant to the Illinois State Archeological Survey (ISAS), or their agents acting on behalf of Illinois Department of Transportation, permission to survey and/or test excavate said property, located:

(Indicate location of property by county, section, sub-section, township, range)

(Signature of Property Owner)

(Name of Property Owner)

(Address of Property Owner)

I (we), _____ owner(s) of said property, do hereby grant
(Name)

permission for ISAS, or their agents, acting on behalf of the Illinois Department of Transportation, to remove artifacts and scientific samples from said property and agree that all artifacts and samples shall remain in public ownership, in the custody of ISAS at the University of Illinois, Urbana-Champaign.

(Signature of Property Owner)

(Name of Property Owner)

(Address of Property Owner)

(Phone number of Owner)



Route	<u>FAP 0335</u>	Marked Rte.	<u>IL Rte 60 / Academy Drive</u>
Section	<u>14-F300-BT</u>	Project No.	<u>61101-0124-786</u>
County	<u>Lake</u>	Contract No.	<u></u>

This plan has been prepared to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit No. ILR10 (Permit ILR10), issued by the Illinois Environmental Protection Agency (IEPA) for storm water discharges from construction site activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Jeff Sloat
 Print Name
Planning Manager
 Title
Lake County Forest Preserves
 Agency

Jeff Sloat
 Signature
10.5.15
 Date

I. Site Description:

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

This improvement is located in the Middfork Savanna Forest Preserve adjacent to Academy Drive and north of IL Route 60 in the City of Lake Forest.

B. Provide a description of the construction activity which is the subject of this plan:

This work consists of construction an 8' wide ped/bike path on the west side of Academy drive. A ped bridge will also be constructed over the Metra Railroad with the 8' trail continuing east to connect with the existing Middlefork Trail system. This will consist of HMA pavements, spot curb and gutter replacement, drainage structure adjustment or reconstruction, pavement marking, pedestrian signal modification, temporary traffic control, landscaping and erosion control.

C. Provide the estimated duration of this project:

The project should be completed within one construction season.

D. The total area of the construction site is estimated to be 4.1 acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is 4

E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:

0.33

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

See attached NRCS Soils Map

G. Provide an aerial extent of wetland acreage at the site:

There are wetlands located at various locations along the trail corridor. The total area of impacted wetland is 0.058 acres located at the northwest quadrant of the IL Rte 60 and Academy Drive.

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

The areas where culverts and path construction occurs are susceptible to erosion.

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

The soil disturbing activities include curb and gutter replacement, path construction and landscaping.

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

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

The drainage system along Academy Drive belongs to the City of Lake Forest. The system along the trail corridor belongs to the Lake County Forest Preserve.

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

The City of Lake Forest and the Lake County Forest Preserve

- M. The following is a list of receiving water(s) and the ultimate receiving water(s) for this site. The location of the receiving waters can be found on the erosion and sediment control plans:

Water from this site is received by the Middle Fork North Branch Chicago River

- N. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes, highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc.

Perimeter erosion barrier will be used in the vicinity of the wetlands, streams and erodable soil areas.

- O. The following sensitive environmental resources are associated with this project, and may have the potential to be impacted by the proposed development:

- Floodplain
- Wetland Riparian
- Threatened and Endangered Species
- Historic Preservation
- 303(d) Listed receiving waters for suspended solids, turbidity, or siltation
- Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or siltation
- Applicable Federal, Tribal, State or Local Programs
- Other

1. 303(d) Listed receiving waters (fill out this section if checked above):

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

b. Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event:

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

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

2. TMDL (fill out this section if checked above)

- a. The name(s) of the listed water body:
- b. Provide a description of the erosion and sediment control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL:
- c. If a specific numeric waste load allocation has been established that would apply to the project's discharges, provide a description of the necessary steps to meet that allocation:

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

- | | |
|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Soil Sediment | <input checked="" type="checkbox"/> Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) |
| <input checked="" type="checkbox"/> Concrete | <input checked="" type="checkbox"/> Antifreeze / Coolants |
| <input checked="" type="checkbox"/> Concrete Truck Waste | <input checked="" type="checkbox"/> Waste water from cleaning construction equipment |
| <input checked="" type="checkbox"/> Concrete Curing Compounds | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Solid Waste Debris | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Paints | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Solvents | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Fertilizers / Pesticides | <input type="checkbox"/> Other (specify) |

II. Controls:

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

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

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

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

- 1. Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
- 2. On areas where construction activity has temporarily ceased and will resume after fourteen (14) days, a temporary stabilization method can be used.

The following stabilization practices will be used for this project:

- | | |
|-----------------------------------------------------------------------|------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Preservation of Mature Vegetation | <input checked="" type="checkbox"/> Erosion Control Blanket / Mulching |
|-----------------------------------------------------------------------|------------------------------------------------------------------------|

- | | |
|-----------------------------------------------------------------------|------------------------------------------|
| <input type="checkbox"/> Vegetated Buffer Strips | <input type="checkbox"/> Sodding |
| <input checked="" type="checkbox"/> Protection of Trees | <input type="checkbox"/> Geotextiles |
| <input checked="" type="checkbox"/> Temporary Erosion Control Seeding | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Temporary Turf (Seeding, Class 7) | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Temporary Mulching | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Permanent Seeding | <input type="checkbox"/> Other (specify) |

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

Preservation of Mature Vegetation and Protection of Trees will be utilized, where applicable, as well as Tree Root Pruning and Tree Pruning in accordance with Section 201 of the IDOT "Standard Specifications for Road and Bridge Construction" shall be used to preserve existing trees.

Vegetated buffers are being provided as buffers to the wetland impacts.

Temporary Erosion Control blanket / mulching is being applied to Temporary erosion control seeding and permanent seeding to protect bare earth while construction is continuing elsewhere.

Geotextiles are being utilized with riprap downstream of culverts to control velocity and erosion.

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

The planted grass in the swale area will limit erosion control.

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

The following structural practices will be used for this project:

- | | |
|------------------------------------------------------------------|--------------------------------------------------|
| <input checked="" type="checkbox"/> Perimeter Erosion Barrier | <input type="checkbox"/> Rock Outlet Protection |
| <input checked="" type="checkbox"/> Temporary Ditch Check | <input type="checkbox"/> Riprap |
| <input checked="" type="checkbox"/> Storm Drain Inlet Protection | <input type="checkbox"/> Gabions |
| <input checked="" type="checkbox"/> Sediment Trap | <input type="checkbox"/> Slope Mattress |
| <input type="checkbox"/> Temporary Pipe Slope Drain | <input type="checkbox"/> Retaining Walls |
| <input type="checkbox"/> Temporary Sediment Basin | <input type="checkbox"/> Slope Walls |
| <input type="checkbox"/> Temporary Stream Crossing | <input type="checkbox"/> Concrete Revetment Mats |
| <input type="checkbox"/> Stabilized Construction Exits | <input type="checkbox"/> Level Spreaders |
| <input type="checkbox"/> Turf Reinforcement Mats | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Permanent Check Dams | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Permanent Sediment Basin | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Aggregate Ditch | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Paved Ditch | <input type="checkbox"/> Other (specify) |

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

Perimeter Erosion Barrier will be provided along the project construction limits to minimize potential erosion sediment runoff where indicated in the plans or as approved by the Engineer.

Temporary Ditch Checks will be placed in a ditch line or as approved by the Engineer to minimize erosion sediment runoff.

Storm Drain Inlet Protection will be placed at storm sewer structures per the Erosion Control Plans to reduce sediment infiltration and downstream erosion.

A Stone Retaining wall will be place to achieve specified slopes.

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

The vegetated Swale will remain to filter water drained from the site.

D. Treatment Chemicals

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

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

Flocculation logs and powder shall be used in sediment traps and in up-slope of any permanent ditch checks in order to increase the settling of sediment particles prior to any discharges into adjacent waterways.

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

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

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

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

Description of permanent storm water management controls:

Permanent buffer plantings shall be used where practical near discharge areas into waterways.

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

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

See Erosion Control Plans.

G. Contractor Required Submittals: Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342a.

1. The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:

- Approximate duration of the project, including each stage of the project
 - Rainy season, dry season, and winter shutdown dates
 - Temporary stabilization measures to be employed by contract phases
 - Mobilization timeframe
 - Mass clearing and grubbing/roadside clearing dates
 - Deployment of Erosion Control Practices
 - Deployment of Sediment Control Practices (including stabilized construction entrances/exits)
 - Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
 - Paving, saw-cutting, and any other pavement related operations
 - Major planned stockpiling operations
 - Timeframe for other significant long-term operations or activities that may plan non-storm water discharges such as dewatering, grinding, etc.
 - Permanent stabilization activities for each area of the project
2. The Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:
- Vehicle Entrances and Exits – Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
 - Material Delivery, Storage and Use – Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
 - Stockpile Management – Identify the location of both on-site and off-site stockpiles. Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
 - Waste Disposal – Discuss methods of waste disposal that will be used for this project.
 - Spill Prevention and Control – Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.)
 - Concrete Residuals and Washout Wastes – Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
 - Litter Management – Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
 - Vehicle and Equipment Fueling – Identify equipment fueling locations for this project and what BMPs will be used to ensure containment and spill prevention.
 - Vehicle and Equipment Cleaning and Maintenance – Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
 - Dewatering Activities – Identify the controls which will be used during dewatering operations to ensure sediments will not leave the construction site.
 - Polymer Flocculants and Treatment Chemicals – Identify the use and dosage of treatment chemicals and provide the Resident Engineer with Material Safety Data Sheets. Describe procedures on how the chemicals will be used and identify who will be responsible for the use and application of these chemicals. The selected individual must be trained on the established procedures.
 - Additional measures indicated in the plan.

III. Maintenance:

When requested by the Contractor, the Resident Engineer will provide general maintenance guides to the Contractor for the practices associated with this project. The following additional procedures will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. It will be the Contractor's responsibility to attain maintenance guidelines for any manufactured BMPs which are to be installed and maintained per manufacture's specifications.

IV. Inspections:

Qualified personnel shall inspect disturbed areas of the construction site which have not yet been finally stabilized, structural control measures, and locations where vehicles and equipment enter and exit the site using IDOT Storm Water Pollution Prevention Plan Erosion Control Inspection Report (BC 2259). Such inspections shall be conducted at least once every seven (7) calendar days and within twenty-four (24) hours of the end of a storm or by the end of the following business or work day that is 0.5 inch or greater or equivalent snowfall.

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

If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer shall notify the appropriate IEPA Field Operations Section office by email at: epa.swnoncomp@illinois.gov, telephone or fax within twenty-four (24) hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Non-Compliance" (ION) report for the identified violation within five (5) days of the incident. The Resident Engineer shall use forms provided by IEPA and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of non-compliance shall be signed by a responsible authority in accordance with Part VI. G of the Permit ILR10.

The Incidence of Non-Compliance shall be mailed to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn: Compliance Assurance Section
1021 North Grand East
Post Office Box 19276
Springfield, Illinois 62794-9276

Additional Inspections Required:

V. Failure to Comply:

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



Contractor Certification Statement

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

Route FAP 0335 Marked Rte. IL Rte 60 and Academy Drive
Section 14-F300-03-BT Project No. 61101-0124-786
County Lake Contract No.

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

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

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

- Contractor
Sub-Contractor

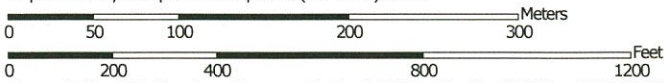
Print Name Signature
Title Date
Name of Firm Telephone
Street Address City/State/ZIP

Items which this Contractor/subcontractor will be responsible for as required in Section II.G. of SWPPP:

Custom Soil Resource Report
Soil Map



Map Scale: 1:4,270 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lake County, Illinois
 Survey Area Data: Version 8, Sep 13, 2014

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 13, 2012—Mar 28, 2012

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map-unit boundaries may be evident.

MAP LEGEND

- | | | | | | | | | | |
|--|------------------------|--|------------------------|--|---------------------|--|----------------------|--|----------------|
| | Area of Interest (AOI) | | Soil Map Unit Polygons | | Soil Map Unit Lines | | Soil Map Unit Points | | Spoil Area |
| | Soils | | Stony Spot | | Very Stony Spot | | Wet Spot | | Other |
| | Special Line Features | | Special Line Features | | Water Features | | Streams and Canals | | Transportation |
| | Blowout | | Borrow Pit | | Clay Spot | | Closed Depression | | Gravel Pit |
| | Gravelly Spot | | Landfill | | Lava Flow | | Marsh or swamp | | Mine or Quarry |
| | Miscellaneous Water | | Perennial Water | | Rock Outcrop | | Saline Spot | | Sandy Spot |
| | Severely Eroded Spot | | Sinkhole | | Slide or Slip | | Sodic Spot | | US Routes |
| | Major Roads | | Local Roads | | Background | | Aerial Photography | | |

Map Unit Legend

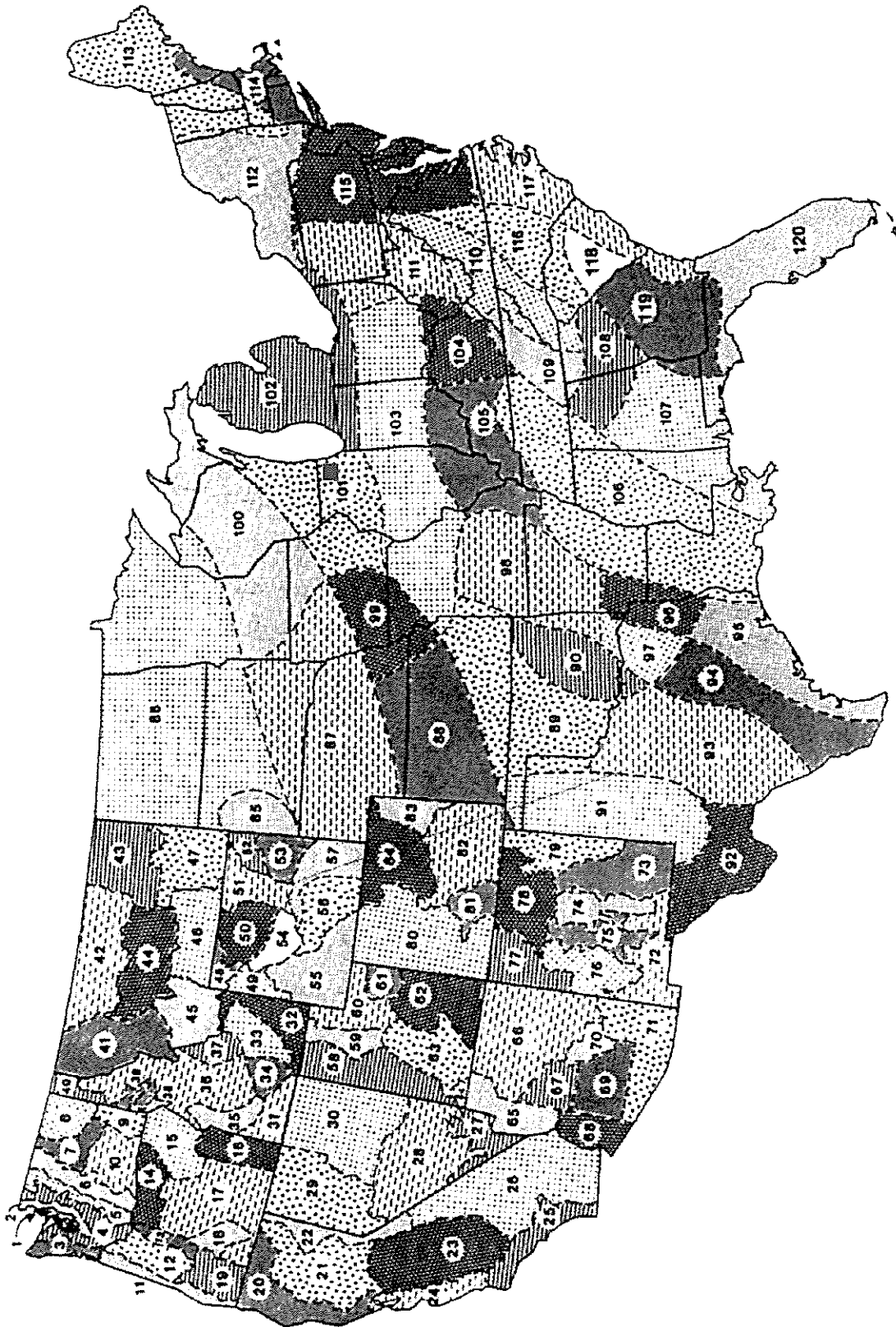
Lake County, Illinois (IL097)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
103A	Houghton muck, 0 to 2 percent slopes	0.2	0.2%
153A	Pella silty clay loam, 0 to 2 percent slopes	32.2	32.4%
232A	Ashkum silty clay loam, 0 to 2 percent slopes	2.2	2.2%
320A	Frankfort silt loam, 0 to 2 percent slopes	0.5	0.5%
465A	Montgomery silty clay loam, 0 to 2 percent slopes	24.4	24.5%
696B	Zurich silt loam, 2 to 4 percent slopes	10.1	10.2%
802B	Orthents, loamy, undulating	5.8	5.8%
805B	Orthents, clayey, undulating	3.1	3.1%
978A	Wauconda and Beecher silt loams, 0 to 2 percent slopes	1.9	2.0%
981A	Wauconda and Frankfort silt loams, 0 to 2 percent slopes	3.7	3.7%
982A	Aptakisic and Nappanee silt loams, 0 to 2 percent slopes	2.9	3.0%
983B	Zurich and Nappanee silt loams, 2 to 4 percent slopes	7.6	7.7%
W	Water	4.6	4.6%
Totals for Area of Interest		99.5	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

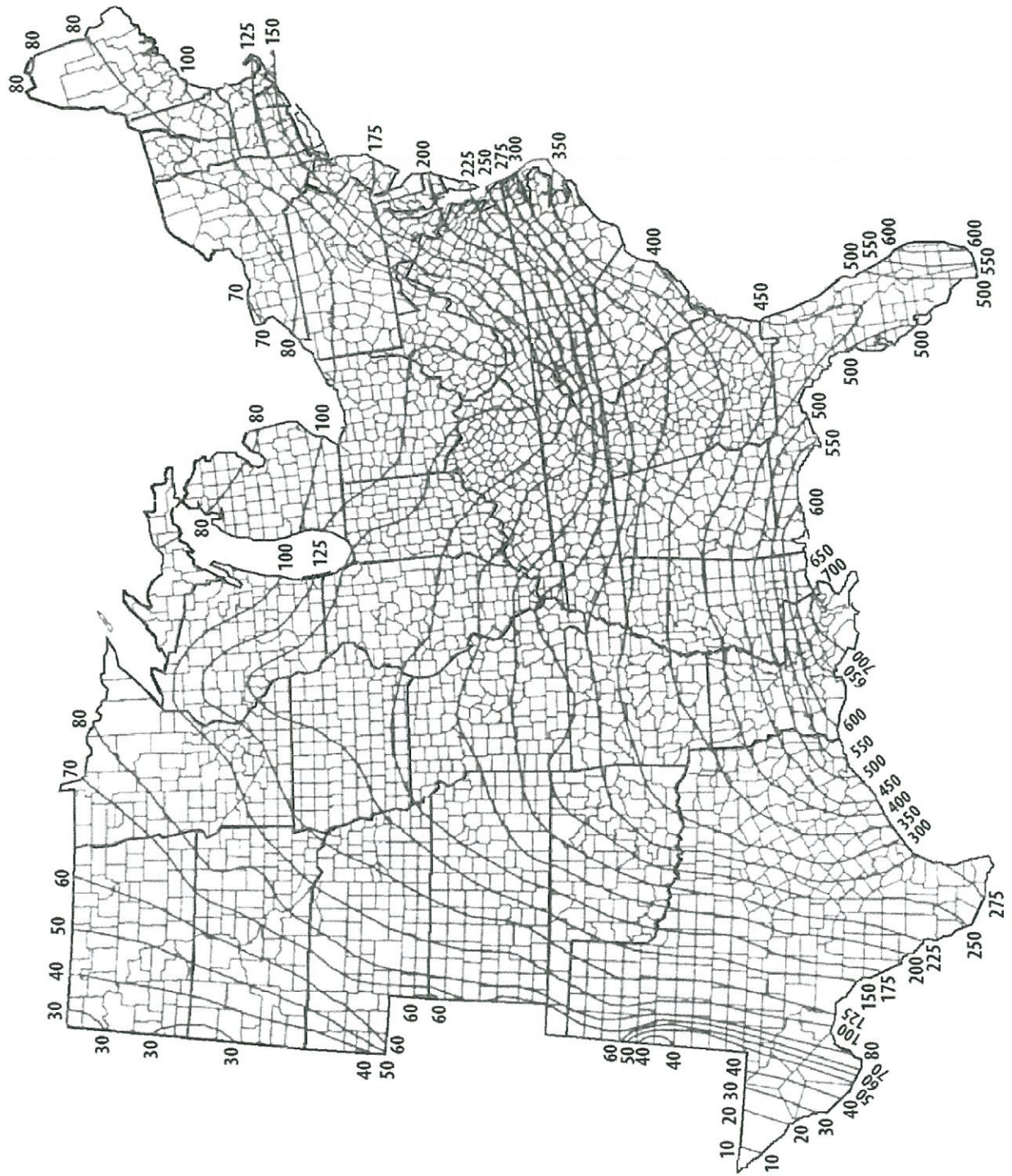
Figure 1. Erosivity Index Zone Map



Month	Jan	Jan	Jan	Jan	Jan	Feb	Mar	Mar	Mar	Apr	Apr	May	May	Jun	Jun	Jul	Jul	Aug	Aug	Sept	Sept	Oct	Oct	Nov	Nov	Dec	Dec
Day	1	16	31	15	1	15	1	16	31	15	30	15	30	14	29	14	29	13	28	12	27	12	27	11	26	11	31
El Zone																											
76	0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.6	1.3	2.0	3.5	4.9	8.4	17.4	37.3	57.5	72.9	83.7	89.5	95.8	98.4	99.6	100.0	100.0	100
77	0	0.2	0.3	0.3	0.4	0.8	1.5	2.0	2.8	3.9	5.9	7.2	10.3	21.5	46.5	66.3	78.3	86.3	90.8	96.0	98.2	99.1	99.5	99.8	99.8	100	100
78	0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	1.6	3.8	8.9	13.2	21.8	35.8	56.6	75.4	86.0	92.9	95.9	98.2	99.2	99.8	99.8	100.0	100.0	100	100
79	0	0.0	0.0	0.0	0.0	0.2	0.7	1.3	2.7	5.8	12.7	18.8	28.8	41.6	58.4	75.7	86.5	94.2	97.3	98.9	99.5	99.9	99.9	100.0	100.0	100	100
80	0	0.6	1.2	1.6	2.1	2.5	3.3	4.5	6.9	10.1	15.5	19.7	26.6	36.4	51.7	67.5	79.4	88.8	93.2	96.1	97.3	98.2	98.7	99.3	99.3	100	100
81	0	0.1	0.1	0.2	0.4	0.5	0.8	0.9	1.5	3.9	9.9	12.8	18.2	30.7	54.1	77.1	89.0	94.9	97.2	98.7	99.3	99.6	99.6	99.7	99.9	100	100
82	0	0.0	0.1	0.1	0.2	0.2	0.5	1.2	3.1	6.7	14.4	20.1	29.8	44.5	64.2	83.1	92.2	96.4	98.1	99.3	99.7	99.8	99.8	99.8	99.9	100	100
83	0	0.0	0.1	0.1	0.1	0.1	0.3	0.9	1.6	3.5	8.3	19.4	30.0	44.0	59.2	72.4	84.6	91.2	96.5	98.6	99.5	99.8	99.9	100.0	100.0	100	100
84	0	0.0	0.1	0.1	0.1	0.2	0.3	0.6	1.7	4.9	9.9	19.5	27.2	38.3	52.8	68.8	83.9	91.6	96.4	98.2	99.2	99.6	99.8	99.8	99.9	100	100
85	0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	3.0	6.0	11.0	23.0	36.0	49.0	63.0	77.0	90.0	95.0	98.0	99.0	100.0	100.0	100.0	100.0	100.0	100	100
86	0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	3.0	6.0	11.0	23.0	36.0	49.0	63.0	77.0	90.0	95.0	98.0	99.0	100.0	100.0	100.0	100.0	100.0	100	100
87	0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	3.0	6.0	10.0	17.0	29.0	43.0	55.0	67.0	77.0	85.0	91.0	96.0	98.0	99.0	100.0	100.0	100.0	100	100
88	0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	3.0	6.0	13.0	23.0	37.0	51.0	61.0	69.0	78.0	85.0	91.0	94.0	96.0	98.0	99.0	99.0	100.0	100	100
89	0	1.0	1.0	2.0	3.0	4.0	7.0	12.0	18.0	27.0	38.0	47.0	53.0	57.0	61.0	65.0	70.0	76.0	83.0	90.0	94.0	97.0	98.0	99.0	100.0	100	100
90	0	1.0	2.0	3.0	4.0	6.0	8.0	13.0	21.0	29.0	37.0	46.0	54.0	60.0	65.0	69.0	74.0	81.0	87.0	92.0	95.0	97.0	98.0	98.0	99.0	100	100
91	0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	3.0	6.0	16.0	29.0	39.0	46.0	53.0	60.0	67.0	74.0	81.0	88.0	95.0	99.0	99.0	100.0	100.0	100	100
92	0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	3.0	6.0	16.0	29.0	39.0	46.0	53.0	60.0	67.0	74.0	81.0	88.0	95.0	99.0	99.0	100.0	100.0	100	100
93	0	1.0	1.0	2.0	3.0	4.0	6.0	8.0	13.0	19.0	26.0	34.0	42.0	50.0	58.0	63.0	68.0	74.0	79.0	84.0	89.0	93.0	95.0	97.0	99.0	100	100
94	0	1.0	2.0	4.0	6.0	8.0	10.0	15.0	21.0	29.0	38.0	47.0	53.0	57.0	61.0	65.0	70.0	76.0	83.0	90.0	94.0	97.0	98.0	99.0	100.0	100	100
95	0	1.0	3.0	5.0	7.0	9.0	11.0	14.0	18.0	27.0	35.0	41.0	46.0	51.0	57.0	62.0	68.0	73.0	79.0	84.0	89.0	93.0	96.0	96.0	98.0	100	100
96	0	2.0	4.0	6.0	9.0	12.0	17.0	23.0	30.0	37.0	43.0	49.0	54.0	58.0	62.0	66.0	70.0	74.0	78.0	82.0	86.0	86.0	90.0	94.0	97.0	100	100
97	0	1.0	3.0	5.0	7.0	10.0	14.0	20.0	28.0	37.0	48.0	56.0	61.0	64.0	68.0	72.0	77.0	81.0	86.0	89.0	92.0	95.0	98.0	98.0	99.0	100	100
98	0	1.0	2.0	4.0	6.0	8.0	10.0	13.0	19.0	26.0	34.0	42.0	50.0	58.0	63.0	68.0	74.0	79.0	84.0	89.0	93.0	95.0	97.0	99.0	100	100	100
99	0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	3.0	5.0	7.0	12.0	19.0	33.0	48.0	57.0	62.0	68.0	73.0	79.0	84.0	89.0	93.0	95.0	99.0	100	100
100	0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	3.0	5.0	9.0	15.0	27.0	38.0	50.0	62.0	74.0	84.0	91.0	95.0	97.0	98.0	99.0	99.0	100.0	100	100
101	0	0.0	0.0	1.0	2.0	3.0	4.0	6.0	9.0	14.0	20.0	28.0	39.0	49.0	59.0	69.0	78.0	85.0	91.0	94.0	96.0	98.0	98.0	99.0	100.0	100	100
102	0	0.0	1.0	2.0	3.0	4.0	6.0	8.0	11.0	15.0	22.0	31.0	40.0	49.0	59.0	69.0	78.0	85.0	91.0	94.0	96.0	98.0	98.0	99.0	100.0	100	100
103	0	1.0	2.0	3.0	4.0	6.0	8.0	10.0	14.0	18.0	25.0	34.0	45.0	56.0	64.0	72.0	79.0	84.0	89.0	92.0	95.0	97.0	98.0	98.0	99.0	100	100
104	0	2.0	3.0	5.0	7.0	10.0	13.0	16.0	19.0	23.0	27.0	34.0	44.0	54.0	63.0	72.0	80.0	85.0	89.0	91.0	93.0	95.0	96.0	96.0	98.0	100	100
105	0	1.0	3.0	6.0	9.0	12.0	16.0	21.0	26.0	31.0	37.0	43.0	50.0	57.0	64.0	71.0	77.0	81.0	85.0	88.0	91.0	93.0	95.0	95.0	97.0	100	100
106	0	3.0	6.0	9.0	13.0	17.0	21.0	27.0	33.0	38.0	44.0	49.0	55.0	61.0	67.0	71.0	75.0	78.0	81.0	84.0	86.0	86.0	90.0	94.0	97.0	100	100
107	0	3.0	5.0	7.0	10.0	14.0	18.0	23.0	27.0	31.0	35.0	39.0	45.0	53.0	60.0	67.0	74.0	80.0	84.0	86.0	88.0	88.0	90.0	93.0	95.0	100	100
108	0	3.0	6.0	9.0	12.0	16.0	20.0	24.0	28.0	33.0	38.0	43.0	50.0	59.0	69.0	75.0	80.0	84.0	87.0	89.0	90.0	92.0	94.0	96.0	98.0	100	100
109	0	3.0	6.0	10.0	13.0	16.0	19.0	23.0	26.0	29.0	33.0	39.0	47.0	58.0	68.0	75.0	80.0	83.0	86.0	88.0	90.0	92.0	95.0	97.0	98.0	100	100
110	0	1.0	3.0	5.0	7.0	9.0	12.0	15.0	18.0	21.0	25.0	29.0	36.0	45.0	56.0	68.0	77.0	83.0	88.0	91.0	93.0	95.0	95.0	97.0	99.0	100	100
111	0	1.0	2.0	3.0	4.0	5.0	6.0	8.0	11.0	15.0	20.0	28.0	41.0	54.0	65.0	74.0	82.0	87.0	92.0	94.0	96.0	96.0	97.0	98.0	99.0	100	100
112	0	0.0	0.0	1.0	2.0	3.0	4.0	5.0	7.0	12.0	17.0	24.0	33.0	42.0	52.0	60.0	68.0	75.0	80.0	85.0	89.0	92.0	96.0	98.0	99.0	100	100
113	0	1.0	2.0	3.0	4.0	5.0	6.0	8.0	10.0	13.0	17.0	22.0	31.0	42.0	52.0	60.0	68.0	75.0	80.0	85.0	89.0	92.0	96.0	98.0	99.0	100	100
114	0	1.0	2.0	4.0	6.0	8.0	11.0	13.0	15.0	18.0	21.0	26.0	32.0	38.0	46.0	55.0	64.0	71.0	77.0	81.0	85.0	89.0	93.0	97.0	98.0	100	100
115	0	1.0	2.0	4.0	6.0	8.0	11.0	14.0	19.0	26.0	34.0	42.0	50.0	58.0	66.0	76.0	82.0	86.0	90.0	93.0	95.0	95.0	97.0	99.0	99.0	100	100

Use 97-52 = 45

Figure 2. Isoerodent Map of the Eastern U.S.



Note: Units for all maps on this page are hundreds ft•tonf•in(ac•h•yr)⁻¹

Annual isoerodent value (from this map) = 135
 Erosivity index = 0.45 * 135 = 61



Date of Inspection: _____ County: Lake

Name of Inspector: _____ Section: 14-F300-03-BT

Type of Inspection: Weekly Route: FAP 0335

>0.5" Precip. Precip. Amt: _____ " District: 1

Contractor: _____ Contract No: _____

Subs: _____ Job No. _____

Project: 61101-0124-786

NPDES/ESC Deficiency Deduction: \$ _____ NPDES Permit No: _____

Total Disturbed Area: _____ acre Ready for Final Cover: _____ acre

Final Cover Established: _____ acre

Erosion and Sediment Control Practices

Item # / BMP		YES	NO	N/A
1.	Slopes: Do all slopes and exposed areas where soil disturbing activities have temporarily or permanently ceased, and not permanently stabilized, have adequate temporary seed or other stabilization in accordance with the NPDES permitted 7 and 14 day rule?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Ditches Are all ditches (existing and temporary) clear of sediment and/or debris? Do all ditches have adequate stabilization and structural practices in place?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
3.	Perimeter Erosion Barrier: Are all perimeter erosion barriers in good working order? Has perimeter barrier no longer needed been removed and the area stabilized?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
4.	Temporary Ditch Checks: Are all temporary ditch checks in good working order? Are the current ditch checks adequate to control erosion?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
5.	Temp Diversions/ Slope Drains: Are all Temporary Diversions and Slope Drains functioning properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Inlet Protection: Are ALL inlet protection devices in good working order? Are ALL inlet filters less than 25% full and fabric unobstructed?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
7.	Sediment Basins/Traps: Are ALL sediment basins/traps in good working order? Does sufficient capacity exist for the design stormwater event?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
8.	Areas of Interest – Wetland/Prairie/Tree Preservation: Has the contractor remained clear of all designated “no entry” areas? Are all “no intrusion” areas adequately marked to prevent accidental entry?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
9.	Stock Piles: Are all stockpiles properly situated and maintained to prevent runoff and protected to minimize discharge of materials or residue in case of erosion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	Borrow/Waste Sites: Are all borrow and waste locations, including those located offsite, in compliance with NPDES requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	Other Installations: Are all other BMP installations shown in the plans properly functioning? (note in comments)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

General Site Maintenance Required of the Permit

12.	Vehicle Tracking: Is the site free from mud, sediment and debris from the vehicles entering/leaving off road areas throughout the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Are Stabilized Construction field entrances properly located?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Are Stabilized Construction field entrances in good working condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Item # / BMP		YES	NO	N/A
13.	Concrete Washout Areas: Are concrete washout areas adequately signed and maintained? Has all washout occurred only at designated washout locations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.	Staging/Storage Areas: Are all staging/storage facilities free of litter, leaking containers, leaking equipment, spills, etc?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.	Fuel/Chemical Storage: Are all fuels and chemicals stored only in designated locations? Are all designated locations free of evidence of leaks and or spills?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.	Previous Inspection Follow Up: Have all corrections from the last report been properly completed? If not, has a NPDES/ESC Deficiency Deduction been assessed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.	Update SWPPP: Have all changes to the projects SWPPP been noted on the graphic site plan, signed and dated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.	Off-site Discharge of Sediment: Has sediment or other pollutants of concern been released from the project site? If Yes, has the Illinois Environmental Protection Agency been notified within 24 hours of your observation of the discharge and an Incidence of Non-Compliance (ION) mailed within 5 days?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Specific Instructions Related to "No" Answers From Above:

Item #	Station or Station to Station	Practice	Comments/Actions Required	Time for Repair

Other Comments:

Additional Pages (Attached As Needed)

- Outfalls / Receiving Waters
 - Drainage Structure/Ditch Check Locations
 - Additional Instructions to Contractor
- Other: _____

If the answer to any of Items 1-16 above is "No", the contractor is hereby ordered to correct the deficiency. Repairs and stabilization are to be completed within 24 hours of this report (or as indicated above) or the DAILY NPDES/ESC Deficiency Deduction will be assessed for each noted deficiency until the required action is completed.

Inspector's Signature _____ Date/Time: _____

Contractor's Signature _____ Date/Time: _____

Original: Project File
cc: Contractor



Illinois Environmental Protection Agency

Bureau of Water • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

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

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

For Office Use Only

OWNER INFORMATION

Permit No. ILR10 _____

Company/Owner Name: Lake County Forest Preserves

Mailing Address: 1899 West Winchester Road Phone: 847.968.3274

City: Libertyville State: IL Zip: 60048 Fax: 847.680.6304

Contact Person: Jeff Slood E-mail: jslood@lcfpd.org

Owner Type (select one) County

CONTRACTOR INFORMATION

MS4 Community: Yes No

Contractor Name: _____

Mailing Address: _____ Phone: _____

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

CONSTRUCTION SITE INFORMATION

Select One: New Change of information for: ILR10 _____

Project Name: Middlefork Savanna Trail Connection County: Lake

Street Address: IL Rte 60 and Academy Drive City: Lake Forest IL Zip: 60045

Latitude: 42 14 35 Longitude: 87 53 03 S31 T44N R12E
(Deg) (Min) (Sec) (Deg) (Min) (Sec) Section Township Range

Approximate Construction Start Date June 1, 2016 Approximate Construction End Date Nov 1, 2016

Total size of construction site in acres: 4.1

If less than 1 acre, is the site part of a larger common plan of development?
 Yes No

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

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

Has the SWPPP been submitted to the Agency? Yes No

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

Location of SWPPP for viewing: Address: _____ City: _____

SWPPP contact information: _____ Inspector qualifications: _____

Contact Name: _____

Phone: _____ Fax: _____ E-mail: _____

Project inspector, if different from above _____ Inspector qualifications: _____

Inspector's Name: _____

Phone: _____ Fax: _____ E-mail: _____

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

TYPE OF CONSTRUCTION (select one)

Construction Type Transportation

SIC Code: _____

Type a detailed description of the project:

The proposed improvement consists of constructing a trail along the west side of Academy Drive with a pedestrian bridge being constructed over the Metra Railroad Tracks with the new trail construction continuing east to connect with the existing Middlefork Trail system.

HISTORIC PRESERVATION AND ENDANGERED SPECIES COMPLIANCE

Has the project been submitted to the following state agencies to satisfy applicable requirements for compliance with Illinois law on:

Historic Preservation Agency Yes No

Endangered Species Yes No

RECEIVING WATER INFORMATION

Does your storm water discharge directly to: Waters of the State or Storm Sewer

Owner of storm sewer system: Lake County Forest Preserve

Name of closest receiving water body to which you discharge: Middle Fork North Branch Chicago River

Mail completed form to: Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn: Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276
or call (217) 782-0610
FAX: (217) 782-9891

Or submit electronically to: epa.constilr10swppp@illinois.gov

I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the development and implementation of a storm water pollution prevention plan and a monitoring program plan, will be complied with.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Jeff Sloat
Owner Signature:

10.5.15

Date:

JEFF SLOAT

Printed Name:

Planning Manager

Title:

INSTRUCTIONS FOR COMPLETION OF CONSTRUCTION ACTIVITY NOTICE OF INTENT (NOI) FORM

Submit original, electronic or facsimile copies. Facsimile and/or electronic copies should be followed-up with submission of an original signature copy as soon as possible. Please write "copy" under the "For Office Use Only" box in the upper right hand corner of the first page.

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

Illinois Environmental Protection Agency
 Division of Water Pollution Control
 Permit Section
 Post Office Box 19276
 Springfield, Illinois 62794-9276
 or call (217) 782-0610
 FAX: (217) 782-9891

Or submit electronically to: epa.constilr10swppp@illinois.gov

Reports must be typed or printed legibly and signed.

Any facility that is not presently covered by the General NPDES Permit for Storm Water Discharges From Construction Site Activities is considered a new facility.

If this is a change in your facility information, renewal, etc., please fill in your permit number on the appropriate line, changes of information or permit renewal notifications do not require a fee.

NOTE: FACILITY LOCATION IS NOT NECESSARILY THE FACILITY MAILING ADDRESS, BUT SHOULD DESCRIBE WHERE THE FACILITY IS LOCATED.

Use the formats given in the following examples for correct form completion.

	Example	Format
Section	12	1 or 2 numerical digits
Township	12N	1 or 2 numerical digits followed by "N" or "S"
Range	12W	1 or 2 numerical digits followed by "E" or "W"

For the Name of Closest Receiving Waters, do not use terms such as ditch or channel. For unnamed tributaries, use terms which include at least a named main tributary such as "Unnamed Tributary to Sugar Creek to Sangamon River."

Submission of initial fee and an electronic submission of Storm Water Pollution Prevention Plan (SWPPP) for Initial Permit prior to the Notice of Intent being considered complete for coverage by the ILR10 General Permits. Please make checks payable to: Illinois EPA at the above address.

Construction sites with less than 5 acres of land disturbance - fee is \$250.

Construction sites with 5 or more acres of land disturbance - fee is \$750.

SWPPP should be submitted electronically to: epa.constilr10swppp@illinois.gov When submitting electronically, use Project Name and City as indicated on NOI form.

**THIS CARD MUST BE CONSPICUOUSLY DISPLAYED
LAKE COUNTY
BUILDING & USE**

PERMIT

**HAS BEEN SECURED
PERMIT # 200843-C**

Project: ACCESSORY STRUCTURE
Address: 0 MELODY RD, LAKE FOREST
Subdivison\Lot: MIDDLEFORK SAVANNA
Owner: SITTLER, KIRSTEN
Contractor: PEARSON, BROWN & ASS. INC.
Date Issued: 5/28/14

Sec-T-R: 31-44-12
PIN: 12-31-300-009

Issued By: 

Conditions:

Please post this Permit Card on the job site before starting construction.

Permit is valid for 6 months. All work shall be completed within this time. Upon completion of work, please call (847) 377-2600 for Final Inspection. Provide the Permit # when requesting the inspection.

NOT ALL BUILDING INSPECTIONS ARE REQUIRED. PLEASE CALL 847-377-2600 FOR QUESTIONS ON REQUIRED INSPECTIONS AND TO SCHEDULE INSPECTIONS.

1. FOOTING/ SETBACK	2. DRAIN TILE	3. DAMPPROOF FOUNDATION	4. ROUGH CARPENTRY	5. ROUGH MASONRY	6. ROUGH ELECTRICAL	7. ROUGH ELECTRICAL IN CONC SLAB	8. ROUGH PLUMBING
9. ROUGH PLUMBING IN CONC SLAB	10. ROUGH HVAC	11. INSULATION	12. WATER SUPPLY	13. SWIMMING POOLS	14. OCCUPANCY & USE CERTIFICATE	15. ELEVATOR	16. FINAL INSPECTION

Lake County Planning, Building and Development Department (847) 377-2600

12-31-300-009

Permit Number: 200843-C

Address: 0 MELODY RD, LAKE FOREST

Owner: KIRSTEN SITTLER

Date: _____

CERTIFICATE OF OCCUPANCY
Lake County Planning, Building & Development

This is to certify that the building and use thereof, located as shown on Permit Number 200843-C has been inspected and found to comply with the ordinances of Lake County, relating to Building and Zoning.

Use: Pedestrian Bridge

Building Officer

By: _____

Deputy

Note: A new certificate is required if the USE of the building or premises is changed, or if alterations are made to the building or property described. A new certificate voids any certificate of prior date.

PIN: 12-31-300-009

Permit Number: 200843-C

Address: 0 MELODY RD, LAKE FOREST

Owner: KIRSTEN SITTLER

Date: _____

CERTIFICATE OF OCCUPANCY
Lake County Planning, Building & Development

This is to certify that the building and use thereof, located as shown on Permit Number 200843-C has been inspected and found to comply with the ordinances of Lake County, relating to Building and Zoning.

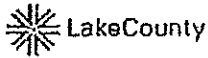
Use: Pedestrian Bridge

Building Officer

By: _____

Deputy

Note: A new certificate is required if the USE of the building or premises is changed, or if alterations are made to the building or property described. A new certificate voids any certificate of prior date.



Central Permit Facility
500 West Winchester Road Unit 101
Libertyville, Illinois 60048-1331
PHONE: 847.377.2600 FAX: 847.984.5854
EMAIL: lcpermits@lakecountyil.gov

NOTICE TO APPLICANT (Please Read)

BUILDINGS

All new buildings, structures and signs shall conform to all applicable requirements of the Unified Development Ordinance (UDO) and the Building Code.

CHANGE OF OCCUPANCY

The use or purpose for which a building is to be used shall not be changed until a Change of Use Permit and a Certificate of Occupancy permitting the new use or occupancy is issued by the Building Official.

VIOLATIONS & PENALTIES

Every permit issued by the Building Official, under the provision of the Building Code shall expire by limitation and become null and void if the authorized work is not commenced within 6 months unless renewed. Before work can again be resumed, a new permit will be required. Any person, firm or corporation violating the provisions of this Ordinance is subject to the fines and penalties as provided by law.

INSPECTION PROCEDURE

All bearers of building permits are required to give this office 24 hours advance notice regarding the following stages of construction. *Please call (847) 377-2600 to schedule and inspection (Give permit number, section, township and range, and address).*

- | | |
|--------------------------------------|--------------------------------------|
| 1. Footing and Setback* | 9. Rough Plumbing in Concrete Slab |
| 2. Drain Tile Inspection | 10. Rough Heating & Air Conditioning |
| 3. Damp Proofing Foundation | 11. Insulation |
| 4. Rough Carpentry | 12. Water Supply |
| 5. Rough Masonry | 13. Swimming Pools |
| 6. Rough Electrical | 14. Occupancy & Use Certificate |
| 7. Rough Electrical in Concrete Slab | 15. Elevator Inspection |
| 8. Rough Plumbing | |

*Iron pipes must be readily visible and accessible with witness stakes in place at the time of footing and setback inspection for all buildings. If circumstances warrant, a complete and current survey of the property in question can and may be required by the Building Official.



STORMWATER MANAGEMENT COMMISSION

**WATERSHED DEVELOPMENT PERMIT NUMBER
Permit #98-84-291A
HAS BEEN SECURED**

Project: Middlefork Savanna Trail Connection

Date Issued: November 19, 2015

Lat/Long: 42.24235, -87.88352

PIN No.: 1231300009

Conditions:

- Install and maintain all SE/SC measures
- Minimize environmental impacts

Issued By: Robert D. Gardiner, PE, CFM
Permit Engineer

Kurt A. Woolford, PE, CFM, LEED AP
Chief Engineer

Notice to Contractors and Owners

Post this card at the site, visible from the street and so located as to permit the inspector to record the indicated inspections on the placard. Do not post in the interior of a building.

Inspectors and sheriff's deputies are instructed to stop all work where this permit card is not displayed.

Always mention the Watershed Development Permit number when referring to this project. If this card becomes mislaid or lost please contact Lake County Stormwater Management Commission for a replacement.

Lake County Stormwater Management Commission (847) 377-7705



SOIL AND MATERIAL CONSULTANTS, INC.

office: 1-847-870-0544
fax: 1-847-870-0661
www.soilandmaterialconsultants.com
us@soilandmaterialconsultants.com

January 20, 2010
File No. 19846

Ms. Kirsten E. Sittler
Preserve Planner
Lake County Forest Preserve District
32492 N. Almond Road
Grayslake, IL 60030

Re: Geotechnical Investigation
New Pedestrian Bridge
Middlefork Savanna
Lake Forest, Illinois

Dear Ms. Sittler:

The following is our report of findings for the geotechnical investigation completed for the above reference project in the City of Lake Forest, Illinois.

The investigation was requested to determine current subsurface soil and water conditions at select boring locations. The findings of the field investigation and the results of laboratory testing are intended to assist in the design and construction of proposed site improvements.

PROPOSED IMPROVEMENTS

We understand that it is proposed to construct a new pedestrian bridge spanning approximately 170 feet to 200 feet over the Metra railroad tracks and beyond the existing abutments at the Middlefork Savanna in Lake Forest. We understand that the bridge is expected to be supported on new abutments located behind the existing abutments.

SCOPE OF THE INVESTIGATION

The field investigation included obtaining 2 structure borings at the locations requested and as indicated on the enclosed sketch. The boring locations were established using field taping methods and accuracy. Surface elevations were determined using the temporary benchmarks indicated on the location sketch. It should be noted that there were two separate temporary benchmarks used for this project, one each on the east and west sides of the railroad tracks.

We auger drilled the 2 structure borings to depths of 50.0 feet below existing surface elevations. Soil samples were obtained using a split barrel sampler advanced utilizing an automatic SPT hammer. Soil profiles were determined in the field and soil samples returned to our laboratory for additional testing including determination of moisture content. Cohesive soils

8 WEST COLLEGE DRIVE * ARLINGTON HEIGHTS, IL 60004

SOIL BORINGS * SITE INVESTIGATIONS * PAVEMENT INVESTIGATIONS * GEOTECHNICAL ENGINEERING
TESTING OF * SOIL * AS * CONCRETE * MORTAR * STEEL

EXHIBIT G

obtained by split barrel sampling were tested further to determine dry unit weight and unconfined compressive strength

The results of all field determinations and laboratory testing are included in summary with this report

RESULTS OF THE INVESTIGATION

Enclosed are boring logs indicating the soil conditions encountered at each location. The site surface conditions include the existing abutments, old pavement materials and vegetation.

Deep fill soil conditions were encountered at each boring. The composition of the fill includes the presence of moderately to well compacted clay/silt mixtures extending to depths of 19.5 feet to 23.5 feet at these boring locations. The limits of fill placement were not determined within the scope of this investigation.

The underlying soil conditions include the presence of cohesive soils. These are classified as very tough to hard clay/silt mixtures with lesser portions of sand and gravel.

Non-cohesive soils were encountered at the deeper elevations as indicated at both boring locations. These include medium dense to dense sand/gravel/silt/clay, sand, silt/clay, sand/gravel and silt mixtures. The non-cohesive granular soils are often in a very damp to saturated condition. Cobbles and boulders may be present within the site soils at any elevation, although none were encountered while drilling.

The following table summarizes depth ranges below existing grade, the magnitude of soil strength within these ranges and other information:

<u>Boring</u>	<u>Surface Elevation (feet)</u>	<u>Depth Range Below Existing Surface (feet)</u>	<u>Soil Strength (lbs./sq.ft.)</u>	<u>Recorded Water Levels, W.D./A.D. (feet)</u>
1	*93.6	3.5 to 7.0	3,000	44.5/40.0
		7.0 to 24.0	4,000	
		24.0 to 32.0	6,000	
		32.0 to 45.0	5,000	
		45.0 to 47.0	6,000	
2	*93.3	3.5 to 8.5	3,000	44.0/37.0
		8.5 to 20.0	4,000	
		20.0 to 26.0	6,000	
		26.0 to 40.0	4,000	
		40.0 to 47.0	5,000	

* Note two separate temporary benchmarks were used, one for each boring location.

It is expected that foundations can be supported on undisturbed natural soils or the suitable fill soils located at any elevation within the depth ranges indicated in the above table. Above these depth ranges the soils are not considered able to support foundations, even at reduced design bearing values, due to long-term settlement considerations.

SUBSURFACE WATER

The boring logs and the above table indicate the depth at which subsurface water was encountered in the bore holes at the time of the drilling operations and during the period of these readings. It is expected that fluctuations from the water levels recorded will occur over a period of time due to variations in rainfall, temperature, subsurface soil conditions, soil permeability and other factors not evident at the time of the water level measurements.

FOUNDATIONS

Based on the results of this investigation it is our opinion that isolated footing foundations may be considered for support of the new bridge loads. These foundations can be supported on undisturbed natural soils or suitable fill soils located below all pavement materials, debris, unsuitable fill soils, low strength soils and other unsuitable conditions which may be encountered. Soil strength values and the depths at which they are expected to be encountered at these boring locations are indicated in the above table. An allowable bearing value of 3,000 lbs./sq.ft. is available for foundation design. Increased bearing values may be available at some locations and elevations. The feasibility of using a higher value is best determined after our review of proposed foundation details and elevations.

All foundations should extend at least 60.0 inches below exposed surface elevations to provide adequate protection against uplift due to freezing of the supporting soils. We recommend providing adequate reinforcing steel in foundation walls and piers to minimize the effects of long-term differential settlement.

A deep foundation system could also be considered. A caisson foundation system, designed by a licensed structural engineer, can be utilized to transmit loads to deeper elevations. Caissons designed for end bearing should extend about 3.0 feet or deeper into cohesive soils and should bottom in soils possessing the design bearing strength. The bottom of the shafts can be belled to increase the load carrying capacity of each caisson. This will require extending the drilled shaft further into the cohesive soils as needed to assure non-caving soil conditions in the sidewall of the bell. Temporary or permanent casing extending above the ground surface is needed to prevent caving of the soil around the top of the drilled shaft. Further, temporary or permanent casing will be needed when drilling through caving soils or through soft soils which squeeze thus narrowing the diameter of the drilled shaft. The casing will also reduce the volume of water seeping into the drilled shaft.

SUBSURFACE WATER

The boring logs and the above table indicate the depth at which subsurface water was encountered in the bore holes at the time of the drilling operations and during the period of

these readings. It is expected that fluctuations from the water levels recorded will occur over a period of time due to variations in rainfall, temperature, subsurface soil conditions, soil permeability and other factors not evident at the time of the water level measurements.

DEWATERING

Excavations may require dewatering due to subsurface water seepage and/or surface precipitation. This water can likely be removed to depths of several feet by standard sump and pump operations. Soils exposed at foundation elevations should not be permitted to become saturated. Loss of bearing strength and stability may occur thus requiring additional soil excavation.

DESIGN

Where applicable, the following values can be utilized for design of the proposed foundations in the area of borings 1 and 2:

From 4.0 feet to 30.0 feet

<u>Item</u>	<u>On-Site Soil</u> <u>Undrained</u>
Active Pressure:	90 psf/f
At Rest Pressure:	105 psf/f
Passive Pressure:	245 psf/f

From 30.0 feet to 47.0 feet

<u>Item</u>	<u>On-Site Soil</u> <u>Undrained</u>
Active Pressure:	27 psf/f
At Rest Pressure:	42 psf/f
Passive Pressure:	182 psf/f

Granular Backfill

<u>Item</u>	<u>Undrained</u>
Active Pressure:	45 psf/f
At Rest Pressure:	60 psf/f
Passive Pressure:	260 psf/f

The buoyant unit weight of soil should be used for design below the water table. Although water was not encountered until approximately 44.0 feet at the boring locations a more conservative value of 30.0 feet was used based upon the interface of the brown and gray soils. This is the reason for the lower lateral earth pressure values below 30.0 feet. Additionally, passive pressure values are not available for the design within 4.0 feet of the exposed surfaces due to the seasonal considerations.

File No. 19846
Re: New Pedestrian Bridge
Middlefork Savanna
Lake Forest, IL

Page 5

CONCLUSION

The information within this report is intended to provide initial information concerning subsurface soil and water conditions on the site. Variations in subsurface conditions are expected to be present between boring locations due to naturally changing and fill soil conditions.

Our understanding of the proposed improvements is based on limited information available to us at the writing of this report. The findings of the investigation and the recommendations presented are not considered applicable to significant changes in the scope of the improvements or applicable to alternate site uses. We recommend that proposed foundation plans be reviewed by our office to determine if additional considerations are necessary to address anticipated subsurface conditions.

We recommend that soil conditions encountered at foundation elevations be tested to verify the presence of design soil strength prior to concrete placement.

If you have any questions concerning the findings or recommendations presented in this report, please let me know.

Very truly yours,

SOIL AND MATERIAL CONSULTANTS, INC.

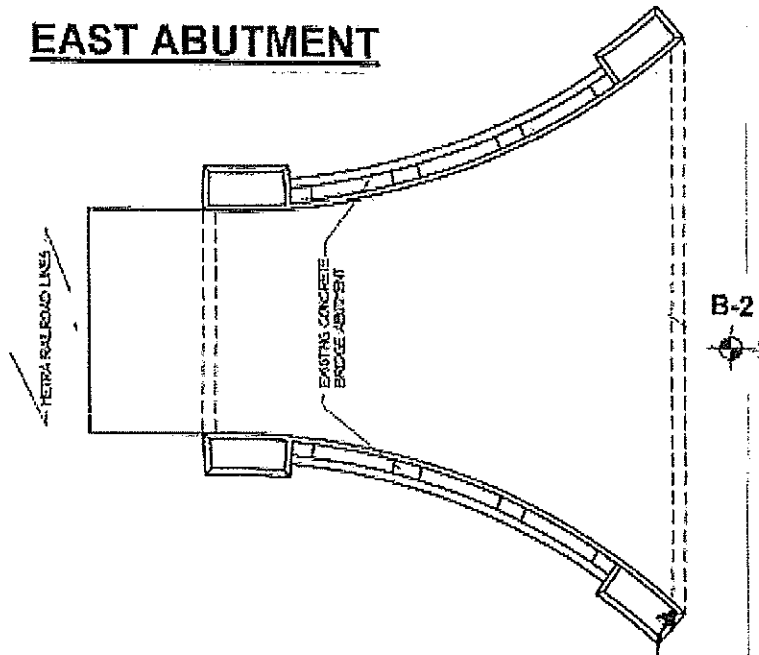


Thomas P. Johnson, P.E.
Project Engineer

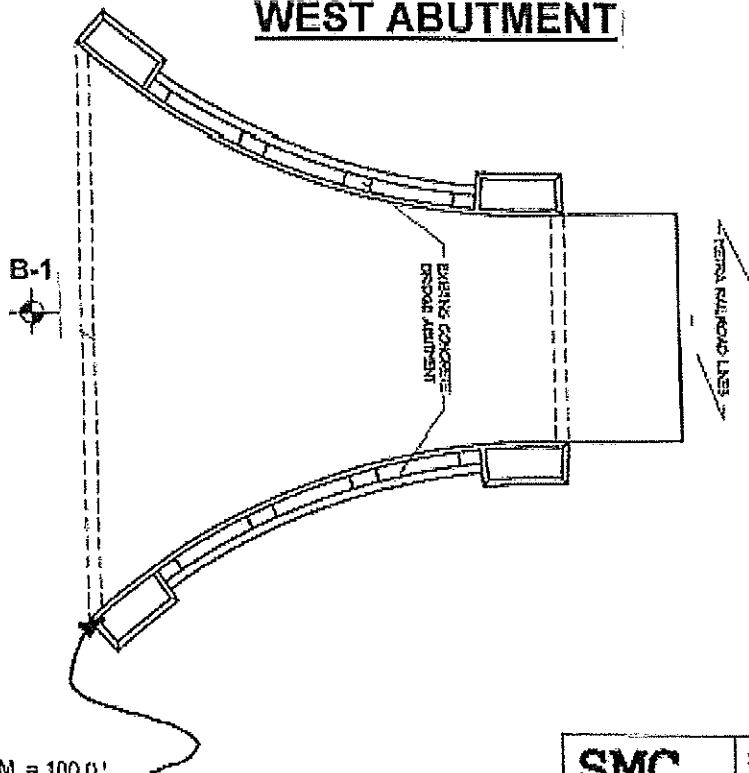
TPJ:ek
Enc.

CC: Mark F. Danielak – Stuart Jacobson & Associates, Ltd.

EAST ABUTMENT



WEST ABUTMENT



B.M. = 100.0'
Top of Concrete.

B.M. = 100.0'
Top of Concrete.



SMC		SOIL AND MATERIAL CONSULTANTS, INC.	LOCATION SKETCH
Client:	LAKE COUNTY FOREST PRESERVE DISTRICT		
Project:	NEW PEDESTRIAN BRIDGE		
Location:	LAKE FOREST, ILLINOIS		
File No.	19846	Date:	1-18-10
		Scale:	NONE



SOIL AND MATERIAL CONSULTANTS, INC.

Arlington Heights, Illinois (847) 870-8544

West

SOIL BORING LOG 1

Logged By: DA

Page: 1 of 2

Client: Lake County Forest Preserve District

File No. 19846

Date Drilled: 1/15/10

Reference: New Pedestrian Bridge over Metra RR Middle Fork Savanna Lake Forest, IL

Comments:

Equipment: CME 45B CME 55 Hard Auger Other

depth, ft.

CLASSIFICATION

Elevation 93.6' Existing Surface

Crushed limestone with fines - 22.0"

Brown-dark brown clay & silt, trace sand & gravel, damp, hard - Fill

Brown-gray clay & silt, trace sand & gravel, damp, hard

Brown clay, some silt, trace sand & gravel, damp, very tough

Gray clay, some silt, trace sand & gravel, damp, very tough

standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength
X	Δ	⊗	○
21	3.5 12.9		
11	19.1		
22	18.1		
23	17.5		
16	13.4		
17	16.2		
15	20.0		
19	17.3		
18	20.5		
23	16.5	115.1	4.9
23	16.4	119.5	5.7
21	19.0	113.9	3.5
18	20.1	111.6	2.9
14	17.7	120.3	3.0

○ unconfined compressive strength, tons/sq.ft.
 ● penetrometer reading, tons/sq.ft.
 1.0 2.0 3.0 4.0
 X standard penetration 'N', blows/ft.
 Δ moisture content, %
 10 20 30 40

Water encountered at 44.5 feet during drilling operations (W.D.).
 Water recorded at 40.0 feet on completion of drilling operations (A.D.).
 Water recorded at _____ feet _____ hours after completion of drilling operations (A.D.).

EAST

SOIL BORING LOG 2

Logged By: DA Page: 1 of 2

Client: Lake County Forest Preserve District

File No. 19846 Date Drilled: 1/18/10

Reference: New Pedestrian Bridge over Metra RR
 Middle Fork Savanna
 Lake Forest, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

Elevation 93.3' Existing Surface
 (at site, top of soil)

Crushed limestone, some cinders, damp,
 medium dense - 34.0"

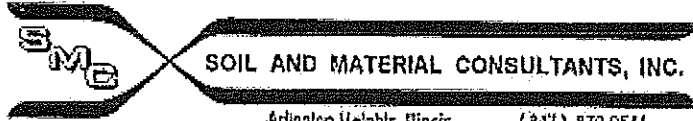
5 - Brown-dark brown clay & silt, trace sand
 & gravel, damp, very tough - Fill

20 - Brown clay, some silt, trace sand & gravel,
 damp, very tough to hard

30 - Gray clay, some silt, trace sand & gravel,
 damp, tough to very tough

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	unconfined compressive strength, tons/sq.ft.			
					1.0	2.0	3.0	4.0
					standard penetration 'N', blows/ft.			
					moisture content, %			
					10	20	30	40
16	X	Δ	34.5			X		Δ
9			18.5	112.8	2.8	X	Δ	●
9			18.6			X	Δ	●
19			19.1	113.1	2.9		Δ	●
13			20.4	109.4	3.1	X	Δ	●
11			20.2			X	Δ	●
14			21.2	105.7	2.9		X	Δ
14			21.0			X	Δ	●
14			18.2			X	Δ	●
18			18.7	113.7	3.3		Δ	●
26			18.9	117.9	3.3		Δ	X
19			18.0	118.2	4.0		Δ	●
22			17.1	119.8	4.4		Δ	X
12			17.6	118.6	1.7		X	Δ
17			19.2	112.8	3.2		X	Δ

Water encountered at 44.0 feet during drilling operations (W.D.)
 Water recorded at 37.0 feet on completion of drilling operations (A.D.)
 Water recorded at _____ feet _____ hours after completion of drilling operations (A.D.)



SOIL AND MATERIAL CONSULTANTS, INC.

Arlington Heights, Illinois (847) 870-0544

SOIL BORING LOG 2

Logged By: DA Page: 2 of 2

Client: Lake County Forest Preserve District

File No. 19846 Date Drilled: 1/18/10

Reference: New Pedestrian Bridge over Metra RR
Middle Fork Savanna
Lake Forest, IL

Comments:

Equipment: CME 458 CME 55 Hand Auger Other

CLASSIFICATION
Elevation

45	Gray clay, some silt, trace sand & gravel, damp, very tough
45	Gray fine-medium sand, some coarse sand & gravel, very damp-saturated, medium dense
50	Gray silt, trace fine sand & clay, very damp, medium dense
	End of Boring
55	(a) Bituminous concrete - 2-0"
	(b) Gray silt, some clay, trace fine sand, damp, medium dense

depth, ft	standard penetration	moisture content	dry unit weight, lbs./cu.ft.	unconfined comp. strength	unconfined compressive strength, tons/sq.ft.	penetrometer reading, tons/sq.ft.	standard penetration "N", blows/ft.	moisture content, %
	X	Δ	X	○	○	●	X	Δ
					1.0	2.0	3.0	4.0
							10	20
							30	40
45	25	18.1 18.5 14.9	116.0	2.5				
50	14	20.4						

Water encountered at 44.0 feet during drilling operations (W.D.).
Water recorded at 37.0 feet on completion of drilling operations (A.D.).
Water recorded at _____ feet _____ hours after completion of drilling operations (A.D.).

G-303b



General Notes

SAMPLE CLASSIFICATION

Soil sample classification is based on the Unified Soil Classification System, the Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), ASTM D-2488, the Standard Test Method for Classification of Soils for Engineering Purposes, ASTM D-2487(when applicable), and the modifiers noted below.

CONSISTENCY OF COHESIVE SOILS

Term	Qu -tons/sq. ft.	N (unreliable)
Very Soft	0.00 - 0.25	0 - 2
Soft	0.25 - 0.49	3 - 4
Stiff	0.50 - 0.99	5 - 8
Tough	1.00 - 1.99	9 - 15
Very Tough	2.00 - 3.99	16 - 30
Hard	4.00 - 7.99	30 +
Very Hard	8.00 +	

RELATIVE DENSITY OF GRANULAR SOILS

Term	N - blows/foot
Very Loose	0 - 4
Loose	5 - 9
Medium Dense	10 - 29
Dense	30 - 49
Very Dense	50 +

IDENTIFICATION AND TERMINOLOGY

Term	Size Range
Boulder	over 8 in.
Cobble	3 in. to 8 in.
Gravel	1 in. to 3 in.
	-coarse
	-medium
	-fine
Sand	#4 sieve to #4 sieve
	-coarse
	-medium
	-fine
Silt	0.002 mm to #200 sieve
Clay	smaller than 0.002 mm

Modifying Term Percent by Weight

Trace	1 - 10
Little	11 - 20
Some	21 - 35
And	36 - 50

Moisture Condition

Dry
Damp
Very Damp
.Saturated

DRILLING, SAMPLING & SOIL PROPERTY SYMBOLS

CF - Continuous Flight Auger
 HS - Hollow Stem Auger
 HA - Hand Auger
 RD - Rotary Drilling
 AX - Rock Core, 1-3/16 in. diameter
 BX - Rock Core, 1-5/8 in. diameter
 NX - Rock Core, 2-1/8 in. diameter
 S - Sample Number
 T - Type of Sample
 J - Jar
 AS - Auger Sample
 SS - Split-spoon (2 in. O.D. with 1-3/8 in. I.D.)
 ST - Shelby Tube (2 in. O.D. with 1-7/8 in. I.D.)
 R - Recovery Length, in.
 B - Blows/ 6 in. Interval, Standard Penetration Test (SPT)
 N - Blows/ foot to drive 2 in. O.D. split-spoon sampler with 140 lb. hammer falling 30 in., (STP)
 Pen. - Pocket Penetrometer reading, tons/ sq. ft.
 W - Water Content, % of dry weight
 Uw - Dry Unit Weight of soil, lbs./ cu. ft.
 Qu - Unconfined Compressive Strength, tons/ sq. ft.
 Str - % Strain at Qu.
 WL - Water Level
 WD - While Drilling
 AD - After Drilling
 DCI - Dry Cave-in
 WCI - Wet Cave-in
 LL - Liquid Limit, %
 PL - Plastic limit, %
 PI - Plasticity Index (LL-PL)
 LI - Liquidity Index [(W-PL)/PI]



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June 30, 2014
File No. 19846

Ms. Kirsten E. Sittler
Lake County Forest Preserve District
32492 N. Almond Road
Grayslake, IL 60030

Re: Geotechnical Investigation
Middlefork Savanna - Proposed Overlook
Lake Forest, Illinois

Dear Ms. Sittler:

The following is our report of findings for the geotechnical investigation completed for the proposed overlook at the Middlefork Savanna located in the City of Lake Forest, Illinois.

The investigation was requested to determine current subsurface soil and water conditions at the select boring location. The findings of the field investigation and the results of laboratory testing are intended to assist in the design and construction of the proposed overlook.

SCOPE OF THE INVESTIGATION

The field investigation included obtaining 1 boring at the location requested and as indicated on the enclosed sketch. The boring location was established in the field by the client with the surface elevation determined using the data presented on the topographic survey.

We auger drilled the structure boring to a depth of 25.0 feet below existing surface elevation. Soil samples were obtained using a split barrel sampler advanced utilizing an automatic SPT hammer. Soil profiles were determined in the field and soil samples returned to our laboratory for additional testing including determination of moisture content. Cohesive soils obtained by split barrel sampling were tested further to determine dry unit weight and unconfined compressive strength. The results of all field determinations and laboratory testing are included in summary with this report.

RESULTS OF THE INVESTIGATION

Enclosed is the boring log indicating soil conditions encountered at this location. Site surface conditions include vegetation and fill soil conditions.

Composition of the fill includes the presence of topsoil and silt/clay mixtures extending to a depth of 13.5 feet. The limits of fill placement were not determined within the scope of this investigation. The fill soil conditions were found to overlie a thin seam of the apparent natural topsoil at a depth of 13.5 feet.

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TESTING OF • SOIL • ASPHALT • CONCRETE • MORTAR • STEEL

Underlying natural soil conditions include the presence of cohesive soils. These are classified as very tough to hard clay/silt mixtures with lesser portions of sand and gravel. Non-cohesive soils were also encountered. These include a loose sand mixture. The non-cohesive granular soils are in a very damp to saturated condition. Cobbles and boulders may be present within the site soils at any elevation, although none were encountered while drilling.

The following table summarizes depth ranges below existing grade, the magnitude of soil strength within these ranges and other information:

<u>Boring</u>	<u>Surface Elevation (feet)</u>	<u>Depth Range Below Existing Surface (feet)</u>	<u>Soil Strength (lbs./sq.ft.)</u>	<u>Recorded Water Levels, W.D./A.D. (feet)</u>
101	681.5	4.0 to 14.5	2,000	23.0/23.0
		14.5 to 19.0	4,000	
		19.0 to 22.0	3,000	

It is expected that foundations can be supported on the existing fill soils or undisturbed natural soils located at any elevation within the depth ranges indicated in the above table. Above these depth ranges the soils are not considered able to support foundations, even at reduced design bearing values, due to long-term settlement considerations.

SUBSURFACE WATER

The boring logs and the above table indicate the depth at which subsurface water was encountered in the bore holes at the time of the drilling operations and during the period of these readings. It is expected that fluctuations from the water levels recorded will occur over a period of time due to variations in rainfall, temperature, subsurface soil conditions, soil permeability and other factors not evident at the time of the water level measurements.

SUBGRADE SOIL PREPARATION

Subgrade soil preparation should be accomplished where needed within the proposed overlook area prior to excavation for foundations. The procedure in all areas of subgrade supported improvements should include the removal of unsuitable surface conditions including vegetation, surface topsoil, unsuitable fill soils, weak or unstable soils, and other deleterious conditions which may be encountered. Above grade areas should be cut to design subgrade elevations. Exposed subgrade soils should be leveled, compacted and reviewed by the Soil Engineer.

Soft or unstable soil conditions in pavement or slab areas can often be bridged by use of an effective depth of crushed granular material. The placement of the crushed granular bridging material, possibly in conjunction with the use of an appropriate geotextile fabric, should only proceed after review of the proof-roll conditions by the Soil Engineer. Long-term settlement of pavement surfaces may occur locally as the bridged soils desiccate.

Structural fill can be placed on soils prepared to the satisfaction of the Soil Engineer. Fill placed on the slope should be benched into the slope according to IDOT Benching Detail BD-51. The fill should be placed in lifts not to exceed 8.0 inches when uncompacted. Each lift should exceed minimum compaction requirements prior to placement of the next lift. We recommend a minimum of 95% compaction based on the modified Proctor test, ASTM D-1557, be achieved. Compaction requirements also apply to backfill placement around foundations and within trench excavations located below subgrade supported improvements.

FILL SOURCES

The onsite non-organic soils are generally suitable for reuse as fill. Offsite sources may also be used provided they are approved in advance by the Soil Engineer. Aeration may be necessary to reduce soil moisture content prior to compaction. Soil borrowed from near the surface where seasonal fluctuations in soil moisture content occur may require particular attention. The moisture content of fill soils should be within approximately 3.0% of optimum moisture content as determined by the modified Proctor test for the soils to meet or exceed minimum compaction requirements.

FOUNDATIONS

Based on the results of this investigation it is our opinion that continuous and isolated footing foundations may be considered for support of the overlook. These foundations can be supported on the existing fill soils below any surface topsoil or low strength fill soils. Soil strength values and the depths at which they are expected to be encountered are indicated in the above table. A net allowable bearing value of 2,000 lbs./sq.ft. is available for design. This value can be used to size foundations for support of structure dead and live loads.

All overlook foundations should extend at least 60.0 inches below exposed surface elevations to provide adequate protection against uplift due to freezing of the supporting soils. We recommend providing adequate reinforcing steel in foundation walls and piers to minimize the effects of long-term differential settlement.

Weak soil conditions may be discovered locally at design foundation elevations and may require extending the foundation to a deeper elevation. Alternately, removal of the weak soil followed by replacement with properly compacted coarse crushed granular fill (CA01) may be feasible. When removal is approved by the Soil Engineer, the removal of the weak soil should also extend beyond the face of footings and/or piers to a distance at least equal to the depth of fill that will be present beneath the footings and/or piers. A capping layer of finer crushed granular fill (CA06) can be utilized to establish a working surface.

DEWATERING

Excavations may require dewatering due to subsurface water seepage and/or surface precipitation. This water can be removed by standard sump and pump operations. Soils exposed at foundation, slab or undercut elevations should not be permitted to become saturated. Loss of bearing strength and stability may occur, requiring additional soil excavation.

Fill soils, organic soils, cohesive soils and others can be unstable when saturated. These soils tend to cave or run when submerged or disturbed. The stability of exposed embankments is minimal to non-existent as confining soil pressures are removed. Proper drainage within excavations is necessary at all times, particularly when excavations extend below anticipated water levels and below saturated soils.

The contractor should be made responsible for designing and constructing stable temporary excavations. Also, the contractor should shore, slope, bench or restrain the sides of the excavations as required to maintain stability of both the excavation sides and bottom. In no case, should the slope, slope heights, or excavation depth exceed those in the local, state, and federal safety regulations.

CONCLUSION

The information within this report is intended to provide initial information concerning subsurface soil and water conditions on the site. Variations in subsurface conditions are expected to be present between boring locations due to naturally changing and filled soil conditions.

Our understanding of the proposed improvements is based on limited information available to us at the writing of this report. The findings of the investigation and the recommendations presented are not considered applicable to significant changes in the scope of the improvements or applicable to alternate site uses. We recommend that proposed foundation, pavement and grading plans be reviewed by our office to determine if additional considerations are necessary to address anticipated subsurface conditions.

The soils exposed in soil undercut areas should be evaluated for suitability prior to placement of structural fill, as previously indicated in this report. Soils and aggregates placed as structural fill should be tested as the work progresses to verify that minimum compaction requirements have been met. We recommend that soil conditions encountered at foundation elevations be tested to verify the presence of design soil strength prior to concrete placement.

If you have any questions concerning the findings or recommendations presented in this report, please let me know.

Very truly yours,

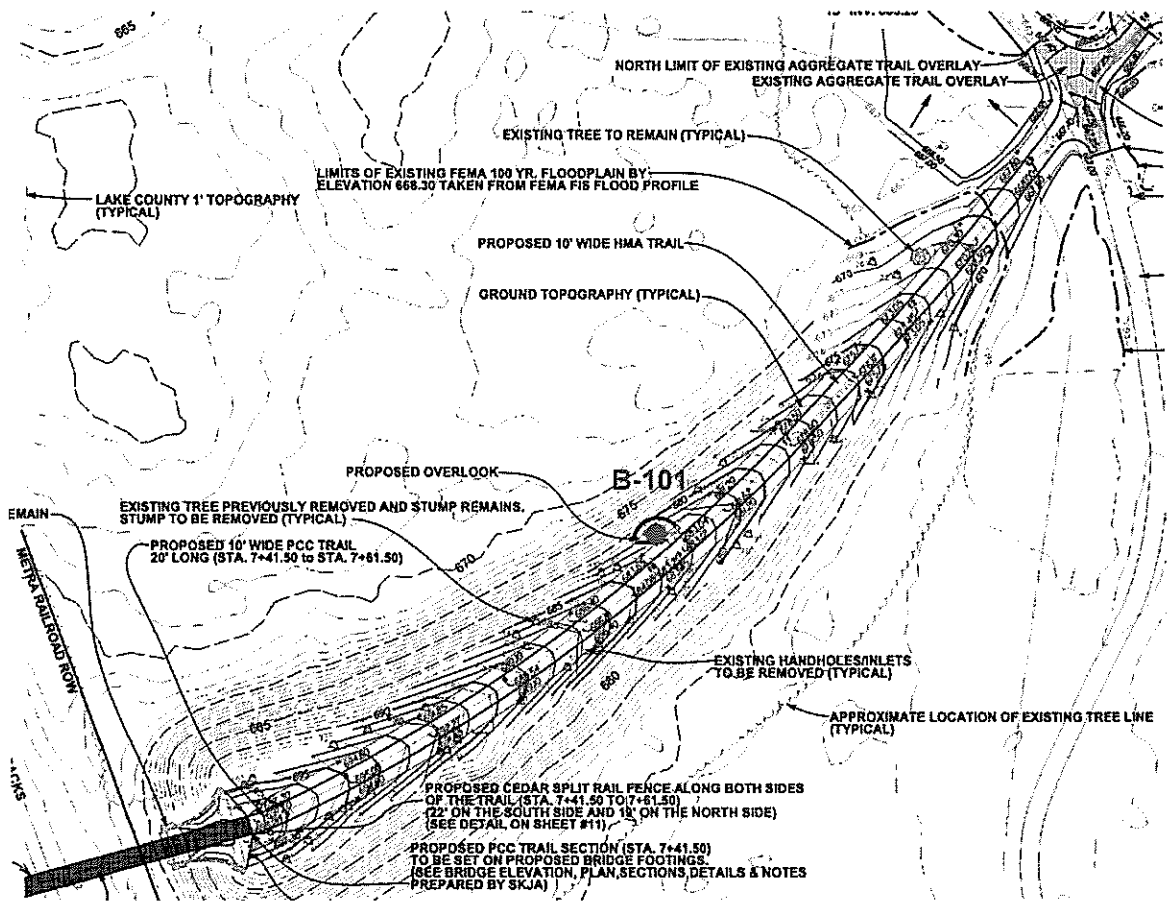
SOIL AND MATERIAL CONSULTANTS, INC.



Thomas P. Johnson, P.E.
President

TPJ:ek
Enc.

cc: Mr. Don Henne – Pearson, Brown & Associates, Inc.



SMC		SOIL AND MATERIAL CONSULTANTS, INC.		LOCATION SKETCH	
Client:		LAKE COUNTY FOREST PRESERVE DISTRICT			
Project:		PROPOSED OVERLOOK-MIDDLEFORK SAVANNA			
Location:		LAKE FOREST, ILLINOIS			
File No.	19846	Date:	06-25-14	Scale:	NONE

Client: Lake County Forest Preserve District

File No. 19846

Date Drilled: 6/25/14

Reference: New Pedestrian Bridge over Metra RR
Middle Fork Savanna
Lake Forest, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

Elevation 681.5' Existing Surface

Black silt, some clay, trace sand & roots, damp (topsoil) - Fill

Dark brown-brown silt, some clay, trace sand & roots, damp, very loose-Fill

5 Brown silt, some clay, trace sand, damp, loose to medium dense - Fill

7 19.3

9 22.4

10 20.3

(a) see below

15 Brown clay, some silt, trace sand & gravel, damp, very tough to hard

20 16.4

23 16.7

(b) see below

25 (c) see below

End of Boring

(a) Dark brown silt, some clay, trace sand & roots, damp, loose (topsoil)

30 (b) Brown fine sand, very damp-saturated, loose

(c) Brown to gray clay, some silt, trace sand & gravel, damp, very tough

35

40

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	Strength/Reading Legend			
	X	Δ	⊗	○	○	●	X	Δ
					1.0	2.0	3.0	4.0
					10	20	30	40
		45.9						45.9
	4	21.0			X		Δ	
5	9	21.1			X		Δ	
	7	19.3			X		Δ	
10	9	22.4			X		Δ	
	10	20.3			X		Δ	
	12	21.2	102.6	2.3	X		○	
20	23	16.4	116.7	5.4			Δ	5.4
	12	16.7	120.7	3.8	X		Δ	

Water encountered at 23.0 feet during drilling operations (W.D.).
 Water recorded at 23.0 feet on completion of drilling operations (A.D.).
 Water recorded at _____ feet _____ hours after completion of drilling operations (A.D.).



General Notes

SAMPLE CLASSIFICATION

Soil sample classification is based on the Unified Soil Classification System, the Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), ASTM D-2488, the Standard Test Method for Classification of Soils for Engineering Purposes, ASTM D-2487 (when applicable), and the modifiers noted below.

CONSISTENCY OF COHESIVE SOILS

<u>Term</u>	<u>Qu -tons/sq. ft.</u>	<u>N (unreliable)</u>
Very Soft	0.00 - 0.25	0 - 2
Soft	0.26 - 0.49	3 - 4
Stiff	0.50 - 0.99	5 - 8
Tough	1.00 - 1.99	9 - 15
Very Tough	2.00 - 3.99	16 - 30
Hard	4.00 - 7.99	30 +
Very Hard	8.00 +	

RELATIVE DENSITY OF GRANULAR SOILS

<u>Term</u>	<u>N - blows/foot</u>
Very Loose	0 - 4
Loose	5 - 9
Medium Dense	10 - 29
Dense	30 - 49
Very Dense	50 +

IDENTIFICATION AND TERMINOLOGY

<u>Term</u>	<u>Size Range</u>
Boulder	over 8 in.
Cobble	3 in. to 8 in.
Gravel	-coarse 1 in. to 3 in.
	-medium 3/8 in. to 1 in.
	-fine #4 sieve to 3/8 in.
Sand	-coarse #10 sieve to #4 sieve
	-medium #40 sieve to #10 sieve
	-fine #200 sieve to #40 sieve
Silt	0.002 mm to #200 sieve
Clay	smaller than 0.002 mm

Modifying Term Percent by Weight

Trace	1 - 10
Little	11 - 20
Some	21 - 35
And	36 - 50

Moisture Condition

Dry
Damp
Very Damp
Saturated

DRILLING, SAMPLING & SOIL PROPERTY SYMBOLS

CF - Continuous Flight Auger
 HS - Hollow Stem Auger
 HA - Hand Auger
 RD - Rotary Drilling
 AX - Rock Core, 1-3/16 in. diameter
 BX - Rock Core, 1-5/8 in. diameter
 NX - Rock Core, 2-1/8 in. diameter
 S - Sample Number
 T - Type of Sample
 J - Jar
 AS - Auger Sample
 SS - Split-spoon (2 in. O.D. with 1-3/8 in. I.D.)
 ST - Shelby Tube (2 in. O.D. with 1-7/8 in. I.D.)
 R - Recovery Length, in.
 B - Blows/ 6 in. interval, Standard Penetration Test (SPT)
 N - Blows/ foot to drive 2 in. O.D. split-spoon sampler with 140 lb. hammer falling 30 in., (STP)
 Pen. - Pocket Penetrometer reading, tons/ sq. ft.
 W - Water Content, % of dry weight
 Uw - Dry Unit Weight of soil, lbs./ cu. ft.
 Qu - Unconfined Compressive Strength, tons/ sq. ft.
 Str - % Strain at Qu.
 WL - Water Level
 WD - While Drilling
 AD - After Drilling
 DCI - Dry Cave-in
 WCI - Wet Cave-in
 LL - Liquid Limit, %
 PL - Plastic limit, %
 PI - Plasticity Index (LL-PL)
 LI - Liquidity Index [(W-PL)/PI]



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April 14, 2015
File No. 22021

Mr. Joel E. Christell, P.E.
Civiltech Engineering, Inc.
450 E. Devon Avenue, Suite 300
Chicago, IL 60143

Re: Geotechnical Investigation
New Pedestrian Bridge
Middlefork Savanna
Lake Forest, Illinois

Dear Mr. Christell:

The following is a supplemental report to our original geotechnical investigation completed for the Lake County Forest Preserve District in January 2010 for the above reference project in the City of Lake Forest, Illinois.

The supplemental report was requested to determine estimated pile lengths and suitability of soils to support spread footings which are currently being considered for design of the pedestrian bridge.

PROPOSED IMPROVEMENTS

We understand that it is proposed to construct a new 10 ft. wide pedestrian bridge spanning approximately 220 feet over the Metra railroad tracks and beyond the existing abutments at the Middlefork Savanna in Lake Forest. We understand that the bridge is expected to be supported on new abutments located behind the existing abutments.

SCOPE OF THE INVESTIGATION

The field investigation included 2 structure borings extending to 50.0 feet at the locations indicated on the enclosed sketch. Surface elevations were determined using the data presented on the topography survey estimated to the nearest 0.5 feet. The results of all field determinations and laboratory testing are included in summary with this report.

RESULTS OF THE INVESTIGATION

Enclosed are boring logs indicating the soil conditions encountered at each location. The site surface conditions include the existing abutments, old pavement materials and vegetation.

Deep fill soil conditions were encountered at each boring. The composition of the fill includes the presence of moderately to well compacted clay/silt mixtures extending to depths of 19.5 feet to 23.5 feet at these boring locations. The limits of fill placement were not determined within the scope of this investigation.

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The underlying soil conditions include the presence of cohesive soils. These are classified as very tough to hard clay/silt mixtures with lesser portions of sand and gravel.

Non-cohesive soils were encountered at the deeper elevations as indicated at both boring locations. These include medium dense to dense sand/gravel/silt/clay, sand, silt/clay, sand/gravel and silt mixtures. The non-cohesive granular soils are often in a very damp to saturated condition. Cobbles and boulders may be present within the site soils at any elevation, although none were encountered while drilling.

The following table summarizes depth ranges below existing grade, the magnitude of soil strength within these ranges and other information:

<u>Boring</u>	<u>Surface Elevation (feet)</u>	<u>Depth Range Below Existing Surface (feet)</u>	<u>Soil Strength (lbs./sq.ft.)</u>	<u>Recorded Water Levels, W.D./A.D. (feet)</u>
1	696.0	3.5 to 7.0	3,000	44.5/40.0
		7.0 to 24.0	4,000	
		24.0 to 32.0	6,000	
		32.0 to 45.0	5,000	
		45.0 to 47.0	6,000	
2	696.0	3.5 to 8.5	3,000	44.0/37.0
		8.5 to 20.0	4,000	
		20.0 to 26.0	6,000	
		26.0 to 40.0	4,000	
		40.0 to 47.0	5,000	

It is expected that foundations can be supported on undisturbed natural soils or the suitable fill soils located at any elevation within the depth ranges indicated in the above table. Above these depth ranges the soils are not considered able to support foundations, even at reduced design bearing values, due to long-term settlement considerations.

SUBSURFACE WATER

The boring logs and the above table indicate the depth at which subsurface water was encountered in the bore holes at the time of the drilling operations and during the period of these readings. It is expected that fluctuations from the water levels recorded will occur over a period of time due to variations in rainfall, temperature, subsurface soil conditions, soil permeability and other factors not evident at the time of the water level measurements.

FOUNDATIONS

Based on the results of this investigation it is our opinion that isolated footing foundations may be considered for support of the new bridge loads. These foundations can be supported on

undisturbed natural soils or suitable fill soils located below all pavement materials, debris, unsuitable fill soils, low strength soils and other unsuitable conditions which may be encountered. Soil strength values and the depths at which they are expected to be encountered at these boring locations are indicated in the above table. A net allowable bearing value of 3,000 lbs./sq.ft. is available for foundation design.

All foundations should extend at least 60.0 inches below exposed surface elevations to provide adequate protection against uplift due to freezing of the supporting soils. We recommend providing adequate reinforcing steel in foundation walls and piers to minimize the effects of long-term differential settlement.

The structural engineer could also consider a pile foundation system for support of the new bridge. The design engineer can consider using 12 inch or 14 inch metal shell piles, or steel H-piles for support of the new structure. The following are our estimated pile lengths based upon the Modified IDOT Static Method of Estimating Pile Length using a geotechnical resistance factor (Φ_c) of 0.55, modified August, 2011.

Table of Estimated Lengths for Metal Shell 12" with .179" walls

<u>Location</u>	<u>R_n (kips) ⁽¹⁾</u>	<u>R_f (kips) ⁽²⁾</u>	<u>Length (ft.) ⁽³⁾</u>
West Abutment (B-1)	109	60	10
East Abutment (B-2)	109	60	16

Table of Estimated Lengths for 12" Timber Piles

<u>Location</u>	<u>R_n (kips) ⁽¹⁾</u>	<u>R_f (kips) ⁽²⁾</u>	<u>Length (ft.) ⁽³⁾</u>
West Abutment (B-1)	109	60	16
East Abutment (B-2)	109	60	19

Table of Estimated Lengths for HP 10 x 42

<u>Location</u>	<u>R_n (kips) ⁽¹⁾</u>	<u>R_f (kips) ⁽²⁾</u>	<u>Length (ft.) ⁽³⁾</u>
West Abutment (B-1)	109	60	36
East Abutment (B-2)	109	60	26

⁽¹⁾ R_n: Nominal Required Bearing

⁽²⁾ R_f: Factored Resistance Available

⁽³⁾ Pile Lengths were estimated using a ground surface against driving elevation of 696.0 feet with a pile cutoff elevation of 697.0 feet.

Downdrag, liquefaction and scour are not expected to affect the design of the new bridge foundations.

We recommend that one test pile be performed at each substructure location. The piles should be driven until the required driving resistance is developed as determined using the appropriate pile driving formula. The test piles should be driven to not less than 110% of the Nominal Required Bearing. We would also recommend that the WSDOT formula be used in the field as the construction verification. The designer should also consider the use of metal shell pile shoes as the piles may encounter cobbles, boulders and thin dense layers of material during driving.

The bridge is located in Seismic Performance Zone (SPZ) 1. Based on the soil conditions encountered and using the LRFD Seismic Soil Site Class Definition, Site Class D is applicable to the entire bridge. The design spectral acceleration at 1.0 sec (S_{D1}) = 0.091g and the design spectral acceleration at 0.2 sec (S_{D5}) = 0.128g.

SUBSURFACE WATER

The boring logs and the above table indicate the depth at which subsurface water was encountered in the bore holes at the time of the drilling operations and during the period of these readings. It is expected that fluctuations from the water levels recorded will occur over a period of time due to variations in rainfall, temperature, subsurface soil conditions, soil permeability and other factors not evident at the time of the water level measurements.

DEWATERING

Excavations may require dewatering due to subsurface water seepage and/or surface precipitation. This water can likely be removed to depths of several feet by standard sump and pump operations. Soils exposed at foundation elevations should not be permitted to become saturated. Loss of bearing strength and stability may occur thus requiring additional soil excavation.

DESIGN

Where applicable, the following values can be utilized for design of the proposed foundations in the area of borings 1 and 2:

<u>Item</u>	<u>On-Site Soil Undrained</u>	<u>Granular Backfill Undrained</u>
Active Pressure:	90 psf/f	45 psf/f
At Rest Pressure:	105 psf/f	60 psf/f
Passive Pressure:	245 psf/f	260 psf/f

Passive pressure values are not available for the design within 4.0 feet of the exposed surfaces due to the seasonal considerations.

CONCLUSION

The information within this report is intended to provide initial information concerning subsurface soil and water conditions on the site. Variations in subsurface conditions are expected to be present between boring locations due to naturally changing and fill soil conditions.

Our understanding of the proposed improvements is based on limited information available to us at the writing of this report. The findings of the investigation and the recommendations presented are not considered applicable to significant changes in the scope of the improvements or applicable to alternate site uses. We recommend that proposed foundation plans be reviewed by our office to determine if additional considerations are necessary to address anticipated subsurface conditions.

Soil conditions encountered at foundation elevations are recommended to be tested to verify the presence of design soil strength prior to concrete placement.

If you have any questions concerning the findings or recommendations presented in this report, please let me know.

Very truly yours,

SOIL AND MATERIAL CONSULTANTS, INC.



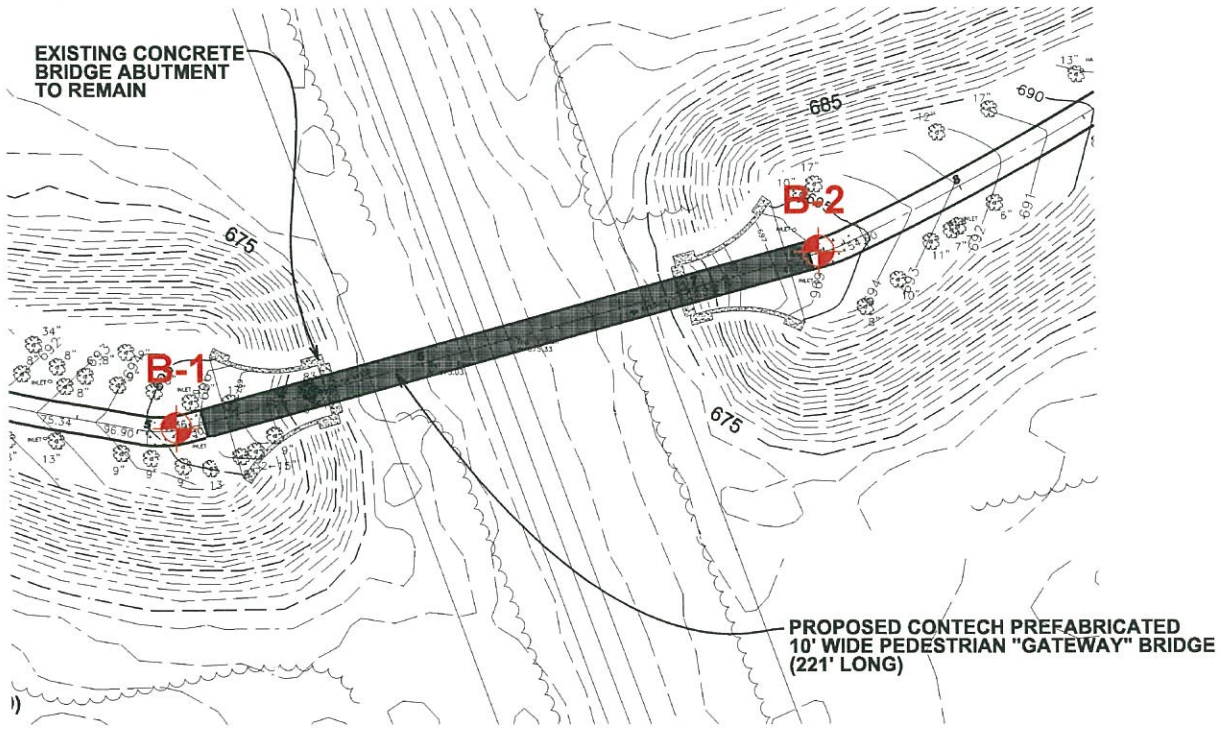
Reid T. Steinbach, E.I.T
Project Engineer



Thomas P. Johnson, P.E.
President

RTS/TPJ:ek
Enc.

CC: Gregory J. Hatlestad, P.E., S.E. – Civiltech Engineering, Inc.



SMC		SOIL AND MATERIAL CONSULTANTS, INC.	LOCATION SKETCH
Client:	CIVILTECH ENGINEERING INC.		
Project:	NEW PEDESTRIAN BRIDGE		
Location:	LAKE FOREST, ILLINOIS		
File No.	22021	Date:	01-15-10
		Scale:	1" ≈ 50'

Client: Lake County Forest Preserve District

File No. 19846

Date Drilled: 1/15/10

Reference: New Pedestrian Bridge over Metra RR
Middle Fork Savanna
Lake Forest, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

Elevation 696.0' Existing Surface
(a) see page 2 of 2

Crushed limestone with fines - 22.0"

(b) see page 2 of 2

5 Brown-dark brown clay & silt, trace sand & gravel, damp, hard - Fill

10

15

20

25 Brown-gray clay & silt, trace sand & gravel, damp, hard

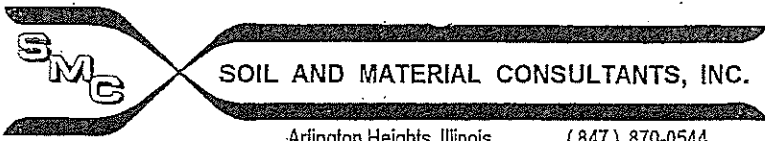
30 Brown clay, some silt, trace sand & gravel, damp, very tough

35 Gray clay, some silt, trace sand & gravel, damp, very tough

40

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	
	×	△	⌘	○	
21		3.5 12.9			△ X
11		19.1			X △ ●
22		18.1			△ X ● 4.5*
23		17.5			△ X ● 4.5*
16		13.4			△ X ● 4.5*
17		16.2			X △ ● 4.5*
15		20.0			X △ ● 4.5*
19		17.3			X △ ● 4.5*
18		20.5			X △ ● 4.5*
23		16.5	115.1	4.9	△ X ○ 4.9
23		16.4	119.5	5.7	△ X ○ 5.7
21		19.0	113.9	3.5	X △ ○
18		20.1	111.6	2.9	X △ ●
14		17.7	120.3	3.0	X △ ● ○

Water encountered at 44.5 feet during drilling operations (W.D).
Water recorded at 40.0 feet on completion of drilling operations (A.D.).
Water recorded at _____ feet _____ hours after completion of drilling operations (A.D.).



SOIL AND MATERIAL CONSULTANTS, INC.

Arlington Heights, Illinois (847) 870-0544

SOIL BORING LOG 1

Logged By: DA Page: 2 of 2

Client: Lake Forest Forest Preserve District

File No. 19846 Date Drilled: 1/15/10

Reference: New Pedestrian Bridge over Metra RR
Middle Fork Savanna
Lake Forest, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

Elevation

depth, ft.	standard penetration	moisture content	dry unit weight, lbs./cu.ft.	unconfined comp. strength	
	×	△	⊗	○	○ unconfined compressive strength, tons/sq.ft. ● penetrometer reading, tons/sq.ft. 1.0 2.0 3.0 4.0 × standard penetration "N", blows/ft. △ moisture content, % 10 20 30 40
45	29	19.8 9.9	110.4	3.8	△ ● ⊗
50	31	12.8			△ ×
55					
60					
65					
70					
75					
80					

Gray clay, some silt, trace sand & gravel, damp, very tough

Gray sand & gravel, some silt & clay, damp-very damp, medium dense

Gray fine sand, trace medium-coarse sand & gravel, damp-very damp, dense

End of Boring

- (a) Bituminous concrete - 2.0"
- (b) Black cinders, trace clay & silt, damp, medium dense - Fill

Water encountered at 44.5 feet during drilling operations (W.D).
Water recorded at 40.0 feet on completion of drilling operations (A.D).
Water recorded at _____ feet _____ hours after completion of drilling operations (A.D).

Client: Lake County Forest Preserve District

File No. 19846 Date Drilled: 1/18/10

Reference: New Pedestrian Bridge over Metra RR
Middle Fork Savanna
Lake Forest, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

Elevation 696.0' Existing Surface
(a) see page 2 of 2

Crushed limestone, some cinders, damp,
medium dense - 34.0"

5 Brown-dark brown clay & silt, trace sand
& gravel, damp, very tough - Fill

10
15
14 21.2 105.7 2.9
14 21.0 18.2
20 Brown clay, some silt, trace sand & gravel,
damp, very tough to hard

18 18.7 113.7 3.3

25 26 18.9 117.9 3.3

19 18.0 118.2 4.0

30 22 17.1 119.8 4.4

Gray clay, some silt, trace sand & gravel,
damp, tough to very tough

35 12 17.6 118.6 1.7

Water encountered at 44.0 feet during drilling operations (W.D.)

Water recorded at 37.0 feet on completion of drilling operations (A.D.)

Water recorded at _____ feet _____ hours after completion of drilling operations (A.D.)

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	penetrometer reading, tons/sq.ft.	moisture content, %
	X	Δ	⊗	○	●	△
					1.0 2.0 3.0 4.0	10 20 30 40
16		34.5				
5		18.5	112.8	2.8		
9		18.6				
10		19.1	113.1	2.9		
13		20.4	109.4	3.1		
11		20.2				
14		21.2	105.7	2.9		
14		21.0	18.2			
18		18.7	113.7	3.3		
25		26	18.9	117.9	3.3	
19		18.0	118.2	4.0		
30		22	17.1	119.8	4.4	
35		12	17.6	118.6	1.7	
40		17	19.2	112.8	3.2	



General Notes

SAMPLE CLASSIFICATION

Soil sample classification is based on the Unified Soil Classification System, the Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), ASTM D-2488, the Standard Test Method for Classification of Soils for Engineering Purposes, ASTM D-2487 (when applicable), and the modifiers noted below.

CONSISTENCY OF COHESIVE SOILS

Term	Qu -tons/sq. ft.	N (unreliable)
Very Soft	0.00 - 0.25	0 - 2
Soft	0.26 - 0.49	3 - 4
Stiff	0.50 - 0.99	5 - 8
Tough	1.00 - 1.99	9 - 15
Very Tough	2.00 - 3.99	16 - 30
Hard	4.00 - 7.99	30 +
Very Hard	8.00 +	

RELATIVE DENSITY OF GRANULAR SOILS

Term	N - blows/foot
Very Loose	0 - 4
Loose	5 - 9
Medium Dense	10 - 29
Dense	30 - 49
Very Dense	50 +

IDENTIFICATION AND TERMINOLOGY

Term	Size Range
Boulder	over 8 in.
Cobble	3 in. to 8 in.
Gravel	-coarse 1 in. to 3 in.
	-medium 3/8 in. to 1 in.
	-fine #4 sieve to 3/8 in.
Sand	-coarse #10 sieve to #4 sieve
	-medium #40 sieve to #10 sieve
	-fine #200 sieve to #40 sieve
Silt	0.002 mm to #200 sieve
Clay	smaller than 0.002 mm

Modifying Term Percent by Weight

Trace	1 - 10
Little	11 - 20
Some	21 - 35
And	36 - 50

Moisture Condition

Dry
Damp
Very Damp
Saturated

DRILLING, SAMPLING & SOIL PROPERTY SYMBOLS

CF	- Continuous Flight Auger
HS	- Hollow Stem Auger
HA	- Hand Auger
RD	- Rotary Drilling
AX	- Rock Core, 1-3/16 in. diameter
BX	- Rock Core, 1-5/8 in. diameter
NX	- Rock Core, 2-1/8 in. diameter
S	- Sample Number
T	- Type of Sample
J	- Jar
AS	- Auger Sample
SS	- Split-spoon (2 in. O.D. with 1-3/8 in. I.D.)
ST	- Shelby Tube (2 in. O.D. with 1-7/8 in. I.D.)
R	- Recovery Length, in.
B	- Blows/ 6 in. interval, Standard Penetration Test (SPT)
N	- Blows/ foot to drive 2 in. O.D. split-spoon sampler with 140 lb. hammer falling 30 in., (STP)
Pen.	- Pocket Penetrometer reading, tons/ sq. ft.
W	- Water Content, % of dry weight
Uw	- Dry Unit Weight of soil, lbs./ cu. ft.
Qu	- Unconfined Compressive Strength, tons/ sq. ft.
Str	- % Strain at Qu.
WL	- Water Level
WD	- While Drilling
AD	- After Drilling
DCI	- Dry Cave-in
WCI	- Wet Cave-in
LL	- Liquid Limit, %
PL	- Plastic limit, %
PI	- Plasticity Index (LL-PL)
LI	- Liquidity Index [(W-PL)/PI]

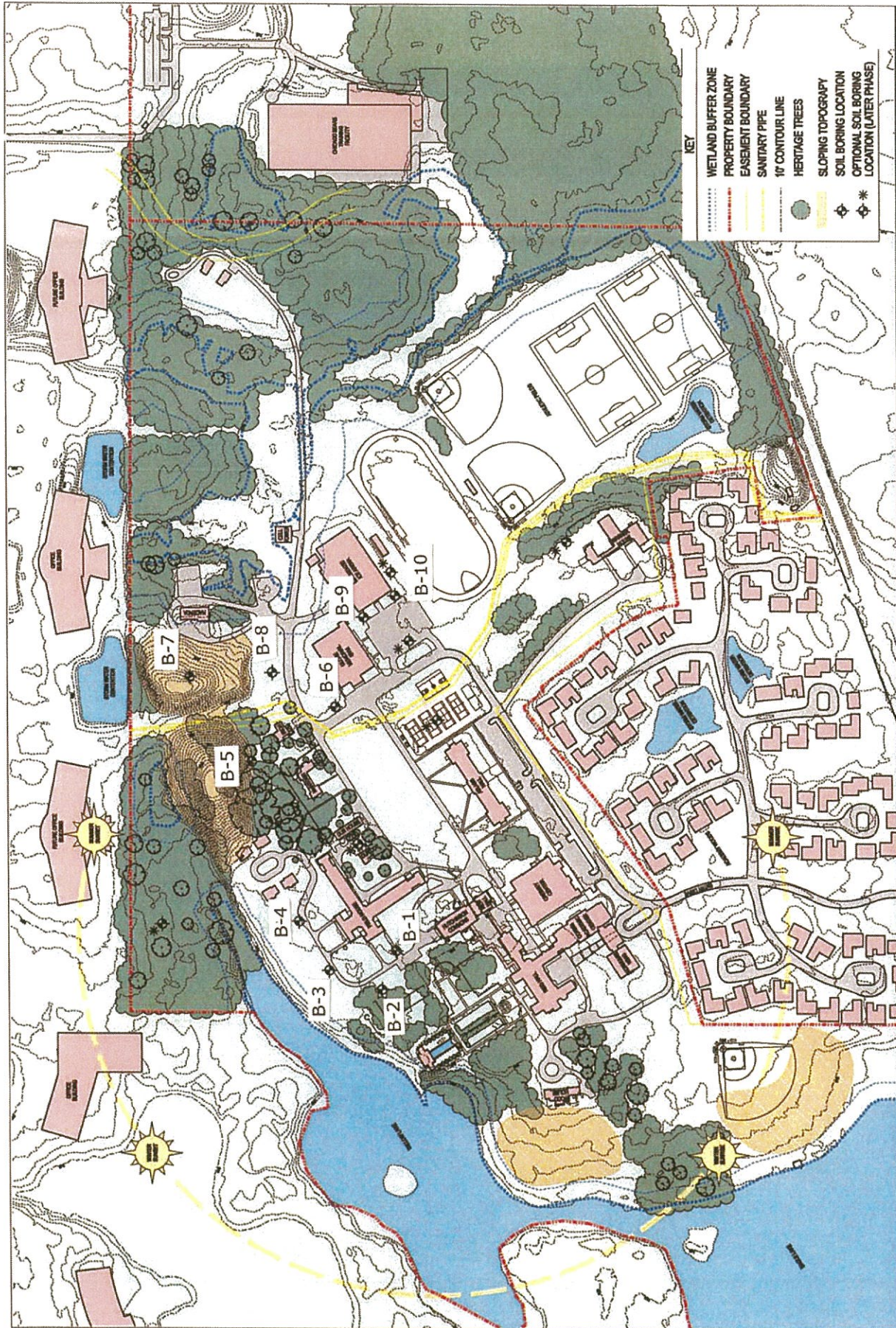
SOIL EXPLORATION AND ANALYSIS
LAKE FOREST ACADEMY EXPANSION
PHASE 1

Lake Forest, Illinois

PREPARED FOR
LAKE FOREST ACADEMY
LAKE FOREST, ILLINOIS

BY:
MIDLAND STANDARD ENGINEERING & TESTING, INC
EAST DUNDEE, ILLINOIS

JULY, 2007



Lake Forest Academy
 Proposed Boring Soil Locations
 Bowie Gridley Architects

Figure 3

MIDLAND STANDARD ENGINEERING & TESTING, INC.

558 Plate Drive Unit 6 East Dundee, Illinois 60118 (847) 844-1895

RECORD OF SUBSURFACE EXPLORATION

BORING B-5 PAGE 1 OF 1

PROJECT NAME <u> Lake Forest Academy </u> <hr/> MSET PROJECT NO. <u> 77262 </u> SITE LOCATION <u> Lake Forest, Illinois </u> <hr/> <u> Residence </u>	DATE STARTED <u> 7/5/07 </u> DATE COMPLETED <u> 7/5/07 </u> LOGGED BY <u> SE </u> BORING METHOD <u> CFA </u> GW ENCOUNTERED WHILE DRILLING <u> none </u> GROUNDWATER, AT COMPLETION <u> dry </u> GROUNDWATER, AFTER _____ DAYS _____ HOLE CAVED, _____ AT _____
------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

ELEV.	DESCRIPTION	DEPTH	SAMPLE	N	Qu	Qp	Wc	Remarks
678.0	SURFACE	Feet			LAB	FIELD	LAB	
	±8" Dark Brown Silty CLAY/TOPSOIL							
	Brown and Grey Silty CLAY, trace Sand, trace Gravel, hard, (CL): FILL		SS-1	15	--	4.5+	15	
			SS-2A SS-2B	7	-- 3.66	4.0 2.5	14 33	
	Black to Dark Grey Silty CLAY, very stiff, (CH)	5						
	Yellow-Brown and Grey Silty CLAY, trace Sand, trace Gravel, very stiff, (CL-CH)		SS-3	11	2.47	2.25	26	
			SS-4	13	--	3.0	19	
	Brown Silty CLAY, trace Sand, trace Gravel, very stiff to hard, (CL)	10						
	Brown-Grey		SS-5	18	4.46	4.25	18	
	Grey Silty CLAY, trace Sand, trace Gravel, very stiff, (CL)		SS-6	11	3.49	3.5	17	
	End of Boring @ 15.0'	15						

SYMBOLS

N: STANDARD PENETRATION, BLOWS/FT.
 Qu: UNCONFINED COMPRESSIVE STRENGTH, TONS/SQ. FT.
 Wc: WATER CONTENT, %
 LL: LIQUID LIMIT, %
 PI: PLASTICITY INDEX, %
 Dd: NATURAL DRY DENSITY, LBS./CU. FT.
 Qp: HAND PENETROMETER, TONS/SQ. FT.
 GW: GROUND WATER

SAMPLE DESIGNATION

SS- DRIVEN SPLIT SPOON 1 3/8" I.D., 2" O.D.
 ST- PRESSED SHELBY TUBE
 AU- AUGER SAMPLE
 RC- ROCK CORE - NXM
 BORING METHOD
 HSA- HOLLOW STEM AUGER
 CFA- CONTINUOUS FLIGHT AUGERS
 C- CASING
 MD- MUD DRILLING

NOTE: The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

MIDLAND STANDARD ENGINEERING & TESTING, INC.

558 Plate Drive Unit 6 East Dundee, Illinois 60118 (847) 844-1895

RECORD OF SUBSURFACE EXPLORATION

BORING B-7 PAGE 1 OF 2

PROJECT NAME <u>Lake Forest Academy</u>	DATE STARTED <u>7/5/07</u>
MSET PROJECT NO. <u>77262</u>	DATE COMPLETED <u>7/5/07</u>
SITE LOCATION <u>Lake Forest, Illinois</u>	LOGGED BY <u>SE</u> BORING METHOD <u>CFA</u>
<u>Field House (on stockpile)</u>	GW ENCOUNTERED WHILE DRILLING <u>none</u>
	GROUNDWATER, AT COMPLETION <u>dry</u>
	GROUNDWATER, AFTER _____ DAYS _____
	HOLE CAVED, _____ AT _____

ELEV.	DESCRIPTION	DEPTH	SAMPLE	N	Qu	Qp	Wc	Remarks
692.3	SURFACE	Feet			LAB	FIELD	LAB	
	<i>Dark Brown Silty CLAY, little to some Sand, little Gravel, (SC): FILL</i>							
	<i>Dark Grey and Black Silty CLAY, trace Sand, trace Gravel, (CL-CH): FILL</i>	5	SS-1	4	--	1.5	22	
	<i>Brown Silty CLAY, little Sand, trace Gravel, very stiff to very hard, (CL)</i>	10	SS-2A SS-2B	11	-- 2.79	1.5 3.0	21 25	
			SS-3	20	9.70+	4.0	16	
		15	SS-4	27	9.70+	4.5+	17	
			SS-5	24	9.70+	4.5+	16	
	<i>Brown-Grey</i>		SS-6	21	7.37	4.5+	17	
	----- <i>continued</i>	20						

SYMBOLS
 N: STANDARD PENETRATION, BLOWS/FT.
 Qu: UNCONFINED COMPRESSIVE STRENGTH, TONS/SQ. FT.
 Wc: WATER CONTENT, %
 LL: LIQUID LIMIT, %
 PI: PLASTICITY INDEX, %
 Dd: NATURAL DRY DENSITY, LBS./CU. FT.
 Qp: HAND PENETROMETER, TONS/SQ. FT.
 GW: GROUND WATER

SAMPLE DESIGNATION
 SS- DRIVEN SPLIT SPOON 1 3/8" I.D., 2" O.D.
 ST- PRESSED SHELBY TUBE
 AU- AUGER SAMPLE
 RC- ROCK CORE - NXM
BORING METHOD
 HSA- HOLLOW STEM AUGER
 CFA- CONTINUOUS FLIGHT AUGERS
 C- CASING
 MD- MUD DRILLING

NOTE: The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

MIDLAND STANDARD ENGINEERING & TESTING, INC.

558 Plate Drive Unit 6 East Dundee, Illinois 60118 (847) 844-1895

RECORD OF SUBSURFACE EXPLORATION

BORING B-7 PAGE 2 OF 2

PROJECT NAME Lake Forest Academy

 MSET PROJECT NO. 77262

 SITE LOCATION Lake Forest, Illinois

ELEV.	DESCRIPTION	DEPTH	SAMPLE	N	Qu	Qp	Wc	Remarks
672.3	CONTINUED	20			LAB	FIELD	LAB	
	Brown-Grey Silty CLAY, trace Sand, trace Gravel, hard, (CL)							
	Grey Silty CLAY, trace Sand, trace Gravel, very stiff, (CL)	25	SS-7	13	2.87	2.25	21	
	End of Boring @ 25.0'							

SYMBOLS

N: STANDARD PENETRATION, BLOWS/FT.
 Qu: UNCONFINED COMPRESSIVE STRENGTH, TONS/SQ. FT.
 Wc: WATER CONTENT, %
 LL: LIQUID LIMIT, %
 PI: PLASTICITY INDEX, %
 Dd: NATURAL DRY DENSITY, LBS./CU. FT.
 Qp: HAND PENETROMETER, TONS/SQ. FT.
 GW: GROUND WATER

SAMPLE DESIGNATION

SS- DRIVEN SPLIT SPOON 1 3/8" I.D., 2" O.D.
 ST- PRESSED SHELBY TUBE
 AU- AUGER SAMPLE
 RC- ROCK CORE - NXM
BORING METHOD
 HSA- HOLLOW STEM AUGER
 CFA- CONTINUOUS FLIGHT AUGERS
 C- CASING
 MD- MUD DRILLING

NOTE: The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

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:

Lake County Forest Preserve District

City of Lake Forest

Lake Forest Academy

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

BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE) (RETURN FORM WITH BID)

Effective: November 2, 2006

Revised: July 1, 2015

Description. Bituminous material cost adjustments will be made to provide additional compensation to the Contractor, or credit to the Department, for fluctuations in the cost of bituminous materials when optioned by the Contractor. The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments.

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

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

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

Where: CA = Cost Adjustment, \$.

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

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

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

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

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

For bituminous materials measured in gallons: $Q, \text{ tons} = V \times 8.33 \text{ lb/gal} \times SG / 2000$

For bituminous materials measured in liters: $Q, \text{ metric tons} = V \times 1.0 \text{ kg/L} \times SG / 1000$

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

- D = Depth of the HMA mixture, in. (mm).
- G_{mb} = Average bulk specific gravity of the mixture, from the approved mix design.
- V = Volume of the bituminous material, gal (L).
- SG = Specific Gravity of bituminous material as shown on the bill of lading.

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

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

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

Return With Bid

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

**OPTION FOR
BITUMINOUS MATERIALS COST ADJUSTMENTS**

The bidder shall submit this completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments. After award, this form, when submitted, shall become part of the contract.

Contract No.: _____

Company Name: _____

Contractor's Option:

Is your company opting to include this special provision as part of the contract?

Yes No

Signature: _____ **Date:** _____

80173

COARSE AGGREGATE QUALITY (BDE)

Effective: July 1, 2015

Revise Article 1004.01(b) of the Standard Specifications to read:

“(b) Quality. The coarse aggregate shall be according to the quality standards listed in the following table.

COARSE AGGREGATE QUALITY				
QUALITY TEST	CLASS			
	A	B	C	D
Na ₂ SO ₄ Soundness 5 Cycle, ITP 104 ^{1/} , % Loss max.	15	15	20	25 ^{2/}
Los Angeles Abrasion, ITP 96 ^{11/} , % Loss max.	40 ^{3/}	40 ^{4/}	40 ^{5/}	45
Minus No. 200 (75 µm) Sieve Material, ITP 11	1.0 ^{6/}	---	2.5 ^{7/}	---
Deleterious Materials ^{10/}				
Shale, % max.	1.0	2.0	4.0 ^{8/}	---
Clay Lumps, % max.	0.25	0.5	0.5 ^{8/}	---
Coal & Lignite, % max.	0.25	---	---	---
Soft & Unsound Fragments, % max.	4.0	6.0	8.0 ^{8/}	---
Other Deleterious, % max.	4.0 ^{9/}	2.0	2.0 ^{8/}	---
Total Deleterious, % max.	5.0	6.0	10.0 ^{8/}	---
Oil-Stained Aggregate ^{10/} , % max	5.0	---	---	---

1/ Does not apply to crushed concrete.

2/ For aggregate surface course and aggregate shoulders, the maximum percent loss shall be 30.

3/ For portland cement concrete, the maximum percent loss shall be 45.

4/ Does not apply to crushed slag or crushed steel slag.

5/ For hot-mix asphalt (HMA) binder mixtures, except when used as surface course, the maximum percent loss shall be 45.

6/ For crushed aggregate, if the material finer than the No. 200 (75 µm) sieve consists of the dust from fracture, essentially free from clay or silt, this percentage may be increased to 2.5.

7/ Does not apply to aggregates for HMA binder mixtures.

8/ Does not apply to Class A seal and cover coats.

9/ Includes deleterious chert. In gravel and crushed gravel aggregate, deleterious chert shall be the lightweight fraction separated in a 2.35 heavy media separation. In crushed stone aggregate, deleterious chert shall be the lightweight fraction separated in a 2.55 heavy media separation. Tests shall be run according to ITP 113.

10/ Test shall be run according to ITP 203.

11/ Does not apply to crushed slag.

All varieties of chert contained in gravel coarse aggregate for portland cement concrete, whether crushed or uncrushed, pure or impure, and irrespective of color, will be classed as chert and shall not be present in the total aggregate in excess of 25 percent by weight (mass).

Aggregates used in Class BS concrete (except when poured on subgrade), Class PS concrete, and Class PC concrete (bridge superstructure products only, excluding the approach slab) shall contain no more than two percent by weight (mass) of deleterious materials. Deleterious materials shall include substances whose disintegration is accompanied by an increase in volume which may cause spalling of the concrete."

80360

CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

Effective: June 1, 2010

Revised: November 1, 2014

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

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

Effective Dates	Horsepower Range	Model Year
June 1, 2010 ^{1/}	600-749	2002
	750 and up	2006
June 1, 2011 ^{2/}	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006
June 1, 2012 ^{2/}	50-99	2004
	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006

1/ Effective dates apply to Contractor diesel powered off-road equipment assigned to the contract.

2/ Effective dates apply to Contractor and subcontractor diesel powered off-road equipment assigned to the contract.

The retrofit emission control devices shall achieve a minimum PM emission reduction of 50 percent and shall be:

- a) Included on the U.S. Environmental Protection Agency (USEPA) *Verified Retrofit Technology List* (<http://www.epa.gov/cleandiesel/verification/verif-list.htm>), or verified by the California Air Resources Board (CARB) (<http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>); or
- b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit

device manufacturer that the emission control device provides a minimum PM emission reduction of 50 percent.

Note: Large cranes (Crawler mounted cranes) which are responsible for critical lift operations are exempt from installing retrofit emission control devices if such devices adversely affect equipment operation.

Diesel powered off-road equipment with engine ratings of 50 hp and above, which are unable to be retrofitted with verified emission control devices or if performance certifications are not available which will achieve a minimum 50 percent PM reduction, may be granted a waiver by the Department if documentation is provided showing good faith efforts were made by the Contractor to retrofit the equipment.

Construction shall not proceed until the Contractor submits a certified list of the diesel powered off-road equipment that will be used, and as necessary, retrofitted with emission control devices. The list(s) shall include (1) the equipment number, type, make, Contractor/rental company name; and (2) the emission control devices make, model, USEPA or CARB verification number, or performance certification from the retrofit device manufacturer. Equipment reported as fitted with emissions control devices shall be made available to the Engineer for visual inspection of the device installation, prior to being used on the jobsite.

The Contractor shall submit an updated list of retrofitted off-road construction equipment as retrofitted equipment changes or comes on to the jobsite. The addition or deletion of any diesel powered equipment shall be included on the updated list.

If any diesel powered off-road equipment is found to be in non-compliance with any portion of this special provision, the Engineer will issue the Contractor a diesel retrofit deficiency deduction.

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

Diesel Retrofit Deficiency Deduction

When the Engineer determines that a diesel retrofit deficiency exists, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

The deficiency will be based on lack of diesel retrofit emissions control.

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected.

Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

80261

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000

Revised: July 2, 2016

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 13.00 % 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:
<http://www.idot.illinois.gov/doing-business/certifications/disadvantaged-business-enterprise-certification/il-ucp-directory/index>.

BIDDING PROCEDURES. Compliance with this Special Provision is required prior to the award of the contract and the failure of the low bidder to comply will render the bid not responsive.

In order to assure the timely award of the contract, the low bidder shall submit:

- (a) The bidder shall submit a DBE Utilization Plan on completed Department forms SBE 2025 and 2026.
 - (1) The final Utilization Plan must be submitted within five calendar days after the date of the letting in accordance with subsection (a)(2) of Bidding Procedures.

- (2) To meet the five day requirement, the bidder may send the Utilization Plan electronically by scanning and sending to DOT.DBE.UP@illinois.gov or faxing to (217) 785-1524. The subject line must include the bid Item Number and the Letting date. The Utilization Plan should be sent as one .pdf file, rather than multiple files and emails for the same Item Number. It is the responsibility of the bidder to obtain confirmation of email or fax delivery.

Alternatively, the Utilization Plan may be sent by certified mail or delivery service within the five calendar day period. If a question arises concerning the mailing date of a Utilization Plan, the mailing date will be established by the U.S. Postal Service postmark on the certified mail receipt from the U.S. Postal Service or the receipt issued by a delivery service when the Utilization Plan is received by the Department. It is the responsibility of the bidder to ensure the postmark or receipt date is affixed within the five days if the bidder intends to rely upon mailing or delivery to satisfy the submission day requirement. The Utilization Plan is to be submitted to:

Illinois Department of Transportation
Bureau of Small Business Enterprises
Contract Compliance Section
2300 South Dirksen Parkway, Room 319
Springfield, Illinois 62764

The Department will not accept a Utilization Plan if it does not meet the five day submittal requirement and the bid will be declared not responsive. In the event the bid is declared not responsive due to a failure to submit a Utilization Plan or failure to comply with the bidding procedures set forth herein, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty, and may deny authorization to bid the project if re-advertised for bids. The Department reserves the right to invite any other bidder to submit a Utilization Plan at any time for award consideration.

- (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 Utilization 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 scanned or 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 Utilization 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 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 subsection (c)(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. If the Utilization Plan is not approved because it is deficient as a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no more than a five calendar day period in order to cure the deficiency.
- (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 it receives as a result of the lease arrangement.
- (e) DBE as a material supplier:

- (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
- (2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.
- (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a DBE regular dealer or DBE manufacturer.

CONTRACT COMPLIANCE. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Utilization Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal. All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the DBE Participation Commitment Statement.

- (a) NO AMENDMENT. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be 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 or AER 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, then 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) of this part. Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE in the Utilization Plan.

As stated above, the Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor,

with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

For purposes of this paragraph, good cause includes the following circumstances:

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the 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 1200 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 subcontractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the 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 Resident Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes 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 may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

ENGINEER'S FIELD OFFICE (BDE)

Effective: April 1, 2016

Revise the fifth sentence of the first paragraph of Article 670.07 of the Standard Specifications to read:

"This price shall include all utility costs and shall reflect the salvage value of the building or buildings, equipment, and furniture which remain the property of the Contractor after release by the Engineer, except the Department will pay that portion of the monthly long distance, monthly local telephone, and online data usage that, when combined, exceed \$250."

80363

EQUAL EMPLOYMENT OPPORTUNITY (BDE)

Effective: April 1, 2015

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

"EQUAL EMPLOYMENT OPPORTUNITY

In the event of the Contractor's noncompliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act, or the Illinois Department of Human Rights Rules and Regulations, the Contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political sub-divisions or municipal corporations, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation.

During the performance of this Contract, the Contractor agrees as follows:

- (1) That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status, or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
- (2) That, if it hires additional employees in order to perform this contract or any portion hereof, it will determine the availability (according to the Illinois Department of Human Rights Rules and Regulations) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.
- (3) That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status or an unfavorable discharge from military service.
- (4) That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations. If any labor organization or representative fails or refuses to cooperate with the Contractor in its efforts to comply with such Act and Rules and Regulations, the

Contractor will promptly so notify the Illinois Department of Human Rights and IDOT and will recruit employees from other sources when necessary to fulfill its obligations thereunder.

- (5) That it will submit reports as required by the Illinois Department of Human Rights Rules and Regulations, furnish all relevant information as may from time to time be requested by the Illinois Department of Human Rights or IDOT, and in all respects comply with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.
- (6) That it will permit access to all relevant books, records, accounts, and work sites by personnel of IDOT and the Illinois Department of Human Rights for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.
- (7) That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the Contractor will be liable for compliance with applicable provisions of this clause by subcontractors; and further it will promptly notify IDOT and the Illinois Department of Human Rights in the event any subcontractor fails or refuses to comply with these provisions. In addition, the Contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations."

STATE CONTRACTS. Revise Section II of Check Sheet #5 of the Recurring Special Provisions to read:

"II. EQUAL EMPLOYMENT OPPORTUNITY

In the event of the Contractor's noncompliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act or the Illinois Department of Human Rights Rules and Regulations, the Contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political sub-divisions or municipal corporations, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation.

During the performance of this Contract, the Contractor agrees as follows:

1. That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status, or an unfavorable discharge from military service; and further

that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.

2. That, if it hires additional employees in order to perform this contract or any portion hereof, it will determine the availability (according to the Illinois Department of Human Rights Rules and Regulations) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.
3. That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status, or an unfavorable discharge from military service.
4. That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations. If any labor organization or representative fails or refuses to cooperate with the Contractor in its efforts to comply with such Act and Rules and Regulations, the Contractor will promptly so notify the Illinois Department of Human Rights and IDOT and will recruit employees from other sources when necessary to fulfill its obligations thereunder.
5. That it will submit reports as required by the Illinois Department of Human Rights Rules and Regulations, furnish all relevant information as may from time to time be requested by the Illinois Department of Human Rights or IDOT, and in all respects comply with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.
6. That it will permit access to all relevant books, records, accounts and work sites by personnel of IDOT and the Illinois Department of Human Rights for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.
7. That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the Contractor will be liable for compliance with applicable provisions of this clause by subcontractors; and further it will promptly notify IDOT and the Illinois Department of Human Rights in the event any subcontractor fails or refuses to comply with these provisions. In addition, the Contractor will not utilize any subcontractor declared by the Illinois Human Rights

Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.”

80358

ERRATA FOR THE 2016 STANDARD SPECIFICATIONS (BDE)

Effective: April 1, 2016

- Page 84 Article 204.02. In the seventh line of the first paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)".
- Page 90 Article 205.06. In the first sentence of the third paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)".
- Page 91 Article 205.06. In the first sentence of the fourth paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)", and in the second sentence change "AASHTO T 224" to "Illinois Modified AASHTO T 99 (Annex A1)".
- Page 91 Article 205.06. In the second line of the fifth paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191".
- Page 91 Article 205.06. In the sixth line of the eighth paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)".
- Page 148 Article 302.09. In the second sentence of the fifth paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191", and in the third sentence change "AASHTO T 99" to "Illinois Modified AASHTO T 99".
- Page 152 Article 310.09. In the second sentence of the second paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191", and in the third sentence change "AASHTO T 99" to "Illinois Modified AASHTO T 99".
- Page 155 Article 311.05(a). In the first sentence of the fifth paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)", and in the second sentence change "AASHTO T 224" to "Illinois Modified AASHTO T 99 (Annex A1)".
- Page 155 Article 311.05(a). In the second line of the sixth paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191".
- Page 163 Article 351.05(a). In the second sentence of the fifth paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)", and in the third sentence change "AASHTO T 224" to "Illinois Modified AASHTO T 99 (Annex A1)".
- Page 163 Article 351.05(a). In the second line of the sixth paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191".
- Page 169 Article 352.11. In the second sentence of the fourth paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191", and in the third sentence change "AASHTO T 134 (Method B)" to "Illinois Modified AASHTO T 134 (Method B)".

Page 169 Article 352.12. In the first sentence of the first paragraph change "AASHTO T 22" to "Illinois Modified AASHTO T 22", and in the second sentence change "AASHTO T 134 (Method B)" to "Illinois Modified AASHTO T 134 (Method B)".

Page 196 Article 406.07(a). After the footnotes in Table 1 - Minimum Roller Requirements for HMA add the following:

"EQUIPMENT DEFINITION"

- V_s - Vibratory roller, static mode, minimum 125 lb/in. (2.2 kg/mm) of roller width. Maximum speed = 3 mph (5 km/h) or 264 ft/min (80 m/min). If the vibratory roller does not eliminate roller marks, its use shall be discontinued and a tandem roller, adequately ballasted to remove roller marks, shall be used.
- V_d - Vibratory roller, dynamic mode, operated at a speed to produce not less than 10 impacts/ft (30 impacts/m).
- P - Pneumatic-tired roller, max. speed 3 1/2 mph (5.5 km/h) or 308 ft/min (92 m/min). The pneumatic-tired roller shall have a minimum tire pressure of 80 psi (550 kPa) and shall be equipped with heat retention shields. The self-propelled pneumatic-tired roller shall develop a compression of not less than 300 lb (53 N) nor more than 500 lb (88 N) per in. (mm) of width of the tire tread in contact with the HMA surface.
- T_B - Tandem roller for breakdown rolling, 8 to 12 tons (7 to 11 metric tons), 250 to 400 lb/in. (44 to 70 N/mm) of roller width, max. speed = 3 1/2 mph (5.5 km/h) or 308 ft/min (92 m/min).
- T_F - Tandem roller for final rolling, 200 to 400 lb/in. (35 to 70 N/mm) of roller width with minimum roller width of 50 in. (1.25 m). Ballast shall be increased if roller marks are not eliminated. Ballast shall be decreased if the mat shoves or distorts.
- 3W- Three wheel roller, max. speed = 3 mph (5 km/h) or 264 ft/min (80 m/min), 300 to 400 lb/in. (53 to 70 N/mm) of roller width. The three-wheel roller shall weigh 10 to 12 tons (9 to 11 metric tons)."

Page 331 Article 505.04(p). Under Range of Clearance in the first table change "in. x 10⁻⁶" to "in. x 10⁻³".

Page 444 Article 542.03. In the Notes in Table IIIB add "CPP Corrugated Polypropylene (CPP) pipe with smooth interior".

- Page 445 Article 542.03. In the fourth column in Table IIIB (metric) change the heading for Type 5 pipe from "CPE" to "CPP".
- Page 445 Article 542.03. In the Notes in Table IIIB (metric) change "PE Polyethylene (PE) pipe with a smooth interior" to "CPP Corrugated Polypropylene (CPP) pipe with smooth interior".
- Page 449 Article 542.04(f)(2). In the third line of the second paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)".
- Page 544 Article 639.03. In the first sentence of the first paragraph change "AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, Traffic Signals," to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals,"".
- Page 546 Article 640.03. In the first sentence of the first paragraph change "AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 548 Article 641.03. In the first sentence of the first paragraph change "AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaire and Traffic Signals," to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals,"".
- Page 621 Article 727.03. In the first sentence of the third paragraph change "AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 629 Article 734.03(a). In the fourth line of the second paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)".
- Page 649 Article 801.02. In the first sentence of the first paragraph change "AASHTO's Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 742 Article 1003.04(c). Under Gradation in the table change "(see Article 1003.02(c))" to "(see Article 1003.01(c))".
- Page 755 Article 1004.03(b). Revise the third sentence of the first paragraph to read "For Class A (seal or cover coat), and other binder courses, the coarse aggregate shall be Class C quality or better."

- Page 809 Article 1020.04(e). In the third line of the first paragraph change "ITP SCC-3" to "ITP SCC-4".
- Page 945 Article 1069.05. In the first sentence of the tenth paragraph change ""Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 961 Article 1070.04(b)(1). In the third sentence of the first paragraph change ""Standard Specifications of Structural Supports for Highway Signs, Luminaires and Traffic Signals" published by AASHTO" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 989 Article 1077.01. In the second sentence of the first paragraph change "Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, as published by AASHTO" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 1121 Article 1103.13(a). In the first line of the first paragraph change "Bridge Deck Approach Slabs." to "Bridge Deck and Approach Slabs.".

80364

PEDESTRIAN PUSH-BUTTON (BDE)

Effective: April 1, 2016

Revise Article 888.03 of the Standard Specifications to read:

"888.03 Installation. The pedestrian push-button shall be located next to the curb ramp, sidewalk, or a paved clear space with a minimum size of 2.5 ft x 4.0 ft (760 mm x 1.22 m). The front face of the push-button should be even with the nearest edge of the curb ramp, sidewalk, or clear space but shall in no case be further away than 10 in. (250 mm). The height of the push-button should be 36 in. (900 mm) above the paved surface but shall in no case be less than 30 in. (760 mm) or more than 42 in. (1.05 m). The housing of the push-button shall be completely in contact with the post, pole, or extension arm on which it is mounted. The Contractor shall apply an anti-seize paste compound on all nuts and bolts prior to assembly. The methods of mounting both the pedestrian push-button and the sign shall be approved by the Engineer."

80365

PORTABLE CHANGEABLE MESSAGE SIGNS (BDE)

Effective: November 1, 2016

Revise this second sentence of the first paragraph of Article 1106.02(i) of the Standard Specifications to read:

“The message panel shall be a minimum of 7 ft (2.1 m) above the edge of pavement in urban areas and a minimum of 5 ft (1.5 m) above the edge of pavement in rural areas, present a level appearance, and be capable of displaying up to eight characters in each of three lines at a time.”

80377

PORTLAND CEMENT CONCRETE BRIDGE DECK CURING (BDE)

Effective: April 1,
2015 Revised: July 1,
2016

Revise the following two entries in the table in Article 1020.13 of the Standard Specifications to read:

"INDEX TABLE OF CURING AND PROTECTION OF CONCRETE CONSTRUCTION"			
TYPE OF CONSTRUCTION	CURING METHODS	CURING PERIOD DAYS	LOW AIR TEMPERATURE PROTECTION METHODS
Superstructure (Approach Slab)	1020.13(a)(5)(6) ^{19/}	3	1020.13(d)(1)(2) ^{17/}
Deck	1020.13(a)(5)(6) ^{19/}	7	1020.13(d)(1)(2) ^{17/}

Add the following footnote to the end of the Index Table of Curing and Protection of Concrete Construction in Article 1020.13 of the Standard Specifications:

"19/ The cellulose polyethylene blanket method shall not be used on latex modified concrete."

Revise Article 1020.13(a)(5) of the Standard Specifications to read:

"(5) Wetted Cotton Mat Method. After the surface of concrete has been textured or finished, it shall be covered immediately with dry or damp cotton mats. Cotton mats in poor condition will not be allowed. The cotton mats shall be placed in a manner which will not create indentations greater than 1/4 in. (6 mm) in the concrete surface. Minor marring of the surface is tolerable and is secondary to the importance of timely curing. The cotton mats shall then be wetted immediately and thoroughly soaked with a gentle spray of water. Thereafter, the cotton mats shall be covered with white polyethylene sheeting or burlap-polyethylene blankets. The cotton mats shall be kept saturated with water.

- a. Bridge Decks. For bridge decks, a foot bridge shall be used to place and wet the cotton mats. The cotton mats shall be maintained in a wetted condition until the concrete has hardened sufficiently to place soaker hoses without indentations to the concrete surface. The soaker hoses shall be placed on top of the cotton mats at a maximum 4 ft (1.2 m) spacing. The cotton mats shall be kept wet with a continuous supply of water for the remainder of the curing period. Other continuous wetting systems may be used if approved by the Engineer.

For areas inaccessible to the cotton mats, curing shall be according to Article 1020.13(a)(3)."

Add the following to Article 1020.13(a) of the Standard Specifications.

"(6) Cellulose Polyethylene Blanket Method. After the surface of concrete has been textured or finished, it shall be covered immediately with a cellulose polyethylene blanket. Damaged cellulose polyethylene blankets will not be allowed. The blankets shall be installed with the white perforated polyethylene side facing up. Adjoining blankets shall overlap a minimum of 4 in. (100 mm). Any air bubbles trapped during placement shall be removed. The blankets shall then be wetted immediately and thoroughly soaked with a gentle spray of water. Thereafter, the blankets shall be kept saturated with water. For bridge decks, the blankets shall be placed and kept wet according to Article 1020.13(a)(5)a."

Revise the first paragraph of Article 1022.03 of the Standard Specifications to read:

"1022.03 Waterproof Paper Blankets, White Polyethylene Sheeting, Burlap-Polyethylene Blankets, and Cellulose Polyethylene Blankets. These materials shall be white and according to ASTM C 171, except moisture loss test specimens shall be made according to Illinois Modified AASHTO T 155.

The cellulose polyethylene blanket shall consist of a white polyethylene sheeting with cellulose fiber backing and shall be limited to single use only. The cellulose polyethylene blankets shall be delivered to the jobsite unused and in the manufacturer's unopened packaging until ready for installation. Each roll shall be clearly labeled with product name, manufacturer, and manufacturer's certification of compliance with ASTM C 171."

80359

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

RAILROAD PROTECTIVE LIABILITY INSURANCE (5 and 10) (BDE)

Effective: January 1, 2006

Description. Railroad Protective Liability and Property Damage Liability Insurance shall be carried according to Article 107.11 of the Standard Specifications, except the limits shall be a minimum of \$5,000,000 combined single limit per occurrence for bodily injury liability and property damage liability with an aggregate limit of \$10,000,000 over the life of the policy. A separate policy is required for each railroad unless otherwise noted.

NAMED INSURED & ADDRESS	NUMBER & SPEED OF PASSENGER TRAINS	NUMBER & SPEED OF FREIGHT TRAINS
Metra atten: Manager, Commercial Insurance 15th floor 547 West Jackson Boulevard Chicago, IL 60661	Weekday 66 Psgr (includes 16 Amtrak) Saturday 40 Psgr (includes 16 Amtrak) Sunday 34 Psgr (includes 14 Amtrak) Psgr speed 79 mph (max)	Daily - 25 Freight Freight speed 40 mph
DOT/AAR No.: 388055L RR Division: MWD	RR Mile Post: MP 30.57 RR Sub-Division: C&M SUB	
For Freight/Passenger Information Contact: Timothy G. Pitzen For Insurance Information Contact: Marilyn Schlissman		Phone: 312.322.6924 Phone: 312.322.7093

DOT/AAR No.:
RR Division:

RR Mile Post:
RR Sub-Division:

For Freight/Passenger Information Contact:
For Insurance Information Contact:

Phone:
Phone:

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

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

The Contractor will be advised when the Department has received approval of the insurance from the railroad(s). Before any work begins on railroad right-of-way, the Contractor shall submit to the Engineer evidence that the required insurance has been approved by the railroad(s). The Contractor shall also provide the Engineer with the expiration date of each required policy.

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

80157

STEEL SLAG IN TRENCH BACKFILL (BDE)

Effective: January 1, 2016

Revise the second sentence of Article 1003.01(a)(8) of the Standard Specifications to read:

“Crushed steel slag shall be the nonmetallic product which is developed in a molten condition simultaneously with steel in an open hearth, basic oxygen, or electric arc furnace.”

Revise Article 1003.04(a) of the Standard Specifications to read:

“(a) Description. The fine aggregate shall consist of sand, stone sand, chats, wet bottom boiler slag, slag sand, or granulated slag sand. Crushed concrete sand, construction and demolition debris sand, and steel slag sand produced from an electric arc furnace may be used in lieu of the above for trench backfill.”

80362

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

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

The contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be 1 . In the event the contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

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

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

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

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

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

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

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

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

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

The contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

METHOD OF MEASUREMENT The unit of measurement is in hours.

BASIS OF PAYMENT This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price and total price have been included in the schedule of prices.

20338

WARM MIX ASPHALT (BDE)

Effective: January 1, 2012

Revised: April 1, 2016

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.

“(11) Equipment for Warm Mix Technologies.

- a. Foaming. Metering equipment for foamed asphalt shall have an accuracy of ± 2 percent of the actual water metered. The foaming control system shall be electronically interfaced with the asphalt binder meter.

- b. Additives. Additives shall be introduced into the plant according to the supplier's recommendations and shall be approved by the Engineer. The system for introducing the WMA additive shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes."

Mix Design Verification.

Add the following to Article 1030.04 of the Standard Specifications.

"(e) Warm Mix Technologies.

- (1) Foaming. WMA mix design verification will not be required when foaming technology is used alone (without WMA additives). However, the foaming technology shall only be used on HMA designs previously approved by the Department.
- (2) Additives. WMA mix designs utilizing additives shall be submitted to the Engineer for mix design verification."

Construction Requirements.

Revise the second paragraph of Article 406.06(b)(1) of the Standard Specifications to read:

"The HMA shall be delivered at a temperature of 250 to 350 °F (120 to 175 °C).
WMA shall be delivered at a minimum temperature of 215 °F (102 °C)."

Basis of Payment.

This work will be paid at the contract unit price bid for the HMA pay items involved. Anti-strip will not be paid for separately, but shall be considered as included in the cost of the work.

80288

WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012

| Revised: April 2, 2015

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

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

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

80302

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within 85 working days.

80071

PEDESTRIAN TRUSS SUPERSTRUCTURE

Effective: January 13, 1998

Revised: December 29, 2014

Description: This work shall consist of the design, fabrication, storage, delivery and erection of a welded steel, pedestrian truss superstructure. Also included in this work shall be the furnishing and installation of a deck, all bearings, anchors and/or retainers, railings, fencing and miscellaneous items as indicated on the plans.

Materials:

Truss. Structural steel shall conform to the requirements of Section 1006 of the Standard Specifications, ASTM A847 for cold formed welded square and rectangular tubing, AASHTO M270 Grade 50W (M270M 345W) for atmospheric corrosion resistant structural steel, as applicable, unless otherwise shown on the plans or approved by the Engineer. All structural steel field connections shall be bolted with high strength bolts. High strength bolts for unpainted weathering steel shall conform to ASTM A325 (A325M) (Type 3). For painted structures, the high strength bolts shall be mechanically galvanized according to the requirements of Article 1006.08(a) of the Standard Specifications.

Deck. The deck type shall be as specified on the plans. The materials shall comply with the applicable portions of the materials section of the Standard Specifications.

When specified for use, the concrete deck and stay-in-place forms shall be non composite. Metal Forms shall have a minimum thickness of 0.0359 in. (912 microns) or 20 Gage and shall be galvanized per ASTM A653 (A653M) with a G165 (Z350) min. coating designation.

Railing. The railing shall consist of a smooth rub rail, a toe plate and misc. elements, all located on the inside face of the truss.

Bearings. The bearing shall be designed and furnished as detailed in the plans, in the absence of details, the bearings details shall be as specified by the bridge manufacturer.

When specified for use, elastomeric bearings shall be according to Article 1083 of the Standard Specifications. Teflon surfaces shall be per Article 1083.02(b) of the Standard Specification and shall be bonded to the bearing plate.

Suppliers. The Department maintains a pre-qualified list of proprietary structural systems allowed for pedestrian truss superstructures. This list can be found on the Departments web site under Prequalified Structural Systems. The Contractor's options are limited to those systems pre-qualified by the Department. These systems have been reviewed for structural feasibility and adequacy only. Presence on this list shall in no case relieve the Contractor of the site specific design or QC/QA requirements stated herein.

The manufacturer shall provide evidence of current certification by AISC according to Article 106.08(b) of the Standard Specifications.

Design: The superstructure shall conform to the clear span, clear width, and railing configuration shown on the contract plans. The design shall be according to the LRFD Guide Specifications for the Design of Pedestrian Bridges. The design loads shall be as specified by the Guide Specification except as follows:

Design Wind Loads (P_z) for Pedestrian Trusses in Illinois		
Application	psf (kPa)	Applied to:
Circular Members	35 (1.68)	Projected vertical area of member
Flat Members	55 (2.63)	Projected vertical area of member
Signs	35 (1.68)	Projected vertical area of sign
Chain Link Fencing	10 (0.48)	Full projected area of fencing as if solid

The railings shall be designed per the appropriate Bridge Design Specifications for bicycle railings as shown on the plans. Smooth rub rails shall be attached to the bicycle railing and located at a bicycle handlebar height of 3.5 ft. (1.1 m) above the top of the deck.

Prior to beginning construction or fabrication, the Contractor shall submit design calculations and six sets of shop drawings for each pedestrian bridge to the Engineer for review and approval. In addition, for bridges with any span over 150 ft. (46 m), or over a State or Federal Route, or within the States Right-of-Way, a copy of the shop drawings will be reviewed and approved for structural adequacy, by the Bureau of Bridges and Structures prior to final approval of shop drawings. The shop drawings shall include all support reactions for each load type. The following certification shall be placed on the first sheet of the bridge shop plans adjacent to the seal and signature of the Structural Engineer:

"I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans and complies with the requirements of the Contract and the current 'Guide Specifications for Design of Pedestrian Bridges'."

The substructure is designed per the appropriate Bridge Design Specifications and based on the assumed truss loads, as shown on the plans. If the manufacturer's design exceeds those loads and/or the substructure needs to be adjusted to accommodate the truss superstructure chosen, then the Contractor shall submit the redesign to the Engineer for approval prior to ordering any material or starting construction. All design calculations, shop drawings and redesigned substructure drawings shall be sealed by a Structural Engineer licensed in the State of Illinois.

Construction: Truss erection procedures shall be according to the manufacturer's instructions. The deck shall be placed according to the applicable Sections of the Standard Specifications.

When weathering steel is used, all structural steel shall be prepared according to Article 506.07.

When painting is specified, all structural steel shall be cleaned and painted according to Section 506. The paint system and color of the finish coat shall be as specified in the plans.

Method of Measurement: The pedestrian truss superstructure will be measured in square feet (square meters) of completed and accepted structure measured horizontally from back to back of abutments and within the clear path width as defined on the plans.

Basis of Payment: The pedestrian superstructure will be paid for at the contract unit price per square foot (square meter) for "PEDESTRIAN TRUSS SUPERSTRUCTURE."

PIPE UNDERDRAINS FOR STRUCTURES

Effective: May 17, 2000

Revised: January 22, 2010

Description. This work shall consist of furnishing and installing a pipe underdrain system as shown on the plans, as specified herein, and as directed by the Engineer.

Materials. Materials shall meet the requirements as set forth below:

The perforated pipe underdrain shall be according to Article 601.02 of the Standard Specifications. Outlet pipes or pipes connecting to a separate storm sewer system shall not be perforated.

The drainage aggregate shall be a combination of one or more of the following gradations, FA1, FA2, CA5, CA7, CA8, CA11, or CA13 thru 16, according to Sections 1003 and 1004 of the Standard Specifications.

The fabric surrounding the drainage aggregate shall be Geotechnical Fabric for French Drains according to Article 1080.05 of the Standard Specifications.

Construction Requirements. All work shall be according to the applicable requirements of Section 601 of the Standard Specifications except as modified below.

The pipe underdrains shall consist of a perforated pipe drain situated at the bottom of an area of drainage aggregate wrapped completely in geotechnical fabric and shall be installed to the lines and gradients as shown on the plans.

Method of Measurement. Pipe Underdrains for Structures shall be measured for payment in feet (meters), in place. Measurement shall be along the centerline of the pipe underdrains. All connectors, outlet pipes, elbows, and all other miscellaneous items shall be included in the measurement. Concrete headwalls shall be included in the cost of Pipe Underdrains for Structures, but shall not be included in the measurement for payment.

Basis of Payment. This work will be paid for at the contract unit price per foot (meter) for PIPE UNDERDRAINS FOR STRUCTURES of the diameter specified. Furnishing and installation of the drainage aggregate, geotechnical fabric, forming holes in structural elements and any excavation required, will not be paid for separately, but shall be included in the cost of the pipe underdrains for structures.

WEEP HOLE DRAINS FOR ABUTMENTS, WINGWALLS, RETAINING WALLS AND CULVERTS

Effective: April 19, 2012

Revised: October 22, 2013

Delete the last paragraphs of Articles 205.05 and 502.10 and replace with the following.

"If a geocomposite wall drain according to Section 591 is not specified, a prefabricated geocomposite strip drain according to Section 1040.07 shall be placed at the back of each drain hole. The strip drain shall be 24 inches (600 mm) wide and 48 inches (1.220 m) tall. The strip drain shall be centered over the drain hole with the bottom located 12 inches (300 mm) below the bottom of the drain hole. All form boards or other obstructions shall be removed from the drain holes before placing any geocomposite strip drain."

Revise the last sentence of the first paragraph of Article 503.11 to read as follows.

"Drain holes shall be covered to prevent the leakage of backfill material according to Article 502.10."

Revise the title of Article 1040.07 to Geocomposite Wall Drains and Strip Drains.

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

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

I. GENERAL

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.

Contract Provision - Cargo Preference Requirements

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

“(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.”

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

**MINIMUM WAGES FOR FEDERAL AND FEDERALLY
ASSISTED CONSTRUCTION CONTRACTS**

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision shall be the minimum paid by contractors and subcontractors to laborers and mechanics.