### **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 <a href="http://www.idot.illinois.gov/doing-business/procurements/construction-services/construction-bulletins/transportation-bulletin/index#TransportationBulletin">http://www.idot.illinois.gov/doing-business/procurements/construction-services/construction-bulletins/transportation-bulletin/index#TransportationBulletin</a> before submitting final bid information.

#### IDOT IS NOT RESPONSIBLE FOR ANY E-MAIL FAILURES.

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

Technical questions about downloading these files may be directed to Tim Garman at (217)524-1642 or <a href="mailto:Timothy.Garman@illinois.gov">Timothy.Garman@illinois.gov</a>.

#### STANDARD GUIDELINES FOR SUBMITTING BIDS

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

#### **BID SUBMITTAL CHECKLIST**

Cover page (the sheet that has the item number on it) – This should be the first page of your bid proposal, followed by your bid (the Schedule of Prices/Pay Items). If you are using special software or CBID to generate your schedule of prices, do not include the blank pages of the schedule of prices that came with the proposal package.
☐ Page 4 (Item 9) — Check "YES" if you will use a subcontractor(s) with an annual value over \$50,000. Include the subcontractor(s) name, address, general type of work to be performed and the dollar amount. If you will use subcontractor(s) but are uncertain who or the dollar amount; check "YES" but leave the lines blank.
☐ <b>After page 4</b> – 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) – A copy of your State Board of Elections certificate of registration is no longer required with your bid.
☐ Page 11 (Paragraph M) – Indicate if your company has hired a lobbyist in connection with the job for which you are submitting the bid proposal.
☐ Page 12 (Paragraph C) – This is a work sheet to determine if a completed Form A is required. It is not part of the form and you do not need to make copies for each completed Form A.
□ Pages 14-17 (Form A) – One Form A (4 pages) is required for each applicable person in your company. Copies of the forms can be used and only need to be changed when the information changes. The certification signature and date must be original for each letting. Do not staple the forms together. If you answered "NO" to all of the questions in Paragraph C (page 12), complete the first section (page 14) with your company information and then sign and date the Not Applicable statement on page 17.
Page 18 (Form B) - If you check "YES" to having other current or pending contracts it is acceptable to use the phrase, "See Affidavit of Availability on file". Ownership Certification (at the bottom of the page) - Check N/A if the Form A(s) you submitted accounts for 100 percent of the company ownership. Check YES if any percentage of ownership falls outside of the parameters that require reporting on the Form A. Checking NO indicates that the Form A(s) you submitted is not correct and you will be required to submit a revised Form A.
☐ Page 20 (Workforce Projection) – Be sure to include the Duration of the Project. It is acceptable to use the phrase "Per Contract Specifications".

☐ <b>Proposal Bid Bond</b> – (Insert after the proposal signature page) Submit you using the current Proposal Bid Bond form provided in the proposal package. T the Proposal Bid Bond. If you are using an electronic bond, include your bid bothe Proof of Insurance printed from the Surety's Web Site.	he Power of Attorney page should be stapled to
☐ <b>Disadvantaged Business Utilization Plan and/or Good Faith Effort</b> – Th Utilization Plan (SBE 2026), followed by the DBE Participation Statement (SBE documentation of a Good Faith Effort, it is to follow the SBE Forms.	
The Bid Letting is now available in streaming Audio/Video from the IDOT the main page of the current letting on the day of the Letting. The stream will no bids does not begin until approximately 10:30 AM.	<b>Web Site.</b> A link to the stream will be placed on not begin until 10 AM. The actual reading of the
Following the Letting, the As-Read Tabulation of Bids will be posted by the end Web page for the current letting.	d of the day. You will find the link on the main
QUESTIONS: pre-letting up to execution of the contract	
Contractor pre-qualification	217-782-3413
Small Business, Disadvantaged Business Enterprise (DBE)	
Contracts, Bids, Letting process or Internet downloads	
Estimates Unit	
Aeronautics	
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

227

Proposal Submitted By	
Name	
Address	
City	

# **Letting June 12, 2015**

## NOTICE TO PROSPECTIVE BIDDERS

This proposal can be used for bidding purposes by only those companies that request and receive written AUTHORIZATION TO BID from IDOT's Central Bureau of Construction.

**BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAL** 

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



Springfield, Illinois 62764

Contract No. 61A07 KANE County Section 08-00066-02-BR Route FAS 1107 (Dauberman Road) Project BHOS-0089(130) District 1 Construction Funds

PLEASE MARK THE APPROPRIATE BOX BELOW:	
☐ A <u>Bid</u> <u>Bond</u> 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



**PROPOSAL** 

#### TO THE DEPARTMENT OF TRANSPORTATION

**District 1 Construction Funds** 

1.	Proposal of
	Taxpayer Identification Number (Mandatory)  For the improvement identified and advertised for bids in the Invitation for Bids as:
	Contract No. 61A07
	KANE County
	Section 08-00066-02-BR
	Project BHOS-0089(130) Route FAS 1107 (Dauberman Road)

Remove the superstructure, repairs to the substructure and the replacement with a PPC deck beam superstructure with a 5" wearing surface, located 0.50 miles north of US 50 over Welch Creek.

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

- 3. **ASSURANCE OF EXAMINATION AND INSPECTION/WAIVER.** The undersigned bidder further declares that he/she has carefully examined the proposal, plans, specifications, addenda form of contract and contract bond, and special provisions, and that he/she has inspected in detail the site of the proposed work, and that he/she has familiarized themselves with all of the local conditions affecting the contract and the detailed requirements of construction, and understands that in making this bid proposal he/she waives all right to plead any misunderstanding regarding the same.
- 4. **EXECUTION OF CONTRACT AND CONTRACT BOND.** The undersigned bidder further agrees to execute a contract for this work and present the same to the department within fifteen (15) days after the contract has been mailed to him/her. The undersigned further agrees that he/she and his/her surety will execute and present within fifteen (15) days after the contract has been mailed to him/her contract bond satisfactory to and in the form prescribed by the Department of Transportation, in the penal sum of the full amount of the contract, or as specified in the special provisions, guaranteeing the faithful performance of the work in accordance with the terms of the contract.
- 5. **PROPOSAL GUARANTY.** Accompanying this proposal is either a bid bond on the department form, executed by a corporate surety company satisfactory to the department, or a proposal guaranty check consisting of a bank cashier's check or a properly certified check for not less than 5 per cent of the amount bid or for the amount specified in the following schedule:

<u>A</u>	mount o	of Bid	Proposal <u>Guaranty</u>	<u>Am</u>	ount c		roposal luaranty
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\$	3400,000
\$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\$	000,008
\$1,000,000	to	\$1,500,000	\$50,000	\$30,000,000	to	\$35,000,000\$	3900,000
\$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	y 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	e to delay and other causes	s suffered by the State because of the
failure to execute said contract and contract bond; otherwise, the bid bond will bec	ome void or the proposal	guaranty check will be returned to the
undersigned.		

undersigned.		sine told of the proposal guaranty officer, will be foldined to the
Attach Cashier's C	heck or Certif	ied Check Here
In the event that one proposal guaranty check is intended to cover two of the proposal guaranties which would be required for each individual proposal, state below where it may be found.		
The proposal guaranty check will be found in the bid proposal for:	Item	
	Section No.	
	County	

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

6.	following combination proportion to the	BIDS. The undersigned bidder further agrees that if awarded the ation, he/she will perform the work in accordance with the requirement bid specified in the schedule below, and that the combination bid bid submitted for the same. If an error is found to exist in the gross in a combination, the combination bid shall be corrected as provide	ents of each individual contract comprisir shall be prorated against each section s sum bid for one or more of the individu
		a combination bid is submitted, the schedule below must be coising the combination.	ompleted in each proposal
		nate bids are submitted for one or more of the sections compri nation bid must be submitted for each alternate.	sing the combination, a
		Schedule of Combination Bids	
Со	mbination No.	Sections Included in Combination	Combination Bid Dollars Cents
7.	schedule of price all extensions ar schedule are app is an error in the will be made only The scheduled q	PRICES. The undersigned bidder submits herewith, in accordant is for the items of work for which bids are sought. The unit prices and summations have been made. The bidder understands that proximate and are provided for the purpose of obtaining a gross surextension of the unit prices, the unit prices will govern. Payment to actual quantities of work performed and accepted or materials unantities of work to be done and materials to be furnished may be the in the contract.	bid are in U.S. dollars and cents, and the quantities appearing in the bid in for the comparison of bids. If there to the contractor awarded the contract is furnished according to the contract.
8.	500/20-43) provid	DO BUSINESS IN ILLINOIS. Section 20-43 of the Illinois Produces that a person (other than an individual acting as a sole proprietor or conduct affairs in the State of Illinois prior to submitting the bid.	
9.	Department proc and make payme Purchasing Office Neither the CPO	F CONTRACT: The Department of Transportation will, in accurements, execute the contract and shall be the sole entity having ents under the contract. Execution of the contract by the Chief Proper (SPO) is for approval of the procurement process and execution on the SPO shall be responsible for administration of the coayment there under except as otherwise permitted in the Code.	the authority to accept performance ocurement Officer (CPO) or the State of the contract by the Department.
10.	The services of	a subcontractor will be used.	
	Check box Check box	Yes  No	
		ubcontractors with subcontracts with an annual value of more than \$ address, general type of work to be performed, and the dollar allocat 0/20-120)	

ECMSONS DIGERMOS ECMBONS PAGE

ECMS002 DIGECMOS ECMNOSS FACE RUN DATE - 05/11/15 FRUN TIME - 183100	
ILLINOIS DEPARIMENI OF IRANSPURIALION SCHEDULE OF PRICES CONTRACT NUMBER - 61A07	
'E JOB #- C-91-163-09 NBR -	

ROUTE FAS 1107	TOTAL PRICE DOLLARS CTS	1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	400.00	7,500.00				
PROJECT NUMBER 0089/130/000	JUNIT PRICE DOLLARS CENTS	1		1	11 - 11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	1 - 11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1					08.0	15.00			11 - 11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	- 11
	QUANTITY	1.000 X	1.000 X	. 141.000 X	1.000 X	210.300 X	33.00	0	0 1	24.000 X	500.000 X	0 ;	82.00	0.00	585.000 X	3,322.000 X
ON NUMBER	UNIT OF MEASURE	EACH	EACH		     	SQ		် ပ	NOS 7 .	SQFF	HOUR	HOUR		no		_ 1
NAME CODE DIST SECTION ON O	PAY ITEM DESCRIPTION	-ACERX FREM MM	T-ACER SACR GM 2-1/	URBIDITY BARRIER	ASHOUT BASIN	ONC WEARING SURF 5	RANULAR BACKFILL STR	RAF CONT & PROT SPL	CONSTRUCTION LAYOUT	MP INFO SIGNING	AINEES	TRAINEES TPG	TREE REMOV OVER 15	EARTH EXCAVATION	REM & DISP UNS MATL	TOPSOIL F & P
COUNTY NA	ITEM	200022	001820	X006345	032680	5030305	5860110	7010216	0013798	0030850	0026600	0076604	0100210	200100	020120	21101625

ECMS002 DTGECM03 ECMR003 PAGE RUN DATE - 05/11/15 RUN TIME - 183100 ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 61A07 FAS 1107 08-00066-02-BR KANE

	NIT PRICE TOTAL PRICE CTS					- (1)	1				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- 11
	QUANTITY DO	. 0.400 X	0.300 X	34,000 X	34.000 X	34.000 X	3,077.000 X	726.000 X	9.00	240.000 X	1,149.000 X	2.000 X	3,330.000 X	14.000 X	133.000 X	147.000 X
INTRACT NOMBER	UNIT OF MEASURE	ACRE	ACRE	POUND	POU	DOU	O'S I	SQ	DNDOd	_	FOOT	EACH	(V)	S 1	SQ YD	SQ YD
	PAY ITEM DESCRIPTION	EEDING CL 2A	4G CL 4	NITROGEN FERT NUTR	JSPHORUS FERT NUTR	TASSIUM FERT NUTR	OSION CONTR BLANKET	TURF REINF MAT	TEMP EROS CONTR SEED	TEMP DITCH CHECKS	PERIMETER EROS BAR	INLET & PIPE PROTECT	TEMP EROS CONTR BLANK	STONE DUMP RIP CL A3	STONE DUMP RIP CL A5	FILTER FABRIC
KANE	ITEM NUMBER	500021	5000310	5000400	5000500	5000600	5100630	5100900	8000250	28000305	8000400	8000500	8001100	8100705	8100709	8200200

ECMS002 DTGECM03 ECMR003 PAGE RUN DATE - 05/11/15 ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES

FAS 1107 08-00066-02-BR KANE

	RUN TIME - 183100	
טוסיין סייסיין	CONTRACT NUMBER - 61A07	

ITEM	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE TOTAL PRICE DOLLARS CTS
03001	GG SUBGRADE IMPR 12	SQ YD	1,950.000	
5102000	G BASE CSE B 8	SQ YD		
01308	MA BASE CSE 6	SQ YD	43.000 \$	
0600275	BIT MATLS PR CT	$\supset$ 1	4,970.000 >	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
0603335	MA SC "D" N50	NOL	10.000 \	
0701886	HMA PAVT FD 10 1/4	SQ YD	1,639.000 >	
2001300	TECTIVE COAT	or l	7.000 /	
4000100	AVEMENT REM	- 1	69	1
4000200	IVE PAVEMENT REM		Ō	1
8101500	GGREGATE SHLDS B 6	SQ YD	1,039.000	
8203029	A SHOULDERS 8	> I	- 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
0101500	REM EXIST SUP-STR	EACH	. 1.000 .	
0102400	NC REM		( 22.000 )	
010522	PIPE CULVERT REMOV	FOOT	122.000 )	
020	URE EXCAVATION	CU YD	135.000	- 11

ECMS002 DTGECM03 ECMR003 PAGE RUN DATE - 05/11/15 RUN TIME - 183100 ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 61A07 FAS 1107 08-00066-02-BR KANE

TOTAL BOIGE	DOLLARS CENTS DOLLARS CTS			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						1				- II —
	QUANTITY	38.000 X	- 1	00		1,892.000 X	60.	<u>→</u> 1	40.000		4.00	0.00	2.50	4.0	4.000	204.000 X
1	MEASURE	CU YD	. CU YD	0 1	50	SQ	DOUND	EACH	1	EA	SQ	F0	0 1	EA	EAC	F0(
	PAY ITEM DESCRIPTION	CONC STRUCT	CONC SUP-STR	BR DECK GROOVING	PROTECTIVE COAT	P P CONC DK BM 21 DP	REINF BARS, EPOXY CTD	NAME PLATES	P CUL CL A 1 12	PRC FLAR END SEC 12	GEOCOMPOSITE WALL DR	CONC CURB TB	SPBGR TY A 6FT POSTS	TRAF BAR TERM T6	TR BAR TRM T1 SPL TAN	GUARDRAIL REMOV
	. I TEM NUMBER	0300225	0300255	0300260	0300300	0400405	0800205	1500100	542A0217	4213657	9100100	0600605	300001	3100085	3100167	320031

ECMS002 DTGECM03 ECMR003 PAGE RUN DATE - 05/11/15 RUN TIME - 183100 ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 61A07 FAS 1107 08-00066-02-BR KANE

ITEM	NOTITE DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE DOLLARS   CENTS	TOTAL PRICE DOLLARS C	CTS
NOMBER						
66600105	FUR ERECT ROW MARKERS	· EACH	X 000.8	H —		] [
67000400	ENGR FIELD OFFICE A	CAL MO	X 000.9			! !
67100100	MOBILIZATION	Wns 7	1.000 X	11		1
72400100	REMOV SIN P	1 1 1 1	X 000.6	11		1
78009004	MOD URETH PM	FOOT	1,485.000 X		1 1 1 1 1 1	l 1
78100100	RAISED REFL P	EACH	X 000.6		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1
78200530	BÁR WALL	EACH	4.000 X			1
78201000	TERMINAL MARKER - DA	EACH	4.000 X	- 11		
				TOTAL \$		

NOTE:

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

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. 2

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

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

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

#### I. GENERAL

- **A.** Article 50 of the Code establishes the duty of all State CPOs, SPOs, and their designees to maximize the value of the expenditure of public moneys in procuring goods, services, and contracts for the State of Illinois and to act in a manner that maintains the integrity and public trust of State government. In discharging this duty, they are charged by law to use all available information, reasonable efforts, and reasonable actions to protect, safeguard, and maintain the procurement process of the State of Illinois.
- **B.** In order to comply with the provisions of Article 50 and to carry out the duty established therein, all bidders are to adhere to ethical standards established for the procurement process, and to make such assurances, disclosures and certifications required by law. Except as otherwise required in subsection III, paragraphs J-M, by execution of the Proposal Signature Sheet, the bidder indicates that each of the mandated assurances have been read and understood, that each certification is made and understood, and that each disclosure requirement has been understood and completed.
- **C.** In addition to all other remedies provided by law, failure to comply with any assurance, failure to make any disclosure or the making of a false certification shall be grounds for the CPO to void the contract, and may result in the suspension or debarment of the bidder or subcontractor. If a false certification is made by a subcontractor the contractor's submitted bid and the executed contract may not be declared void unless the contractor refuses to terminate the subcontract upon the State's request after a finding that the subcontractor's certification was false.
- ☐ I acknowledge, understand and accept these terms and conditions.

#### II. ASSURANCES

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

#### A. Conflicts of Interest

Section 50-13. Conflicts of Interest.

- (a) Prohibition. It is unlawful for any person holding an elective office in this State, holding a seat in the General Assembly, or appointed to or employed in any of the offices or agencies of state government and who receives compensation for such employment in excess of 60% of the salary of the Governor of the State of Illinois, or who is an officer or employee of the Capital Development Board or the Illinois State Toll Highway Authority, or who is the spouse or minor child of any such person to have or acquire any contract, or any direct pecuniary interest in any contract therein, whether for stationery, printing, paper, or any services, materials, or supplies, that will be wholly or partially satisfied by the payment of funds appropriated by the General Assembly of the State of Illinois or in any contract of the Capital Development Board or the Illinois State Toll Highway Authority.
- (b) Interests. It is unlawful for any firm, partnership, association or corporation, in which any person listed in subsection (a) is entitled to receive (i) more than 7 1/2% of the total distributable income or (ii) an amount in excess of the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.
- (c) Combined interests. It is unlawful for any firm, partnership, association, or corporation, in which any person listed in subsection (a) together with his or her spouse or minor children is entitled to receive (i) more than 15%, in the aggregate, of the total distributable income or (ii) an amount in excess of 2 times the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.
- (d) Securities. Nothing in this Section invalidates the provisions of any bond or other security previously offered or to be offered for sale or sold by or for the State of Illinois.
- (e) Prior interests. This Section does not affect the validity of any contract made between the State and an officer or employee of the State or member of the General Assembly, his or her spouse, minor child or any combination of those persons if that contract was in existence before his or her election or employment as an officer, member, or employee. The contract is voidable, however, if it cannot be completed within 365 calendar days after the officer, member, or employee takes office or is employed. The current salary of the Governor is \$177,412.00. Sixty percent of the salary is \$106,447.20.

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

#### B. Negotiations

Section 50-15. Negotiations.

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

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

#### C. Inducements

Section 50-25. Inducement.

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

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

#### D. Revolving Door Prohibition

Section 50-30. Revolving door prohibition.

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

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

#### E. Reporting Anticompetitive Practices

Section 50-40. Reporting anticompetitive practices.

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

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

#### F. Confidentiality

Section 50-45. Confidentiality.

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

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

#### G. Insider Information

Section 50-50. Insider information.

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

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

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

#### **III. CERTIFICATIONS**

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

#### A. Bribery

Section 50-5. Bribery.

- (a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:
  - (1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or
  - (2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.
- (b) Businesses. No business shall be barred from contracting with any unit of State or local government, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:
  - (1) the business has been finally adjudicated not guilty; or
  - (2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 2012.
- (c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.
- (d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

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

#### B. Felons

Section 50-10. Felons.

- (a) Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any State agency, or enter into a subcontract, from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.
- (b) Certification. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code and every vendor's submission to a vendor portal shall contain a certification by the bidder or contractor or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any of the certifications required by this Section are false.

#### C. Debt Delinquency

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

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

#### D. Prohibited Bidders, Contractors and Subcontractors

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

The bidder or contractor or subcontractor, respectively, certifies in accordance with Section 50-10.5 that no officer, director, partner or other managerial agent of the contracting business has been convicted of a felony under the Sarbanes-Oxley Act of 2002 or a Class 3 or Class 2 felony under the Illinois Securities Law of 1953 or if in violation of Subsection (c) for a period of five years from the date of conviction. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code shall contain a certification by the bidder, contractor, or subcontractor, respectively, that the bidder, contractor, or subcontract under this Section and acknowledges that the CPO shall declare the related contract void if any of the certifications completed pursuant to this Section are false.

#### E. Section 42 of the Environmental Protection Act

Section 50-14 Environmental Protection Act violations.

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

#### F. Educational Loan

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

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

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

#### G. Bid-Rigging/Bid Rotating

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

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

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

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

#### H. International Anti-Boycott

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

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

#### I. Drug Free Workplace

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

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

#### J. Disclosure of Business Operations in Iran

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

- (1) More than 10% of the Company's revenues produced in or assets located in Iran involve oil-related activities or mineral-extraction activities; less than 75% of the Company's revenues produced in or assets located in Iran involve contracts with or provision of oil-related or mineral-extraction products or services to the Government of Iran or a project or consortium created exclusively by that government; and the Company has failed to take substantial action.
- (2) The Company has, on or after August 5, 1996, made an investment of \$20 million or more, or any combination of investments of at least \$10 million each that in the aggregate equals or exceeds \$20 million in any 12-month period, which directly or significantly contributes to the enhancement of Iran's ability to develop petroleum resources of Iran.

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

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

Check the appro	priate statement:
//	Company has no business operations in Iran to disclose.
//	Company has business operations in Iran as disclosed on the attached document.

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

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

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

NA-FEDERAL_	

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

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

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

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

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

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

#### M. Lobbyist Disclosure

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

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

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

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

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

		Bidder has not hired any person required to register pursuant to the Illinois Lobbyist Registration Act in connection with this contract.
	Or	
		Bidder has hired the following persons required to register pursuant to the Illinois Lobbyist Registration Act in connection with the contract:
		address of person:ees, compensation, reimbursements and other remuneration paid to said person:
П∣ас	kno	owledge understand and accept these terms and conditions for the above certifications

#### **IV. DISCLOSURES**

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

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

#### B. Financial Interests and Conflicts of Interest

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

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

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

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

2. <u>Disclosure Forms</u>. 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. <u>Disclosure Form Instructions</u>

#### 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 <u>per individual per bid</u> 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 <u>NOT APPLICABLE STATEMENT</u> of Form A must be signed and dated by an individual that is authorized to execute contracts for your company.

#### 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 <u>NOT APPLICABLE STATEMENT</u> on Form A <u>does not</u> 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.

# ILLINOIS DEPARTMENT OF TRANSPORTATION

# Form A Financial Information & Potential Conflicts of Interest Disclosure

Contractor Name		
Legal Address		
O'the Otate 7's		
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

 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 IND	IVIDUAL (type	or print information)		
NA	ME:			
AD	DRESS			
Тур	e of ownership	/distributable income share:	:	
stoo		sole proprietorship	Partnership	other: (explain on separate sheet):
% 0	r \$ value of own	ership/distributable income sh	are:	

- **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.

3.	If you are currently appointed to or employed by any agency of the Salary exceeds 60% of the annual salary of the Governor, are you e (i) more than 7 1/2% of the total distributable income of your firm corporation, or (ii) an amount in excess of 100% of the annual salary	ntitled to receive n, partnership, association or
4.	If you are currently appointed to or employed by any agency of the Salary exceeds 60% of the annual salary of the Governor, are you a or minor children entitled to receive (i) more than 15% in aggregate of your firm, partnership, association or corporation, or (ii) an amour salary of the Governor?	nd your spouse of the total distributable income
	employment of spouse, father, mother, son, or daughter, including con previous 2 years.	
If your	answer is yes, please answer each of the following questions.	YesNo
1.	Is your spouse or any minor children currently an officer or employee Board or the Illinois State Toll Highway Authority?	of the Capitol Development YesNo
2.	Is your spouse or any minor children currently appointed to or employ of Illinois? If your spouse or minor children is/are currently appointed agency of the State of Illinois, and his/her annual salary exceeds 60 annual salary of the Governor, provide the name of the spouse and/of the State agency for which he/she is employed and his/her annual	d to or employed by any 0% of the or minor children, the name
3.	If your spouse or any minor children is/are currently appointed to or estate of Illinois, and his/her annual salary exceeds 60% of the annual are you entitled to receive (i) more than 71/2% of the total distributable firm, partnership, association or corporation, or (ii) an amount in excannual salary of the Governor?	I salary of the Governor, e income of your
4.	If your spouse or any minor children are currently appointed to or er State of Illinois, and his/her annual salary exceeds 60% of the annual and your spouse or any minor children entitled to receive (i) more that aggregate of the total distributable income from your firm, partnership (ii) an amount in excess of two times the salary of the Governor?	salary of the Governor, are you an 15% in the
		Yes No
unit of	e status; the holding of elective office of the State of Illinois, the govern government authorized by the Constitution of the State of Illinoic currently or in the previous 3 years.	
	nship to anyone holding elective office currently or in the previous 2 ye daughter.	ears; spouse, father, mother, YesNo
Americ of the S	tive office; the holding of any appointive government office of the State a, or any unit of local government authorized by the Constitution of the State of Illinois, which office entitles the holder to compensation in exceptage of that office currently or in the previous 3 years.	State of Illinois or the statues
	nship to anyone holding appointive office currently or in the previous 2 daughter.	years; spouse, father, mother, YesNo
(g) Employ	yment, currently or in the previous 3 years, as or by any registered lob	byist of the State government. YesNo

e previous 2 years; spouse, father, mother, YesNo
s, by any registered election or reelection clerk of the State of Illinois, or any political the Federal Board of Elections.  YesNo
er; who was a compensated employee in the registered with the Secretary of State or any littee registered with either the Secretary of
Yes No
t of the bidder or offeror who is not identified ng, or may communicate with any State officer continuing obligation and must be promp nout the term of the contract. If no person

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

Name of person(s):	
Nature of disclosure:	
Trace of dississance.	
ADDITO ADI E CTATEMENT	
APPLICABLE STATEMENT  This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Un	dor
penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of knowledge.	
Completed by:	
Signature of Individual or Authorized Representative Date	
NOT APPLICABLE STATEMENT	<u>.</u>
Under penalty of perjury, I have determined that no individuals associated with this organization the criteria that would require the completion of this Form A.	n meet
This Disclosure Form A is submitted on behalf of the CONTRACTOR listed on the previous page	е.
Signature of Authorized Representative Date	_

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

# ILLINOIS DEPARTMENT OF TRANSPORTATION

# Form B Other Contracts & Financial Related Information Disclosure

Contractor Na	ıme				
Legal Address	3				
City, State, Zi	p				
Telephone Nu	ımber		Email Address	Fax Number (if avail	able)
			l s Form is required by Section 50 dicly available contract file. This		
	DISCLOSURE (	OF OTHER (	CONTRACTS AND PROCURE	MENT RELATED INF	ORMATION
has any per any other S	nding contracts (incl state of Illinois agend	luding leases cy: Yes _	ement Related Information. The s), bids, proposals, or other ongo	ping procurement rela	
	such as bid or proje		relationship by showing State o attach additional pages as neces		
		THE FOL	LOWING STATEMENT MUST I	BE CHECKED	
	П				
			Signature of Authorized Representative		Date
			OWNERSHIP CERTIFICA	TION	
	e certify that the foll of ownership.	owing stater	nent is true if the individuals for	all submitted Form F	A disclosures do not total
			erest is held by individuals rec outive income or holding less tha		
	☐ Yes ☐ No	□ N/A (I)	Form A disclosure(s) established	d 100% ownership)	

#### **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.



**PART I. IDENTIFICATION** 

Contract No. 61A07 KANE County Section 08-00066-02-BR Project BHOS-0089(130) Route FAS 1107 (Dauberman Road) District 1 Construction Funds

Dept. of Human Rig	hts #		Duration of Project:															
Name of Bidder:																		
PART II. WORKFO A. The undersigned which this contract wo projection including a	bidder hark is to be	as analyz e perform	ed mir ied, an	d for th d fema	ne locat	ions fro	m whi	ch the b	idder re	ecruits	employe	ees, and h	nerel	oy subm	its the fol	llowir s con	ig workfo	n orce
		TOT	AL Wo	rkforce	Projec	tion for	Contra	act						(	CURREN <sup>*</sup>	ТЕМ	PLOYE	ES .
TOTAL Workforce Projection for Contract  MINORITY EMPLOYEES TRAINEES							TO BE ASSIGNED TO CONTRACT											
JOB		TAL	-	A O.K	LUOD	A N II O		HER	APPI			HE JOB			TAL			RITY
CATEGORIES	M	OYEES F	M	ACK F	M	ANIC F	M	IOR. F	M	ES F	M	INEES F		M	OYEES F	┪╏	M	OYEES F
OFFICIALS (MANAGERS)	IVI	'	101	,	IVI		IVI	'	IVI		IVI			IVI	'		IVI	'
SUPERVISORS																		
FOREMEN																		
CLERICAL																		
EQUIPMENT OPERATORS																		
MECHANICS																		
TRUCK DRIVERS																		
IRONWORKERS																		
CARPENTERS																		
CEMENT MASONS																		
ELECTRICIANS																		
PIPEFITTERS, PLUMBERS																		
PAINTERS																		
LABORERS, SEMI-SKILLED																		
LABORERS, UNSKILLED																		
TOTAL																		
		BLE C	-141-	( (	\ <b>t t</b>				7		Г	FOF	R DE	PARTM	IENT US	E ON	ILY	
EMPLOYEES	OTAL Tr	aining Pro TAL	ojectio T	n tor C	ontract		*^	THER	-			-	_			-		
IN	_	OYEES	BL	ACK	HISF	ANIC	_	NOR.										
TRAINING	M	F	М	F	М	F	М	F	]									
APPRENTICES																		
ON THE JOB TRAINEES																		
*0	ther minori	ties are def	fined as	Asians	(A) or Na	ive Ame	ricans (I	۷).			L							

Note: See instructions on page 2

BC 1256 (Rev. 12/11/07)

Please specify race of each employee shown in Other Minorities column.

Contract No. 61A07 KANE County Section 08-00066-02-BR Project BHOS-0089(130) Route FAS 1107 (Dauberman Road) District 1 Construction Funds

#### PART II. WORKFORCE PROJECTION - continued

B.	Included in "Total Employees" under Table A is the total event the undersigned bidder is awarded this contract.	number of <b>new hires</b> tha	at would be employed in the
	The undersigned bidder projects that: (number)		new hires would be
	recruited from the area in which the contract project is lonew hires would	cated; and/or (number)	ea in which the bidder's principal
	office or base of operation is located.		·
C.	Included in "Total Employees" under Table A is a project undersigned bidder as well as a projection of numbers of		
	The undersigned bidder estimates that (number) be directly employed by the prime contractor and that (number) employed by subcontractors.	umber)	persons will be
PART II	III. AFFIRMATIVE ACTION PLAN		
	The undersigned bidder understands and agrees that is utilization projection included under <b>PART II</b> is determine in any job category, and in the event that the undersig commencement of work, develop and submit a writte (geared to the completion stages of the contract) who utilization are corrected. Such Affirmative Action Plan with the <b>Illinois Department of Human Rights</b> .	ed to be an underutilizat ned bidder is awarded n Affirmative Action Pla nereby deficiencies in n	ion of minority persons or women this contract, he/she will, prior to an including a specific timetable ninority and/or female employee
	The undersigned bidder understands and agrees that the submitted herein, and the goals and timetable included uto be part of the contract specifications.		
Compa	pany	Telephone Numb	er
Addres			
	NOTICE REGARDING	G SIGNATURE	
	Bidder's signature on the Proposal Signature Sheet will constitut completed only if revisions are required.	e the signing of this form.	The following signature block needs
Signatu	ature: 🗌	Title:	Date:
Instruction	tions: All tables must include subcontractor personnel in addition to	prime contractor personnel.	
Table A	A - Include both the number of employees that would be hired (Table B) that will be allocated to contract work, and include should include all employees including all minorities, apprentic	all apprentices and on-the-job	trainees. The "Total Employees" column
Table B	<ul> <li>B - Include all employees currently employed that will be allocate currently employed.</li> </ul>	d to the contract work includin	g any apprentices and on-the-job trainees
Table C	C - Indicate the racial breakdown of the total apprentices and on-	the-job trainees shown in Tabl	e A.
			DO 1050 (D. 10/11/05)

### **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. <u>CERTIFICATION, EQUAL EMPLOYMENT OPPORTUNITY:</u>

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

Contract No. 61A07 KANE County Section 08-00066-02-BR Project BHOS-0089(130) Route FAS 1107 (Dauberman Road) 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.

	Firm Name	
(IF AN INDIVIDUAL)	Signature of Owner	
	Business Address	
	Firm Name	
	Ву	
(IF A CO-PARTNERSHIP)	Business Address	
		Name and Address of All Members of the Firm:
	Corporate Name	
	Ву	Signature of Authorized Representative
(IF A CORPORATION)		Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
	Attest	Signature
(IF A JOINT VENTURE, USE THIS SECTION FOR THE MANAGING PARTY AND THE	Rusinoss Addross	
SECOND PARTY SHOULD SIGN BELOW)	Dusiliess Address	
	Corporate Name	
(IF A JOINT VENTURE)	•	Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
		. , pod 6. printed name and the of Admon2ed Hepresontative
	Attest	O'marken.
		Signature
	Business Address	
If more than two parties are in the joint venture,	please attach an addit	ional signature sheet.

### **Return with Bid**



# Division of Highways Annual Proposal Bid Bond

This Annual Proposal Bid Bond shall become effective at 12:01 AM (CDST) on	and shall be valid until 11:59 PM (CDST).
KNOW ALL PERSONS BY THESE PRESENTS, That We	
as PRINCIPAL, and	
price, or for the amount specified in the bid proposal under '	ne STATE OF ILLINOIS in the penal sum of 5 percent of the total bid 'Proposal Guaranty" in effect on the date of the Invitation for Bids, d STATE OF ILLINOIS, for the payment of which we bind ourselves,
	SUCH that whereas, the PRINCIPAL may submit bid proposal(s) to tof Transportation, for various improvements published in the e.
the time and as specified in the bidding and contract document into a contract in accordance with the terms of the bidding ar coverages and providing such bond as specified with good and the prompt payment of labor and material furnished in the prosenter into such contract and to give the specified bond, the P penalty hereof between the amount specified in the bid propo	d proposal(s) of the PRINCIPAL; and if the PRINCIPAL shall, within its; and if, after award by the Department, the PRINCIPAL shall enter and contract documents including evidence of the required insurance I sufficient surety for the faithful performance of such contract and for secution thereof; or if, in the event of the failure of the PRINCIPAL to RINCIPAL pays to the Department the difference not to exceed the sal and such larger amount for which the Department may contract oposal, then this obligation shall be null and void, otherwise, it shall
preceding paragraph, then Surety shall pay the penal sum to t Surety does not make full payment within such period of time	PAL has failed to comply with any requirement as set forth in the he Department within fifteen (15) days of written demand therefor. If e, the Department may bring an action to collect the amount owed. If attorney's fees, incurred in any litigation in which it prevails either in
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)
Ву	Ву
(Signature and Title)	(Signature of Attorney-in-Fact)
Notary for PRINCIPAL	Notary for SURETY
STATE OF	STATE OF
COUNTY OF	COUNTY OF
Signed and attested before me on (date)	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)
(19 111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(-3 , , , , , , , , , , , , , , , , ,
(Date Commission Expires)	(Date Commission Expires)

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.

In lieu of completing the above section of the Annual Proposal Bid Bond form, the Principal may file an Electronic Bid Bond. By

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

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

# Illinois Department of Transportation

### **Return with Bid**

# Division of Highways Proposal Bid Bond

		Item No.	
		Letting Date	e
(NOW ALL PERSONS BY TH	HESE PRESENTS, That We		
as PRINCIPAL, and			
the amount specified in the bi	d proposal under "Proposal Guaranty"	in effect on the date of the Invitation for	of 5 percent of the total bid price, or for r Bids, whichever is the lesser sum, well s, executors, administrators, successors
			omitted a bid proposal to the STATE OF rtation Bulletin Item Number and Letting
specified in the bidding and c with the terms of the bidding a with good and sufficient sure prosecution thereof; or if, in the pays to the Department the dif	contract documents; and if, after award and contract documents including evide ty for the faithful performance of such the event of the failure of the PRINCIP fference not to exceed the penalty here the party to perform the	I by the Department, the PRINCIPAL sence of the required insurance coverage contract and for the prompt payment AL to enter into such contract and to go between the amount specified in the	RINCIPAL shall, within the time and as shall enter into a contract in accordance es and providing such bond as specified t of labor and material furnished in the give the specified bond, the PRINCIPAL bid proposal and such larger amount for nen this obligation shall be null and void,
hen Surety shall pay the pen within such period of time, the	nal sum to the Department within fiftee	en (15) days of written demand therefo collect the amount owed. Surety is liable	as set forth in the preceding paragraph, r. If Surety does not make full payment e to the Department for all its expenses,
n TESTIMONY WHEREO caused this instrument to b day of	F, the said PRINCIPAL has be signed by its officer A.D.,	In TESTIMONY WHEREOF, instrument to be signed by its day of	the said SURETY has caused this sofficer  A.D.,
(Com	pany Name)	(Com	pany Name)
Зу		Ву	
(Sig	nature and Title)		e of Attorney-in-Fact)
Notary for PRINCIPAL		Notary for SURETY	
STATE OF		STATE OF	
COUNTY OF		COUNTY OF	
Signed and attested before	e me on (date)	Signed and attested before m	ne on (date)
(Name o	of Notary Public)	(Name o	f Notary Public)
(Seal)		(Seal)	
,	(Signature of Notary Public)		(Signature of Notary Public)
	(Date Commission Expires)	_	(Date Commission Expires)
proposal the Principal is e		oid bond has been executed and	Electronic Bid Bond. By signing the the Principal and Surety are firmly
Electronic Bid Bond ID #	Company/Bidder Nar	me	Signature and Title



#### **DBE Utilization Plan**

#### (1) Policy

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

#### (2) Obligation

Date

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

(3) Proj	ect and Bid Identification			
Complet	te the following information concerning the project and bid:			
Route		Total Bid		<u> </u>
Section		Contract DBE Goal		
Project			(Percent)	(Dollar Amount)
County				
Letting [	Date			
Contract	t No.			
Letting I	tem No.			
(4) Ass	urance			
	in my capacity as an officer of the undersigned bidder (or bidder ny company: (check one)  Meets or exceeds contract award goals and has provided door Disadvantaged Business Participation percent  Attached are the signed participation statements, forms SBE use of each business participating in this plan and assuring the work of the contract.  Failed to meet contract award goals and has included good fair provided participation as follows:	cumented participation as for 2025, required by the Spec at each business will perfor	ollows: ial Provision evi m a commercia	dencing availability and lly useful function in the
	Disadvantaged Business Participation percent  The contract goals should be accordingly modified or waive support of this request including good faith effort. Also attrequired by the Special Provision evidencing availability and ubusiness will perform a commercially useful function in the work.	tached are the signed partic use of each business partic	articipation state	ements, forms SBE 2025,
Dec	Company	The "as read" Low Bidder is re		•
Ву		Submit only one utilization pla submitted in accordance with		
Title		Bureau of Small Business Ent	erprises	Local Let Projects

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.

2300 South Dirksen Parkway

Springfield, Illinois 62764

Submit forms to the

Local Agency



# **DBE Participation Statement**

Subcontractor	Registration Num	ber		L	etting	
Participation Statement				Item No.		
(1) Instructions				С	ontract No.	
accordance w	ith the special prov	r each disadvantaged buvision and will be attach cking participation items	ed to the Utilization Pl	an form. If addition	nal space is needed	l complete an
(2) Work:						
Please indicat	te: J/V	Manufacturer	Supplier (60%)	Subcor	tractor	Trucking
Pay Item No.	Descri	ption (Anticipated items	for trucking)*	Quantity	Unit Price	Total
(2) Doutiel De	umant Itama (Far	any of the above items y	uhiah ava navtial nav it	a-ma)	Total	
	ist be sufficient to d	any of the above items v letermine a Commercially			work and subcontrac	t dollar amount:
subcontract, it	is to be a second-t must be clearly in	tier subcontractor, or if the dicated on the DBE Par	ticipation Statement, a	and the details of the	ne transaction fully	explained.
In the event a contract, the p	DBE subcontractorime must submit	or second-tiers a portion a DBE Participation Sta	of its subcontract to o tement, with the detail	ne or more subcor s of the transaction	ntractors during the n(s) fully explained.	work of a
perform a com contractor or 1 prior approval	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 1 <sup>st</sup> 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.					
ű	nature for Contractor _	1 <sup>st</sup> Tier 2 <sup>nd</sup> Tier		•	DBE Firm 1 <sup>st</sup> Tier	2 <sup>nd</sup> Tier
Contact Pers	on		Cont	act Person		
Title			Title			
Firm Name Firm Name						
Address			Addı	ess		
City/State/Zip			City/	State/Zip		
Phone			Phoi	ne		
Email Addres	ss		Ema	il Address		
					E	
The Department of To-	anapartation is requestive all	and any transfer of information that in page 200	with accomplish the statut	ann an airtiinad iraday tit-	to and 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:

lame:	
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. 61A07 KANE County Section 08-00066-02-BR Project BHOS-0089(130) Route FAS 1107 (Dauberman Road) District 1 Construction Funds



# **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 <u>State Required Ethical Standards Governing Subcontractors</u>.

# 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.

#### C. <u>Debt Delinquency</u>

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 subcontract 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

### SUBCONTRACTOR DISCLOSURES

#### I. DISCLOSURES

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

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

#### B. Financial Interests and Conflicts of Interest

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

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

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

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

2. <u>Disclosure Forms</u>. 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. <u>Disclosure Form Instructions</u>

#### 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? YESNO
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 <u>per individual per subcontract</u> even if a specific individual would require a yes answer to more than one question.)
'FS"	answer to any of these questions requires the completion of Form A. The subcontractor must determine each individual in

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 <u>NOT APPLICABLE STATEMENT</u> on page 2 of Form A must be signed and dated by an individual that is authorized to execute contracts for your company.

### 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 <u>NOT APPLICABLE STATEMENT</u> on Form A <u>does not</u> 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		
Subcontractor Name		
Legal Address		
Legal Address		
City, State, Zip		
Oity, State, Zip		
Telephone Number	Email Address	Fax Number (if available)
relephone Number	Liliali Addiess	i ax inuitibei (ii 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 openended 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.

FOR INDIVIDUAL (type or print information)

# **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)

TOTT INDIVIDUAL (	type or print information)		
NAME:			
ADDRESS _			
Type of owner	ship/distributable income share:	:	
stock % or \$ value of	sole proprietorship ownership/distributable income sh	Partnershipare:	other: (explain on separate shee
	nterest relationships apply. If the		dicate which, if any, of the following is "Yes", please attach additional
(a) State employme	nt, currently or in the previous 3	years, including contractu	ual employment of services. Yes No
If your answer is	yes, please answer each of the	e following questions.	<u> </u>
-	currently an officer or employee way Authority?	e of either the Capitol Deve	elopment Board or the Illinois State YesNo
currently exceeds	currently appointed to or emploration appointed to or employed by a 60% of the annual salary of the or which you are employed and	ny agency of the State of le Governor, provide the na	Illinois, and your annual salary

	3.	If you are currently appointed to or employed by any agency of t salary exceeds 60% of the annual salary of the Governor, are yo (i) more than 7 1/2% of the total distributable income of your corporation, or (ii) an amount in excess of 100% of the annual salary	ou entitled to receive firm, partnership, association or
	4.	If you are currently appointed to or employed by any agency of the salary exceeds 60% of the annual salary of the Governor, are your minor children entitled to receive (i) more than 15% in the income of your firm, partnership, association or corporation, or the salary of the Governor?	ou and your spouse aggregate of the total distributable
(b)		employment of spouse, father, mother, son, or daughter, includir previous 2 years.	ng contractual employment services  YesNo
	If	your answer is yes, please answer each of the following question	
	1.	Is your spouse or any minor children currently an officer or empl Board or the Illinois State Toll Highway Authority?	oyee of the Capitol Development YesNo
		Is your spouse or any minor children currently appointed to or er of Illinois? If your spouse or minor children is/are currently agency of the State of Illinois, and his/her annual salary ex annual salary of the Governor, provide the name of your spouse of the State agency for which he/she is employed and his/her an	appointed to or employed by any ceeds 60% of the and/or minor children, the name
	3.	If your spouse or any minor children is/are currently appointed to State of Illinois, and his/her annual salary exceeds 60% of the are you entitled to receive (i) more than 71/2% of the total distribution, partnership, association or corporation, or (ii) an amount annual salary of the Governor?	nnual salary of the Governor, utable income of your
	4.	If your spouse or any minor children are currently appointed to State of Illinois, and his/her annual salary exceeds 60% of the are you and your spouse or minor children entitled to receive aggregate of the total distributable income of your firm, partner (ii) an amount in excess of two times the salary of the Governor?	nual salary of the Governor, (i) more than 15 % in the ship, association or corporation, or
(-)	<b>-</b> 1		YesNo
(C)	unit of	ve status; the holding of elective office of the State of Illinois, the glocal government authorized by the Constitution of the State of Illicurrently or in the previous 3 years.	
(d)		onship to anyone holding elective office currently or in the previour daughter.	s 2 years; spouse, father, mother, YesNo
(e)	Americ of the	ntive office; the holding of any appointive government office of the ca, or any unit of local government authorized by the Constitution State of Illinois, which office entitles the holder to compensation is charge of that office currently or in the previous 3 years.	of the State of Illinois or the statutes
		onship to anyone holding appointive office currently or in the previous daughter.	ous 2 years; spouse, father, mother, YesNo
(g)	Emplo	yment, currently or in the previous 3 years, as or by any registere	d lobbyist of the State government. YesNo

(h) Relationship to anyone who is or was a registered lobbyist son, or daughter.	in the previous 2 years; spouse, father, mother, YesNo
(i) Compensated employment, currently or in the previous 3 y committee registered with the Secretary of State or any contact action committee registered with either the Secretary of States	ounty clerk of the State of Illinois, or any political
(j) Relationship to anyone; spouse, father, mother, son, or data last 2 years by any registered election or re-election common county clerk of the State of Illinois, or any political action of State or the Federal Board of Elections.	ttee registered with the Secretary of State or any ommittee registered with either the Secretary of
	YesNo
Communication Disclosure.	
Disclose the name and address of each lobbyist and other a Section 2 of this form, who is has communicated, is communic employee concerning the bid or offer. This disclosure i supplemented for accuracy throughout the process and threidentified, enter "None" on the line below:	eating, or may communicate with any State officer or s a continuing obligation and must be promptly
Name and address of person(s):	

3

**4. Debarment Disclosure.** For each of the persons identified under Sections 2 and 3 of this form, disclose whether any of the following has occurred within the previous 10 years: debarment from contracting with any governmental entity; professional licensure discipline; bankruptcies; adverse civil judgments and administrative findings; and criminal felony convictions. This disclosure is a continuing obligation and must be promptly

supplemented for accuracy throughout the procurement process and term of the contract. If no person is identified, enter "None" on the line below: Name of person(s): Nature of disclosure: APPLICABLE STATEMENT This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Under penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of my knowledge. Completed by: Signature of Individual or Authorized Officer Date **NOT APPLICABLE STATEMENT** Under penalty of perjury, I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A. This Disclosure Form A is submitted on behalf of the SUBCONTRACTOR listed on the previous page. Signature of Authorized Officer Date

# ILLINOIS DEPARTMENT OF TRANSPORTATION

# Form B Subcontractor: Other Contracts & Financial Related Information Disclosure

Subcontractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)
Disclosure of the information contained in information shall become part of the publicl a total value of \$50,000 or more, from subcontracts.	y available contract file. This Form	B must be completed for subcontracts with
DISCLOSURE OF OTHER CONTRA	CTS, SUBCONTRACTS, AND PRO	OCUREMENT RELATED INFORMATION
1. Identifying Other Contracts & Procure any pending contracts, subcontracts, includ any other State of Illinois agency: Ye If "No" is checked, the subcontractor only	ing leases, bids, proposals, or othe s No	r ongoing procurement relationship with
2. If "Yes" is checked. Identify each such information such as bid or project number (a INSTRUCTIONS:		
THE FOLLO	WING STATEMENT MUST BE CH	ECKED
П		
	Signature of Authorized Officer	Date
	OWNERSHIP CERTIFICATION	
Please certify that the following statement is of ownership	s true if the individuals for all submit	ted Form A disclosures do not total 100%
Any remaining ownership interest is parent entity's distributive income o		han \$106,447.20 of the bidding entity's or interest.
□ Ves □ No □ N/A (Form	A disclosure(s) established 100% of	ownershin)

# Illinois Department of Transportation

# **NOTICE TO BIDDERS**

- 1. TIME AND PLACE OF OPENING BIDS. Sealed proposals for the improvement described herein will be received by the Department of Transportation. Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). Paper-based bids are to be submitted to the Chief Procurement Officer for the Department of Transportation in care of the Chief Contracts Official at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 a.mJune 12, 2015. All bids will be gathered, sorted, publicly opened and read in the auditorium at the Department of Transportation's Harry R. Hanley Building shortly after 10:00 a.m.
- **2. DESCRIPTION OF WORK**. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

Contract No. 61A07 KANE County Section 08-00066-02-BR Project BHOS-0089(130) Route FAS 1107 (Dauberman Road) District 1 Construction Funds

Remove the superstructure, repairs to the substructure and the replacement with a PPC deck beam superstructure with a 5" wearing surface, located 0.50 miles north of US 50 over Welch Creek.

- 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, Acting Secretary

# CONTRACT 61A07

# INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

# Adopted January 1, 2015

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

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-12) (Revised 1-1-15)

# SUPPLEMENTAL SPECIFICATIONS

Std. Spe	ec. Sec. Page	<u>No.</u>
101	Definition of Terms	1
102	Advertisement, Bidding, Award, and Contract Execution	
105	Control of Work	
106	Control of Materials	
107	Legal Regulations and Responsibility to Public	6
108	Prosecution and Progress	14
109	Measurement and Payment	15
202	Earth and Rock Excavation	17
211	Topsoil and Compost	
250	Seeding	
253	Planting Woody Plants	
280	Temporary Erosion and Sediment Control	
312	Stabilized Subbase	
406	Hot-Mix Asphalt Binder and Surface Course	
407	Hot-Mix Asphalt Pavement (Full-Depth)	
420	Portland Cement Concrete Pavement	
424	Portland Cement Concrete Sidewalk	
440	Removal of Existing Pavement and Appurtenances	
502	Excavation for Structures	
503	Concrete Structures	
504	Precast Concrete Structures	
506	Cleaning and Painting New Steel Structures	
512	Piling	
516	Drilled Shafts	
521	Bearings	
540	Box Culverts	
588	Bridge Relief Joint System	
589	Elastic Joint Sealer	48
602	Catch Basin, Manhole, Inlet, Drainage Structure, and Valve Vault Construction, Adjustment,	
	and Reconstruction	
603	Adjusting Frames and Grates of Drainage and Utility Structures	
606	Concrete Gutter, Curb, Median, and Paved Ditch	
610	Shoulder Inlets with Curb	
639	Precast Prestressed Concrete Sight Screen	
642	Shoulder Rumble Strips	
643	Impact Attenuators	
644	High Tension Cable Median Barrier	
669	Removal and Disposal of Regulated Substances	
670	Engineer's Field Office and Laboratory	64

Std. Sp	pec. Sec. Page	No.
701	Work Zone Traffic Control and Protection	65
706	Impact Attenuators, Temporary	. 68
707	Movable Traffic Barrier	
708	Temporary Water Filled Barrier	. 73
730	Wood Sign Support	
780	Pavement Striping	. 76
816	Unit Duct	. 81
836	Pole Foundation	. 82
860	Master Controller	. 83
1001	Cement	. 84
1003	Fine Aggregates	. 85
1004	Coarse Aggregates	. 87
1006	Metals	. 91
1011	Mineral Filler	. 93
1017	Packaged, Dry, Combined Materials for Mortar	. 94
1018	Packaged Rapid Hardening Mortar or Concrete	. 95
1019	Controlled Low-Strength Material (CLSM)	. 96
1020	Portland Cement Concrete	
1024	Grout and Nonshrink Grout	136
1030	Hot-Mix Asphalt	137
1040	Drain Pipe, Tile, Drainage Mat, and Wall Drain	.142
1042	Precast Concrete Products	143
1069	Pole and Tower	144
1070	Foundation and Breakaway Devices	145
1073	Controller	146
1081	Materials for Planting	147
1082	Preformed Bearing Pads	148
1083	Elastomeric Bearings	149
1088	Wireway and Conduit System	150
1095	Pavement Markings	152
1101	General Equipment	155
1102	Hot-Mix Asphalt Equipment	
1103	Portland Cement Concrete Equipment	
1105	Pavement Marking Equipment	160
1106	Work Zone Traffic Control Devices	161

.

# RECURRING SPECIAL PROVISIONS

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

CHE	ECK	SHEET #	PAGE NO.
1	Х	Additional State Requirements for Federal-Aid Construction Contracts	163
2	Х	Subletting of Contracts (Federal-Aid Contracts)	166
3		EEO	
4		Specific EEO Responsibilities Non Federal-Aid Contracts	177
5		Required Provisions - State Contracts	182
6		Asbestos Bearing Pad Removal	188
7		Asbestos Waterproofing Membrane and Asbestos HMA Surface Removal	
8		Temporary Stream Crossings and In-Stream Work Pads	
9		Construction Layout Stakes Except for Bridges	
10	Х	Construction Layout Stakes	
11		Use of Geotextile Fabric for Railroad Crossing	
12		Subsealing of Concrete Pavements	
13		Hot-Mix Asphalt Surface Correction	
14		Pavement and Shoulder Resurfacing	
15		Reserved	
16		Patching with Hot-Mix Asphalt Overlay Removal	207
17		Polymer Concrete	208
18		PVC Pipeliner	210
19		Pipe Underdrains	211
20	Χ	Guardrail and Barrier Wall Delineation	212
21		Bicycle Racks	216
22		Reserved	218
23		Temporary Portable Bridge Traffic Signals	219
24		Work Zone Public Information Signs	221
25		Nighttime Inspection of Roadway Lighting	222
26		English Substitution of Metric Bolts	
27		English Substitution of Metric Reinforcement Bars	224
28		Calcium Chloride Accelerator for Portland Cement Concrete	225
29		Reserved	226
30		Quality Control of Concrete Mixtures at the Plant	227
31	Χ	Quality Control/Quality Assurance of Concrete Mixtures	235
32		Digital Terrain Modeling for Earthwork Calculations	251
33		Pavement Marking Removal	253
34		Preventive Maintenance – Bituminous Surface Treatment	254
35		Preventive Maintenance – Cape Seal	260
36		Preventive Maintenance – Micro-Surfacing	275
37		Preventive Maintenance – Slurry Seal	286
38		Temporary Raised Pavement Markers	
39		Restoring Bridge Approach Pavements Using High-Density Foam	

# LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

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

# Table of Contents

<b>CHECK</b>	SHEET#	PAGE NO.
LRS 1	Reserved	301
LRS 2	☐ Furnished Excavation	302
LRS 3	☑ Work Zone Traffic Control Surveillance	303
LRS 4	☐ Flaggers in Work Zones	304
LRS 5	Contract Claims	305
LRS 6	☐ Bidding Requirements and Conditions for Contract Proposals	306
LRS 7	☐ Bidding Requirements and Conditions for Material Proposals	312
LRS 8	Reserved	318
LRS 9	☐ Bituminous Surface Treatments	319
LRS 10	Reserved	320
LRS 11	Employment Practices	321
LRS 12	Wages of Employees on Public Works	323
LRS 13	Selection of Labor	325
LRS 14	Paving Brick and Concrete Paver Pavements and Sidewalks	
LRS 15	Partial Payments	329
LRS 16	Protests on Local Lettings	330
LRS 17	Substance Abuse Prevention Program	331
LRS 18	Multigrade Cold Mix Asphalt	332

# INDEX OF SPECIAL PROVISIONS

STATE OF ILLINOIS
LOCATION OF PROJECT1
DESCRIPTION OF PROJECT1
COMPLETION DATE PLUS WORKING DAYS2
PRECAUTION FOR UTILITIES2
STATUS OF UTILITIES TO BE ADJUSTED3
COORDINATION WITH FEDERAL AVIATION ADMINISTRATION 5
COORDINATION WITH KANE-DUPAGE SOIL AND WATER CONSERVATION DISTRICT 5
PREQUALIFICATION OF BIDDERS
GUARDRAIL DELINEATION
WASHOUT BASIN6
TURBIDITY BARRIER
MAINTENANCE OF ROADWAYS 9
PUBLIC CONVENIENCE AND SAFETY (DIST 1)
TRAFFIC CONTROL PLAN10
TRAFFIC CONTROL AND PROTECTION (ARTERIALS)11
TEMPORARY INFORMATION SIGNING12
HMA MIXTURE DESIGN REQUIREMENTS (D-1)14
GROUND TIRE RUBBER (GTR) MODIFIED ASPHALT BINDER (D-1)26
COARSE AGGREGATE FOR BACKFILL, TRENCH BACKFILL AND BEDDING (D-1)28
AGGREGATE SUBGRADE IMPROVEMENT (D-1)28
HEAT OF HYDRATION CONTROL FOR CONCRETE STRUCTURES (D-1)30
RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (D-1)30
EMBANKMENT II
RECLAIMED ASPHALT PAVEMENT FOR NON-POROUS EMBANKMENT AND BACKFILL41
IDOT TRAINING PROGRAM GRADUATE ON-THE-JOB TRAINING SPECIAL PROVISION (TBG)

IEPA NOTICE OF INTENT (NOI) FOR GENERAL PERMIT TO DISCHARGE STORM WATER ASSOCIATED WITH CONSTRUCTION SITE ACTIVIES	52
PERMITS: ARMY CORPS OF ENGINEERS (ACOE) KANE-DUPAGE SOIL AND WATER CONSERVATION DISTRICT (KDSWCD) FAA AERONAUTICAL STUDY – 7460 PART 77	54 64 65
GEOTECHNICAL REPORT	67

# INDEX LOCAL ROADS AND STREETS SPECIAL PROVISIONS

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

# **BDE SPECIAL PROVISIONS**

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

<u>File</u> Name	<u>Pg.</u>	Special Provision Title	<u>Effective</u>	Revised
80240		Above Grade Inlet Protection	July 1, 2009	Jan. 1, 2012
80099		Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2014
80274		Aggregate Subgrade Improvement	April 1, 2012	Jan. 1, 2013
80192		Automated Flagger Assistance Device	Jan. 1, 2008	•
80173		Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2013
80241		Bridge Demolition Debris	July 1, 2009	
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
80310		Coated Galvanized Steel Conduit	Jan. 1, 2013	Jan. 1, 2015
80341		Coilable Nonmetallic Conduit	Aug. 1, 2014	Jan. 1, 2015
80198		Completion Date (via calendar days)	April 1, 2008	
80199		Completion Date (via calendar days) Plus Working Days	April 1, 2008	
* 80293		Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	Aprìl 1, 2012	April 1, 2015
80294		Concrete Box Culverts with Skews ≤ 30 Degrees Regardless of Design Fill and Skews > 30 Degrees with Design Fills > 5 Feet	April 1, 2012	April 1, 2014
80311		Concrete End Sections for Pipe Culverts	Jan. 1, 2013	
80334	103	X Concrete Gutter, Curb, Median, and Paved Ditch	April 1, 2014	Aug. 1, 2014
80277		Concrete Mix Design – Department Provided	Jan. 1, 2012	Jan. 1, 2014
80261	104	X Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
80335	107	X Contract Claims	April 1, 2014	
* 80029	108	X Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Jan. 2, 2015
* 80358	119	X Equal Employment Oppurtunity	April 1, 2015	Tanama na wasan na kamana ka ma wakan ji ya dayanji 74 dala.
80265	123	X Friction Aggregate	Jan. 1, 2011	Nov. 1, 2014
80229		Fuel Cost Adjustment	April 1, 2009	July 1, 2009
80329		Glare Screen	Jan. 1, 2014	A 4 0044
80304 80246	127	Grooving for Recessed Pavement Markings  X Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Nov. 1, 2012	Aug. 1, 2014
80322	127	X Hot-Mix Asphalt – Density Testing of Longitudinal Joints Hot-Mix Asphalt – Mixture Design Composition and Volumetric	Jan. 1, 2010	April 1, 2012
00322		Requirements	Nov. 1, 2013	Nov. 1, 2014
80323		Hot-Mix Asphalt – Mixture Design Verification and Production	Nov. 1, 2013	Nov. 1, 2014
* 80347		Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits –	Nov. 1, 2014	April 1, 2015
	one convenient selderlik der	Jobsite Sampling		
80348	129	X Hot-Mix Asphalt – Prime Coat	Nov. 1, 2014	
80315		Insertion Lining of Culverts	Jan. 1, 2013	Nov. 1, 2013
80351		Light Tower	Jan. 1, 2015	
80336	episeper receptor	Longitudinal Joint and Crack Patching	April 1, 2014	
* 80324	134	X LRFD Pipe Culvert Burial Tables	Nov. 1, 2013	April 1, 2015
* 80325		LRFD Storm Sewer Burial Tables	Nov. 1, 2013	April 1, 2015
80045		Material Transfer Device	June 15, 1999	Aug. 1, 2014
80342		Mechanical Side Tie Bar Inserter	Aug. 1, 2014	Jan. 1, 2015
80165		Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
80337		Paved Shoulder Removal	April 1, 2014	
80349		Pavement Marking Blackout Tape	Nov. 1, 2014	
80298		Pavement Marking Tape Type IV	April 1, 2012	
80254		Pavement Patching	Jan. 1, 2010	
80352 * 80359	154	Pavement Striping - Symbols  X Portland Cement Concrete Bridge Deck Curing	Jan. 1, 2015	THE RESERVE OF THE PROPERTY OF THE PROPERTY.
00009	194	TV Trougand certain counters bridge beck confille	April 1, 2015	

<u>File</u> Name	<u>Pg.</u>	Special Provision Title	<u>Effective</u>	Revised
* 80353		Portland Cement Concrete Inlay or Overlay	Jan. 1, 2015	April 1, 2015
80338		Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	April 1, 2014	Commence of the commence of the confidence of the commence of
80343		Precast Concrete Handhole	Aug. 1, 2014	
80300		Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	
80328	157	X Progress Payments	Nov. 2, 2013	
34261		Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157		Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
80306		Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt	Nov. 1, 2012	Jan. 2, 2015
		Shingles (RAS)		
80350		Retroreflective Sheeting for Highway Signs	Nov. 1, 2014	
80327	158	X Reinforcement Bars	Nov. 1, 2013	
80344		Rigid Metal Conduit	Aug. 1, 2014	
* 80354		Sidewalk, Corner, or Crosswalk Closure	Jan. 1, 2015	April 1, 2015
80340		Speed Display Trailer	April 2, 2014	
80127	160	X Steel Cost Adjustment	April 2, 2004	April 1, 2009
80317		Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	
80355		Temporary Concrete Barrier	Jan. 1, 2015	
80301		Tracking the Use of Pesticides	Aug. 1, 2012	
80356	164	X Traffic Barrier Terminals Type 6 or 6B	Jan. 1, 2015	
20338	165	X Training Special Provisions	Oct. 15, 1975	
80318	et de toere a entrete at de la la de	Traversable Pipe Grate	Jan. 1, 2013	April 1, 2014
* 80345		Underpass Luminaire	Aug. 1, 2014	April 1, 2015
80357	. John Translammani sa bila as	Urban Half Road Closure with Mountable Median	Jan. 1, 2015	
* 80346		Waterway Obstruction Warning Luminaire	Aug. 1, 2014	April 1, 2015
80288	168	X Warm Mix Asphalt	Jan. 1, 2012	Nov. 1, 2014
* 80302	170	X Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
80289		Wet Reflective Thermoplastic Pavement Marking	Jan. 1, 2012	
80071		Working Days	Jan. 1, 2002	

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

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

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

- Bridge Demolition Debris
- Building Removal-Case I
- Building Removal-Case II
- Building Removal-Case III
- Building Removal-Case IV
- Completion Date
- Completion Date Plus Working Days
- DBE Participation

- Material Transfer Device
- Railroad Protective Liability Insurance
- Training Special Provisions
- Working Days

# GUIDE BRIDGE SPECIAL PROVISION INDEX/CHECK SHEET

Effective as of the: March 6, 2015 Letting

Pg #	<b>V</b>	File Name	<u>Title</u>	<u>Effective</u>	<u>Revised</u>
		GBSP 4	Polymer Modified Portland Cement Mortar	June 7, 1994	July 26, 2013
		GBSP 12	Drainage System	June 10, 1994	Jan 1, 2007
		GBSP 13	High-Load Multi-Rotational Bearings	Oct 13, 1988	Oct 30, 2012
		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	April 19, 2012
		GBSP 26	Containment and Disposal of Lead Paint Cleaning Residues	Oct 2, 2001	April 30, 2010
		GBSP 28	Deck Slab Repair	May 15, 1995	Oct 15, 2011
		GBSP 29	Bridge Deck Microsilica Concrete Overlay	May 15, 1995	Dec 29, 2014
		GBSP 30	Bridge Deck Latex Concrete Overlay	May 15, 1995	Dec 29, 2014
		GBSP 31	Bridge Deck High-Reactivity Metakaolin (HRM) Conc Overlay	Jan 21, 2000	Dec 29, 2014
		GBSP 32	Temporary Sheet Piling	Sept 2, 1994	Jan 31, 2012
		GBSP 33	Pedestrian Truss Superstructure	Jan 13, 1998	Dec 29, 2014
171	Х		Concrete Wearing Surface	June 23, 1994	Feb 6, 2013
		GBSP 35	Silicone Bridge Joint Sealer	Aug 1, 1995	Oct 15, 2011
		GBSP 38	Mechanically Stabilized Earth Retaining Walls	Feb 3, 1999	Dec 29, 2014
		GBSP 42	Drilled Soldier Pile Retaining Wall	Sept 20, 2001	Jan 3, 2014
		GBSP 43	Driven Soldier Pile Retaining Wall	Nov 13, 2002	Jan 3, 2014
		GBSP 44	Temporary Soil Retention System	Dec 30, 2002	May 11, 2009
		GBSP 45	Bridge Deck Thin Polymer Overlay	May 7, 1997	Feb 6, 2013
		GBSP 46	Geotextile Retaining Walls	Sept 19, 2003	July 26, 2013
		GBSP 51	Pipe Underdrain for Structures	May 17, 2000	Jan 22, 2010
		GBSP 53	Structural Repair of Concrete	Mar 15, 2006	Aug 29, 2014
		GBSP 55	Erection of Curved Steel Structures	June 1, 2007	
	<u> </u>	GBSP 56	Setting Piles in Rock	Nov 14, 1996	April 19, 2012
		GBSP 57	Temporary Mechanically Stabilized Earth Retaining Walls	Jan 6, 2003	Dec 29, 2014
	ļ	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	Mar 6, 2009
	ļ	GBSP 61	Slipform Parapet	June 1, 2007	Dec 29, 2014
175	X		Concrete Deck Beams	June 13, 2008	Oct 9, 2009
		GBSP 64	Segmental Concrete Block Wall	Jan 7, 1999	Oct 30, 2012
		GBSP 65	Precast Modular Retaining Walls	Mar 19, 2001	Dec 29, 2014
		GBSP 67	Structural Assessment Reports for Contractor's Means and Methods	Mar 6, 2009	
		GBSP 70	Braced Excavation	Aug 9, 1995	May 18, 2011
		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	Dec 29, 2014
		GBSP 73	Cofferdams	Oct 15, 2011	
		GBSP 74	Permanent Steel Sheet Piling (LRFD)	Jan 31, 2012	Aug 17, 2012
		GBSP 75	Bond Breaker for Prestressed Concrete Bulb-T Beams	April 19, 2012	
177	X	GBSP 76	Granular Backfill for Structures	April 19, 2012	Oct 30, 2012
		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	April 18, 2014
		GBSP 79	Bridge Deck Grooving (Longitudinal)	Dec 29, 2014	
		GBSP 80	Fabric Reinforced Elastomeric	Aug 29, 2014	

LIST ANY ADDITIONAL SPECIAL PROVISIONS BELOW

The following Guide Bridge Special Provisions have been incorporated into the 2012 Standard Specifications:

File	Title	Std Spec
Name		Location
GBSP22	Cleaning and Painting New Metal Structures	506
GBSP36	Surface Preparation and Painting Req. for Weathering Steel	506
GBSP50	Removal of Existing Non-composite Bridge Decks	501
GBSP58	Mechanical Splicers	508
GBSP63	Demolition Plans for Removal of Existing Structures	501
GBSP68	Piling	512
GBSP69	Freeze-Thaw Aggregates for Concrete Superstructures Poured on Grade	1004

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

File	Title	Disposition:
Name		
GBSP37	Underwater Structure Excavation Protection	Replaced by GBSP73
GBSP11	Permanent Steel Sheet Piling	Replaced by GBSP74
GBSP47	High Performance Concrete Structures	Discontinued
GBSP52	Porous Granular Embankment (Special)	Replaced by GBSP76
GBSP66	Wave Equation Analysis of Piles	Discontinued

### STATE OF ILLINOIS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", adopted January 1, 2012, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids; and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of Dauberman Road (CH 62), Section 08-00066-02-BR, Project BHOS-0089(130), in Kane County, Illinois, and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

Dauberman Road (CH 62) over Welch Creek

SECTION 08-00066-02-BR

KANE COUNTY, ILLINOIS

PROJECT BHO2-0089(130)

Contract 61A07

#### LOCATION OF PROJECT

The Dauberman Road over Welch Creek project is located in Big Rock Township, Kane County, Illinois (T38N, R6E, and Section 14/15). The project is roughly ½ mile north of U.S. Route 30 and six (6) miles south of Interstate 88. Dauberman Road is marked as County Highway 62 and is listed as Federal Aid Secondary (FAS) 1107.

### **DESCRIPTION OF PROJECT**

The project involves the removal of the existing bridge superstructure, repairs to the existing substructure and replacement with concrete deck beams, a five (5)-inch wearing surface, F-shaped parapets and rip rap protection to reduce scouring. The proposed improvement also includes reconstruction of Dauberman Road in advance of the bridge structure.

The work to be performed under this contract shall include, but not be limited to, pavement removal, guardrail removal, tree removal, bridge deck and parapet removal, and removal of other miscellaneous items; construction of Hot-Mix Asphalt pavement, guardrail installation, pavement markings, traffic control and all incidental and collateral work necessary to complete the project as shown on the plans and as described herein.

#### COMPLETION DATE PLUS WORKING DAYS

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

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

"When a completion date plus working days is specified, the Contractor shall complete all contract items and safely open all roadways to traffic by 11:59 PM on July 31, 2016 except as specified herein.

The Contractor will be allowed to complete all clean-up work and punch list items within 10 working days after the completion date for opening the roadway to traffic. Under extenuating circumstances the Engineer may direct that certain items of work, not affecting the safe opening of the roadway to traffic, may be completed within the working days allowed for cleanup work and punch list items. Temporary lane closures for this work may be allowed at the discretion of the Engineer.

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

#### PRECAUTION FOR UTILITIES

The Contractor shall take whatever precautions which may be necessary to protect of the various public utilities which may be located underground or above ground, at or adjacent to the site of this improvement.

# STATUS OF UTILITIES TO BE ADJUSTED

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

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

Name of Utility	Туре	Location	Estimated Duration of Time for the Completion of Relocation or Adjustments
ComEd Ms. Nora Fernandez Rockford Business Office 123 Energy Avenue Rockford, IL 61109 815-490-2335	Overhead Electric and poles	West Side Sta 8+00 to Sta 13+00	Conflicts have been confirmed with ComEd and the existing poles will be removed and not relocated.  ComEd is scheduled to start work 4/20/2015. The work shall be completed in two (2) working days.
AT&T Ms. Janet C. Ahern AT&T Manager — Legal Mandate Engineering 1000 Commerce Drive, Floor 1 Oak Brook, IL 630-573-6414	Buried Fiber Optic cable and copper telephone cable and Overhead telephone and poles	East Side Sta 6+20 to Sta 13+00	Conflicts have been confirmed with AT&T and the existing poles will need to be removed and relocated outside the proposed ditch bottom.  AT&T in the process of confirming the buried fiber optic cable is dead.  Relocations to be completed by fall of 2015 and are estimated to be completed in forty-five (45) working days.
Nicor Gas Ms. Constance Lane, PE DOT Liaison Engineering – Design 1844 Ferry Road Naperville, IL 60563 630-388-3830	Gas	N/A	Nicor has confirmed that there are no Nicor Gas mains in the area of the proposed construction.

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

In accordance with 605 ILCS 5/9-113 of the Illinois Compiled Statutes, utility companies have 90 days to complete the relocation of their facilities after receipt of written notice from the

Dauberman Road (CH 62) over Welch Creek Section 08-00066-02-BR Contract No. 61A07 County: Kane

Department. The 90-day written notice will be sent to the utility companies after the following occurs:

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

### COORDINATION WITH FEDERAL AVIATION ADMINISTRATION

The Contractor shall have based the bid proposal upon performing the work without exceeding the above referenced temporary estimated clearance heights. A FAA Form 7460, Notice of proposed Construction, is required to be submitted for items included in Contract 61A07 due to the proximity to Aurora Municipal Airport. An initial permit submittal has been made by the Kane County to account for construction activity as well as the permanent items that will be constructed. The initial permit submittal includes a temporary estimated clearance height of 150' above the existing elevations for the installation of concrete deck beams. (See <a href="http://www.faa.gov/airports/central/engineering/part77/">http://www.faa.gov/airports/central/engineering/part77/</a> if addition detail on 'Who Must File' is desired.)

The Contractor is required to submit details on maximum construction equipment working heights to the Engineer that will be used so permit compliance can be verified or any necessary permit modifications can be made.

If the Contractor plans to exceed the permitted maximum working heights indicated in the initial permit application, a revised permit submittal will need to be made to the FAA. The Contractor shall provide all necessary exhibits for inclusion in the permit submittal. A standard determination timeframe from the FAA is generally 45-60 days. The Contractor will not be due additional compensation nor will an extension of time be granted for delays associated with FAA approvals for increases to the temporary clearance heights submitted by Kane County and referenced above.

The Contractor must comply with any requirements that are made by the FAA as part of the 7460 Determination. This may include compliance with FAA Advisory Circular AC 70/7460-1K Obstruction Marking and Lighting and/or notification to the FAA when proposed work activities will occur at certain locations.

### COORDINATION WITH KANE-DUPAGE SOIL AND WATER CONSERVATION DISTRICT

The Kane-DuPage Soil and Water Conservation District (KDSWCD) has reviewed the Soil Erosion and Sediment Plans. The Contractor shall allow KDSWCD representative the right to conduct on-site investigations throughout all active construction phases to determine whether all necessary soil erosion and sediment control practices have been installed and are functioning properly. A copy of the erosion control plans and the attached KDSWCD approval letter shall be retained on site at all times during construction.

The contractor shall notify the KDSWCD one week prior to the pre-construction conference, one week prior to the commencement of land-disturbing activities, and one week prior to the final inspections.

Kane-DuPage Soil and Water Conservation District 2315 Dean Street, Suite 100 St. Charles, Illinois 60175 Telephone: (630) 584-7961, Ext. 3 Fax: (630) 584-9534

# PREQUALIFICATION OF BIDDERS

PREQUALIFIATION OF BIDDERS in accordance with Section 102.01 of the Standard Specifications will be required of all bidders on this proposal.

### **GUARDRAIL DELINEATION**

# Description:

This work shall consist of furnishing and installing all Guardrail Mounted Delineators. The Kane County Division of Transportation pre-approved Guardrail Mounted Delineator "AKT-567" shall be provided for all proposed Steel Plate Beam Guardrail locations shown on the plans. Terminal Markers — Direct Applied shall be provided and paid for separately and shall conform to the Standard Specifications.

The reflective area shall be approximately nine (9) square inches of encapsulated lens reflective sheeting permanently mounted to the bracket by either pressure sensitive or heat. The color of the reflective sheeting to be chosen by the Engineer in the field. The delineator shall be mounted at each post location per the manufacturer's specifications and details.

The bracket shall be 12 gauge galvanized steel. The bracket shall be of the same size and shape as the reflective sheeting that is mounted on it. The bracket shall have slotted holes in such a manner as to fit under the collars of the existing guardrail bolts when tightened down. There shall be no open area between the guardrail and the reflector so as to prohibit vandalism. The delineator shall mount within the channel section for the guardrail and shall not protrude further than the guardrail itself. No epoxy shall be used to the guardrail. The delineator shall be capable of holding reflective material for either one way or two way application. The galvanizing shall be G-90 or better.

### Basis of Payment:

This work shall be included in the contract unit price per lineal foot of STEEL PLATE BEAM GUARDRAIL, TYPE A, of the post height specified and included in the contract unit price per each for TRAFFIC BARRIER TERMINAL, of the type specified.

# **WASHOUT BASIN**

# **DESCRIPTION**

This work shall consist of constructing and maintaining a washout basin for concrete trucks and other construction vehicles. The washout basin shall be as detailed on the plans and the work shall include general maintenance and removal of all construction debris and all material, labor, tools, equipment, disposal of surplus material, and incidentals necessary to complete this work.

The contractor shall provide a washout basin per the details on the plans and IUM requirements. Any washouts constructed that do not meet the requirements of the plans or applicable IDOT and/or IUM standards will not be allowed.

# BASIS OF PAYMENT:

This work will be paid for at the lump sum price for WASHOUT BASIN.

#### TURBIDITY BARRIER

# DESCRIPTION

This work shall consist of furnishing, installing, maintaining, and removal of a flotation turbidity curtain, designed to collect sediment from in stream work areas at locations shown on the plans, or as directed by the Engineer.

# **MATERIALS**

The Turbidity Barrier shall be of appropriate size to perform the required function of isolating the work area from the rest of the stream, with length being at least 1 ft. greater than the depth of water in all locations. The barrier assembly shall consist of the silt barrier with flotation segments or appropriate suspension devices and weighing devices and all required anchorage devices. It shall be in good working condition and meet the approval of the Engineer. A detail drawing in the plans depicts the barrier assembly.

The turbidity barrier shall meet the following physical and performance properties

	Testing Method	Requirement
Grab tensile warp strength	ASTM D-4632	≥ 240 lbs.
Elongation @ Break	ASTM D-4632	≥ 60%
Trapezoidal Tear	ASTM D-4533	≥ 90 lbs.
Puncture Strength	ASTM D-4833	≥ 65 lbs.
UV Stability @ 500 hrs	ASTM D-4355	≥ 70%
Permittivity	ASTM D-4491	≥ 0.1 sec^-1
Water Flow Rate	ASTM D-4491	≥ 11 gpm/ft^2
AOS (US sieve #)	ASTM D-4751	≥ 140 sieve
Material construction		Nonwoven

All values are minimum average roll values.

# **INSTALLATION**

The turbidity barrier shall be installed according to the manufacturer directions, and in a manner approved by the Engineer. Additional anchorage may be required as shown on the plans.

# CONSTRUCTION REQUIREMENTS

The Contractor shall inspect the work site to review the stream characteristics where the work is to occur.

The barrier assembly shall be installed in the stream in a configuration that prevents silt from traveling beyond the work area, but does not cause flooding upstream of the work area. The turbidity barrier shall be installed in a manner sufficient to withstand ten-year flood water levels. The turbidity barrier shall not be installed across the entire stream.

Routine maintenance includes continually maintaining a properly working turbidity barrier. Also included is the regular removal and disposal of excess sediment in contact with either side of the barrier, as directed by the Engineer.

Pumping of water contained within the silt curtain or any other structure shall be done in a manner approved by the Engineer. Direct pumping of water back into the stream shall not be permitted. All water pumping operations must be approved by the Engineer.

Dauberman Road (CH 62) over Welch Creek Section 08-00066-02-BR Contract No. 61A07 County: Kane

The turbidity barrier assembly shall remain in place until the Engineer instructs the Contractor of the date and the required procedure for removal. The turbidity barrier assembly shall remain the property of the Contractor.

# METHOD OF MEASUREMENT

The Turbidity barrier will be measured for payment in linear feet along the centerline of the barrier, in place. Only properly working turbidity barriers will be measured for payment.

BASIS OF PAYMENT
Turbidity Barrier shall be paid for at the contract unit price per foot and shall include furnishing, installing, maintaining, and removal.

# MAINTENANCE OF ROADWAYS

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.

The contractor shall commence work on all maintenance of roadways items within 6 hours of notification by the Engineer and complete such items in an expedient and timely manner.

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.

# PUBLIC CONVENIENCE AND SAFETY (DIST 1)

Effective: May 1, 2012 Revised: July 15, 2012

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

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

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

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

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

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

#### TRAFFIC CONTROL PLAN

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

Special attention is called to Article 107.09 and Division 700 of the Standard Specifications and the following Highway Standards, Details, Quality Standard for Work Zone Traffic Control Devices, Supplemental Specifications and Recurring Special Provisions, and Special Provisions contained herein, relating to traffic control.

The Contractor shall contact The County or the appropriate township at least **72 hours** before beginning work.

The Contractor shall be required to use the appropriate highway standards below as traffic conditions and working conditions warrant.

# **HIGHWAY STANDARDS:**

701006-05	OFF-RD OPERATIONS 2L, 2W 15' (4.5 m) TO 24" (600 mm) FROM
	PAVEMENT EDGE
701011-04	OFF-RD MOVING OPERATIONS, 2L, 2W DAY ONLY
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701301-04	LANE CLOSURE, 2L, 2W SHORT TIME OPERATIONS
701901-04	TRAFFIC CONTROL DEVICES

## SPECIAL PROVISIONS:

MAINTENANCE OF ROADWAYS
PUBLIC CONVENIENCE AND SAFETY (DIST 1)
TRAFFIC CONTROL AND PROTECTION (ARTERIALS)
TEMPORARY INFORMATION SIGNING

# **DETAILS:**

## **DETOUR PLAN**

TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS,
	INTERSECTIONS, AND DRIVEWAY
TC-21	DETOUR SIGNING FOR CLOSING STATE HIGHWAYS

TC-22 ARTERIAL ROAD INFORMATION SIGN

### RECURRING SPECIAL PROVISIONS:

#### NONE

At the preconstruction meeting, the Contractor shall furnish the name of the individual in his direct employ who is to be responsible for the installation and maintenance of the traffic control for this project. If the actual installation and maintenance are to be accomplished by a subcontractor, consent shall be requested of the Engineer at the time of the preconstruction meeting in accordance with Article 108.01 of the Standard Specifications. This shall not relieve the Contractor of the requirement to have a responsible individual in his direct employ supervise

this work. The County or the appropriate township will provide the Contractor the name of its representative who will be responsible for the administration of the Traffic Control Plan.

# 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.

<u>Method of Measurement:</u> 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.

<u>Basis of Payment:</u> 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.

#### **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>ltem</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 REQUIREMENTS**

#### Installation.

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

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

The attachment of temporary signs to existing 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.

#### **HMA MIXTURE DESIGN REQUIREMENTS (D-1)**

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

#### 1) Design Composition and Volumetric Requirements

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

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

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

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

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

Revise Article 355.05(a) of the Standard Specifications to read:

"(a) The top lift thickness shall be 2 1/4 in. (60 mm) for mixture composition IL-19.0."

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

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

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

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

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

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

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

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

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

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

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

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

Delete Article 406.14(d) of the Standard Specifications.

Delete Article 406.14(e) of the Standard Specifications.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

"High ESAL	IL-19.0 binder;
g	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) <sup>1/</sup> ;
	HMA Shoulders <sup>2/</sup>

- 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.

ltem	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 <sup>4/</sup> SMA <sup>4/</sup> 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)	890	100		100						
1/2 in. (12.5 mm)	575	889	80	100		100		100		100
3/8 in. (9.5 mm)				65	90	100	90	100		100
#4 (4.75 mm)	240	560	20	30	36	50	334	69	90	100
#8 (2.36 mm)	20	342	16	24 5/	16	325/	34 <sup>6/</sup>	52 <sup>2/</sup>	70	90
#16 (1.18 mm)	115	230					10	32	50	65
#30 (600 µm)			12	16	12	18				
#50 (300 μm)	46	115					4	15	15	30
#100 (150 μm)	34	9					3	10	10	18
#200 (75 μm)	3	6	7.0	9.0 3/	7.5	9.5 <sup>3/</sup>	4	6	7	9 <sup>3/</sup>
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		1.0		1.0

- 1/ Based on percent of total aggregate weight.
- 2/ 3The mixture composition shall not exceed 44 percent passing the #8 (2.36 mm) sieve for surface courses with Ndesign = 90.
- 3/ 4Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer.
- The maximum percent passing the #635 (20 μm) sieve shall be ≤ 3 percent.
- 5/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted above the percentage stated on the table.
- 6/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted below 34 percent.

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

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

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

"(1) High ESAL Mixtures. The target value for the air voids of the HMA shall be 4.0 percent and for IL-4.75 it shall be 3.5 percent at the design number of gyrations. The VMA and VFA of the HMA design shall be based on the nominal maximum size of the aggregate in the mix, and shall conform to the following requirements.

VOLUMETRIC REQUIREMENTS High ESAL						
	Voids in the Mineral Aggregate (VMA), with Asphalt % minimum Binder					
Ndesign	I IL-19.0	(VFA), %				
50	_	4	18.5	65 – 78 <sup>2/</sup>		
70	1 13.5	1 15.0		65 - 75		
0105	13.0	15.5				

- 1/ Maximum Draindown for IL-4.75 shall be 0.3 percent
- 2/ VFA for IL-4.75 shall be 72-85 percent"

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

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

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

"(3) SMA Mixtures.

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

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  $\geq$  2.760.
- 3/ Applies when specific gravity of coarse aggregate is < 2.760.
- 4/ Blending of different types of aggregate will not be permitted. For surface course, the coarse aggregate can be crushed steel slag, crystalline crushed stone or crushed sandstone. For binder course, coarse aggregate shall be crushed stone (dolomite), crushed gravel, crystalline crushed stone, or crushed sandstone.

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

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

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

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

"As an option, collected bag-house dust may be used in lieu of manufactured mineral filler, provided; 1) there is enough available for the production of the SMA mix for the entire project and 2) a mix design was prepared with collected bag-house dust."

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

"Parameter	Frequency of Tests High ESAL Mixture	Test Method See Manual of Test Procedures
	Low ESAL Mixture	for Materials
Aggregate Gradation  % passing sieves:	1 washed ignition oven test on the mix per half day of production	Illinois Procedure
1/2 in. (12.5 mm), No. 4 (4.75 mm), No. 8 (2.36 mm), No. 30 (600 µm) No. 200 (75 µm)	Note 3.	
Asphalt Binder Content by Ignition Oven	1 per half day of production	Illinois-Modified AASHTO T 308
Note 1.		
VMA Note 2.	Day's production ≥ 1200 tons:	Illinois-Modified AASHTO R 35
Note 2.	1 per half day of production	
	Day's production < 1200 tons:	
	1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	
Air Voids	Day's production ≥ 1200 tons:	110
Bulk Specific Gravity of Gyratory Sample	1 per half day of production	Illinois-Modified AASHTO T 312
Note 4.	Day's production < 1200 tons:	-
	1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	
Maximum Specific Gravity of Mixture	Day's production ≥ 1200 tons:	Illinois-Modified AASHTO T 209
	1 per half day of production	
	Day's production < 1200 tons:	
	1 per half day of production for first 2 days and 1 per day thereafter (first	
	sample of the day)	

Note 1. The Engineer may waive the ignition oven requirement for asphalt binder content if the aggregates to be used are known to have ignition asphalt

binder content calibration factors which exceed 1.5 percent. If the ignition oven requirement is waived, other Department approved methods shall be used to determine the asphalt binder content.

- Note 2. The  $G_{sb}$  used in the voids in the mineral aggregate (VMA) calculation shall be the same average  $G_{sb}$  value listed in the mix design.
- Note 3. The Engineer reserves the right to require additional hot bin gradations for batch plants if control problems are evident.
- Note 4. The WMA compaction temperature for mixture volumetric testing shall be 270  $\pm$  5 °F (132  $\pm$  3 °C) for quality control testing. The WMA compaction temperature for quality assurance testing will be 270  $\pm$  5 °F (132  $\pm$  3 °C) if the mixture is not allowed to cool to room temperature. If the mixture is allowed to cool to room temperature, it shall be reheated to standard HMA compaction temperatures."

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

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

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

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

"CONTROL LIMITS						
	High ESAL		SMA		L-4.75	
Parameter	Individual Test	Moving Avg. of 4	Test	Moving Avg. of 4	Individual Test	Moving Avg. of 4
% Passing: 1/						
1/2 in. (12.5 mm)	±6%	±4%	±6%	±4%		
3/8 in. (9.5mm)			±4%	±3%		
No. 4 (4.75 mm)	±5%	±4%	±5%	±4%		
No. 8 (2.36 mm)	±5%	±3%	±4%	±2%		
No. 16 (1.18 mm)			±4%	±2%	±4%	± 3 %
No. 30 (600 μm)	±4%	± 2.5 %	±4%	± 2.5 %		
Total Dust Content No. 200 (75 µm)	± 1.5 %	± 1.0 %	%		± 1.5 %	± 1.0 %
Asphalt Binder Content	± 0.3 %	± 0.2 %	± 0.2 %	± 0.1 %	± 0.3 %	± 0.2 %
Voids	± 1.2 %	± 1.0 %	± 1.2 %	± 1.0 %	± 1.2 %	± 1.0 %
VMA	-0.7 % <sup>2/</sup>	-0.5 % <sup>2/</sup>	-0.7 % <sup>2/</sup>	-0.5 % <sup>2/</sup>	-0.7 % <sup>2/</sup>	-0.5 % <sup>2/</sup>

- 1/ Based on washed ignition oven
- 2/ Allowable limit below minimum design VMA requirement

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

- 1/ Density shall be determined by cores or by correlated, approved thin lift nuclear gauge.
- 2/ 92.0 % when placed as first lift on an unimproved subgrade."

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

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

- 1/ Based on washed ignition oven.
- 2/ Does not apply to IL-4.75.
- 3/ SMA also requires the 3/8 in. (9.5 mm) sieve."

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

Delete Article 1030.06(b) of the Standard Specifications.

Delete Article 1102.01(e) of the Standard Specifications.

# 2) Design Verification and Production

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

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

AASHTO T 324

Hamburg Wheel Test

AASHTO T 283

Tensile Strength Test

Add the following to Article 1030.04 of the Standard Specifications:

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

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

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

Illinois Modified AASHTO T 324 Requirements 1/

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

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

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

For IL 4.75mm Designs (N-50) the maximum rut depth is 9.0mm at 15,000 repetitions.

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

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

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

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

The limitations between the JMF and AJMF are as follows.

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

<sup>\*</sup> In no case shall the target for the amount passing be greater than the JMF.

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

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

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

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

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

"(b) Low ESAL Mixtures."

Add the following to Article 1030.06 of the Standard Specifications:

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

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

#### Method of Measurement:

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

"The plan quantities of SMA mixtures shall be adjusted using the actual approved binder and surface Mix Design's G<sub>mb</sub>."

#### Basis of Payment.

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

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

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

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

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

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

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

production. The GTR modified asphalt binder shall meet the requirements of the following table.

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

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

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

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

"A dedicated storage tank for the Ground Tire Rubber (GTR) modified asphalt binder shall be provided. This tank must be capable of providing continuous mechanical mixing throughout by continuous agitation and recirculation of the asphalt binder to provide a uniform mixture. The tank shall be heated and capable of maintaining the temperature of the asphalt binder at 300 °F to 350 °F (149 °C to 177 °C). The asphalt binder metering systems of dryer drum plants shall be calibrated with the actual GTR modified asphalt binder material with an accuracy of  $\pm$  0.40 percent."

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

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

Add the following note to 1030.02 of the Standard Specifications:

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

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

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

# AGGREGATE SUBGRADE IMPROVEMENT (D-1)

Effective: February 22, 2012 Revised: March 3, 2015

Add the following Section to the Standard Specifications:

#### "SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT

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

#### **303.02 Materials.** Materials shall be according to the following.

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

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  $\pm$  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:

- "1004.06 Coarse Aggregate for Aggregate Subgrade Improvement. The aggregate shall be according to Article 1004.01 and the following.
  - (a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete. 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.

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

	COARSE AGGREGATE SUBGRADE GRADATIONS (Metric)				
Sieve Size and Percent Passing					
Grad No.	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.

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

Effective: November 1, 2013

Article 1020.15 shall not apply.

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

Effective: November 1, 2012

Revise: April 2, 2015

Revise Section 1031 of the Standard Specifications to read:

# "SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES

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

- (a) Reclaimed Asphalt Pavement (RAP). RAP is the material resulting from cold milling or crushing an existing hot-mix asphalt (HMA) pavement. RAP will be considered processed FRAP after completion of both crushing and screening to size. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.
- (b) Reclaimed Asphalt Shingles (RAS). Reclaimed asphalt shingles (RAS). RAS is from the processing and grinding of preconsumer or post-consumer shingles. RAS shall be a clean and uniform material with a maximum of 0.5 percent unacceptable material, as defined in Bureau of Materials and Physical Research Policy Memorandum "Reclaimed

Asphalt Shingle (RAS) Sources", by weight of RAS. All RAS used shall come from a Bureau of Materials and Physical Research approved processing facility where it shall be ground and processed to 100 percent passing the 3/8 in. (9.5 mm) sieve and 90 percent passing the #4 (4.75 mm) sieve . RAS shall meet the testing requirements specified herein. In addition, RAS shall meet the following Type 1 or Type 2 requirements.

- (1) Type 1. Type 1 RAS shall be processed, preconsumer asphalt shingles salvaged from the manufacture of residential asphalt roofing shingles.
- (2) Type 2. Type 2 RAS shall be processed post-consumer shingles only, salvaged from residential, or four unit or less dwellings not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP).

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

- (a) RAP Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. Additional processed RAP (FRAP) shall be stockpiled in a separate working pile, as designated in the QC Plan, and only added to the sealed stockpile when test results for the working pile are complete and are found to meet tolerances specified herein for the original sealed FRAP stockpile. Stockpiles shall be sufficiently separated to prevent intermingling at the base. All stockpiles (including unprocessed RAP and FRAP) shall be identified by signs indicating the type as listed below (i.e. "Non- Quality, FRAP -#4 or Type 2 RAS", etc...).
  - (1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. All FRAP shall be processed prior to testing and sized into fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP in the coarse fraction shall pass the maximum sieve size specified for the mix the FRAP will be used in.
  - (2) Restricted FRAP (B quality) stockpiles shall consist of RAP from Class I, Superpave (High ESAL), or HMA (High ESAL). If approved by the Engineer, the aggregate from a maximum 3.0 inch single combined pass of surface/binder milling will be classified as B quality. All millings from this application will be processed into FRAP as described previously.
  - (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed (FRAP) prior to testing. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
  - (4) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from HMA shoulders, bituminous stabilized subbases or Superpave (Low ESAL)/HMA (Low ESAL) IL-19.0L binder mixture. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an

inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.

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

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

(b) RAS Stockpiles. Type 1 and Type 2 RAS shall be stockpiled separately and shall be sufficiently separated to prevent intermingling at the base. Each stockpile shall be signed indicating what type of RAS is present. However, a RAS source may submit a written request to the Department for approval to blend mechanically a specified ratio of type 1 RAS with type 2 RAS. The source will not be permitted to change the ratio of the blend without the Department prior written approval. The Engineer's written approval will be required, to mechanically blend RAS with any fine aggregate produced under the AGCS, up to an equal weight of RAS, to improve workability. The fine aggregate shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The fine aggregate shall be one that is approved for use in the HMA mixture and accounted for in the mix design and during HMA production.

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

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

- (a) FRAP Testing. When used in HMA, the FRAP shall be sampled and tested either during processing or after stockpiling. It shall also be sampled during HMA production.
  - (1) During Stockpiling. For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).
  - (2) Incoming Material. For testing as incoming material, washed extraction samples shall be run at a minimum frequency of one sample per 2000 tons (1800 metric tons) or once per week, whichever comes first.
  - (3) After Stockpiling. For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP/FRAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

Before extraction, each field sample of FRAP, shall be split to obtain two samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to

Department procedure. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

- (b) RAS Testing. RAS shall be sampled and tested during stockpiling according to Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources". The Contractor shall also sample as incoming material at the HMA plant.
  - (1) During Stockpiling. Washed extraction and testing for unacceptable materials shall be run at the minimum frequency of one sample per 200 tons (180 metric tons) for the first 1000 tons (900 metric tons) and one sample per 1000 tons (900 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once a ≤ 1000 ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS shall be in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.
  - (2) Incoming Material. For testing as incoming material at the HMA plant, washed extraction shall be run at the minimum frequency of one sample per 250 tons (227 metric tons). A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). The incoming material test results shall meet the tolerances specified herein.

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

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

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

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

Parameter	FRAP
No. 4 (4.75 mm)	± 6 %
No. 8 (2.36 mm)	± 5 %
No. 30 (600 μm)	± 5 %
No. 200 (75 μm)	± 2.0 %
Asphalt Binder	± 0.3 %
G <sub>mm</sub>	± 0.03 <sup>1/</sup>

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

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

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

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

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

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

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

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

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

The Engineer will notify the Contractor of observed deficiencies.

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

Test Parameter	Acceptable Limits of Precision		
% Passing:1/	FRAP	RAS	
1/2 in.	5.0%		
No. 4	5.0%		
No. 8	3.0%	4.0%	
No. 30	2.0%	3.0%	
No. 200	2.2%	2.5%	
Asphalt Binder Content	0.3%	1.0%	
G <sub>mm</sub>	0.030		

1/ Based on washed extraction.

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

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

#### 1031.05 Quality Designation of Aggregate in RAP and FRAP.

- (a) RAP. The aggregate quality of the RAP for homogenous, conglomerate, and conglomerate "D" quality stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.
  - (1) RAP from Class I, Superpave/HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.
  - (2) RAP from Superpave/HMA (Low ESAL) IL-19.0L binder mixture is designated as Class D quality coarse aggregate.
  - (3) RAP from Class I, Superpave/HMA (High ESAL) binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate.
  - (4) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.
- (b) FRAP. If the Engineer has documentation of the quality of the FRAP aggregate, the Contractor shall use the assigned quality provided by the Engineer.

If the quality is not known, the quality shall be determined as follows. Fractionated RAP stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5,000 tons (4,500 metric tons). The Contractor shall obtain a representative sample witnessed by the Engineer. The sample shall be a minimum of 50 lb (25 kg). The sample shall be extracted according to Illinois Modified AASHTO T 164 by a consultant prequalified by the Department for the specified testing. The consultant shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample

to the BMPR Aggregate Lab for MicroDeval Testing, according to Illinois Modified AASHTO T 327. A maximum loss of 15.0 percent will be applied for all HMA applications. The fine aggregate portion of the fractionated RAP shall not be used in any HMA mixtures that require a minimum of "B" quality aggregate or better, until the coarse aggregate fraction has been determined to be acceptable thru a MicroDeval Testing.

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

- (a) FRAP. The use of FRAP in HMA shall be as follows.
  - (1) Coarse Aggregate Size (after extraction). The coarse aggregate in all FRAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
  - (2) Steel Slag Stockpiles. FRAP stockpiles containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in HMA (High ESAL and Low ESAL) mixtures regardless of lift or mix type.
  - (3) Use in HMA Surface Mixtures (High and Low ESAL). FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall have coarse aggregate that is Class B quality or better. FRAP shall be considered equivalent to limestone for frictional considerations unless produced/screened to minus 3/8 inch.
  - (4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP in which the coarse aggregate is Class C quality or better.
  - (5) Use in Shoulders and Subbase. FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, Restricted FRAP, conglomerate, or conglomerate DQ.
- (b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.
- (c) FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with FRAP in HMA mixtures up to a maximum of 5.0% by weight of the total mix.

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

Max Asphalt Binder Replacement for FRAP with RAS Combination

HMA Mixtures 1/2/4/	Maximum % ABR		
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified <sup>3/</sup>
30L	50	40	130
50	40	35	130

70	40	30	130
90	40	30	130
4.75 mm N-50			340
SMA N-80			230

- 1/ For HMA "All Other" (shoulder and stabilized subbase) N-30, the percent asphalt binder replacement shall not exceed 50% of the total asphalt binder in the mixture.
- 2/ When the binder replacement exceeds 15 percent for all mixes, except for SMA and IL-4.75, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent binder replacement using a virgin asphalt binder grade of PG64-22 will be reduced to a PG58-28). When constructing full depth HMA and the ABR is less than 15 percent, the required virgin asphalt binder grade shall be PG64-28.
- 3/ When the ABR for SMA or IL-4.75 is 15 percent or less, the required virgin asphalt binder shall be SBS PG76-22 and the elastic recovery shall be a minimum of 80. When the ABR for SMA or IL-4.75 exceeds 15%, the virgin asphalt binder grade shall be SBS PG70-28 and the elastic recovery shall be a minimum of 80.
- 4/ FWhen FRAP or RAS is used alone, the maximum percent asphalt binder replacement designated on the table shall be reduced by 10 percent.

**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.
    - 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.
    - Accumulated mixture tonnage.
    - k. Dust Removed (accumulated to the nearest 0.1 ton)
  - (2) Batch Plants.
    - a. Date, month, year, and time to the nearest minute for each print.
    - b. HMA mix number assigned by the Department.
    - c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
    - d. Mineral filler weight to the nearest pound (kilogram).

- f. RAS and FRAP weight to the nearest pound (kilogram).
- g. Virgin asphalt binder weight to the nearest pound (kilogram).
- h. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.

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

**1031.09 RAP in Aggregate Surface Course and Aggregate Shoulders.** The use of RAP or FRAP in aggregate surface course and aggregate shoulders shall be as follows.

- (a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Non-Quality" and "FRAP". The testing requirements of Article 1031.03 shall not apply. RAP used to construct aggregate surface course and aggregate shoulders shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications"
- (b) Gradation. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded, FRAP, or single sized will not be accepted for use as Aggregate Surface Course and Aggregate Shoulders."

# **EMBANKMENT II**

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

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

<u>Material</u>. Reclaimed asphalt shall not be used within the ground water table or as a fill if ground water is present. The RAP used shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications". Gradation deleterious count shall not exceed 10% of total RAP and 5% of other by total weight.

#### CONSTRUCTION REQUIREMENTS

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

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

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

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

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

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

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

<u>Basis of Payment.</u> This work will not be paid separately but will be considered as included in the various items of excavation.

#### RECLAIMED ASPHALT PAVEMENT FOR NON-POROUS EMBANKMENT AND BACKFILL

Effective: April 1, 2001 Revised: January 1, 2007

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

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

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

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

# 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 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 reimbursement. For purposes of this Special Provision the Contractor is not relived 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 the 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 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 journey worker 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 selected classification. No employee shall be employed as a TPG in any classification in which he/she has successfully completed a training course leading the on-the-job training purposes 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 and 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 requirement. The Contractor will be responsible for demonstrating the steps that it has taken in pursuance thereof, prior to 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.



# **Storm Water Pollution Prevention Plan**

Route	C.H. 62	Marked Rte.	Dauberman Rd
Section	08-00066-02-BR	Project No.	BHOS-0089(130)
County	Kane	Contract No.	61A07
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.			
	Carl Schoedel, PE	\\	
	Print Name		Signature
	County Engineer	AM	RC4 11 , 2015
	Title		Date
	Kane County Division of Transportation		
	Agency		

#### I. Site Description:

A. Provide a description of the project location (include latitude and longitude):

The Dauberman Road over Welch Creek crossing improvement project is located in Big Rock Township (41.771389N and 88.527922W), in Kane County, IL (T38N, R6E, Section 14/15). The project is roughly 1/2 mile north of U.S. Route 30 and six (6) miles south of Interstate 88.

B. Provide a description of the construction activity which is the subject of this plan:

The project involves the removal of the existing bridge superstructre, repairs to the existing substructre and replacement with concrete deck beams, a five (5)-inch wearing surface, F-shaped parapets and rip rap protection to reduce scouring. The proposed improvement also includes reconstruction of Dauberman Road in advance of the bridge structure

C. Provide the estimated duration of this project:

Four (4) months.

D. The total area of the construction site is estimated to be <u>1.2</u> acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is 1.2 acres.

E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:

Pre-project runoff coefficient = 0.54 Post-project runoff coefficient = 0.54

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

The soil prepared by the United States Department of Agriculture, Soil Conservation Sevices (now Natural Resources Conservation Sevice: NRCS) in conjuction with the Illinois Agricultural Experiment Stations, 1997. The following soil types are mapped within the project area:

154A - Flanagan Silt Loam 348B - Wingate Silt Loam

Printed 3/11/2015 Page 1 of 8 BDE 2342 (Rev. 3/20/14)

348C2 - Wingate Silt Loam 3082A - Millington Silt Loam

G. Provide an aerial extent of wetland acreage at the site:

There is an existing wetland associated with Welch Creek, east and west side of Dauberman Road. Approximately 0.03 acre of this wetland within the Dauberman Road right of way will be disturbed.

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

During construction activites, the area with ther greatest potential for erosion are the ditches, side slopes. After construction, the ditches and side slopes will be vegetated and covered with temporary erosion control blanket.

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 ground will be discturbed for the entire length of the project due to the removal of current stabilization (vegetation and asphalt) to replace the existing superstrucure and roadway. Turbidity barriers will be in place in Welch Creek during the placement of riprap to reduce flowing water. During the grading and shaping of ditches, the bare soil will be protected by temporary ditch checks will be in place prior to final stabilization. To minimize the potential for erosion in steep slope ditches peremanent turf reinforcement mat is placed. The embankments will be protected from erosion by vegetation, erosion control blanket and turf reinforcement mat. The slopes very in steepness from 1:1.2 to 1:4. The embankment slopes per side are between 10 and 20 feet in width.

- 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:

Since the drainage system currently lies within the Kane County right of way, Kane County Division of Transportation is the agency responsible for the system.

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

Kane County will have reporting jurisdiction for this project location.

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:

Welch Creek is the receiving waters of the project. Welch Creek is a tributary to Fox 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.

Welch Creek will require turbidity barriers to prevent work from flowing water and reduce the potential erosoin and water quality impacts.

Ο.	The following sensitive environmental resources are associated with this project, and may have the potential to be
	impacted by the proposed development:

$\boxtimes$	Floodplain
$\boxtimes$	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

n/a

1. 303(d) Listed receiving waters (fill out this section if checked above):

	a.	The name(s) of the listed water bod	ly, and id	dentification of all pollutants causing impairment:	
		n/a			
	b.			diment control practices will prevent a discharge of sediment ster than a twenty-five (25) year, twenty-four (24) hour rainfall	
		n/a			
	C.	Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body			
		n/a			
	d.	d. Provide a description of the location(s) of any dewatering discharges to the MS4 and/or v			
		n/a			
2.	TMD	MDL (fill out this section if checked above)			
	a.	. The name(s) of the listed water body:			
		n/a			
	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:			
		n/a			
	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:			
		n/a			
The	follow	ing pollutants of concern will be asso	ciated w	vith this construction project:	
	Coi Coi	l Sediment ncrete ncrete Truck Waste ncrete Curing Compounds		Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) Antifreeze / Coolants Waste water from cleaning construction equipment Other (specify)	
$\boxtimes$	Sol	id Waste Debris		Other (specify)	
	Pai Sol	nts vents		Other (specify) Other (specify)	

# II. Controls:

 $\boxtimes$ 

Ρ.

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;

Fertilizers / Pesticides

3. Maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible;

Other (specify)

4. Minimize soil compaction and, unless infeasible, preserve topsoil.

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: Preservation of Mature Vegetation **Erosion Control Blanket / Mulching** П Soddina □ Vegetated Buffer Strips ☐ Protection of Trees Geotextiles Temporary Erosion Control Seeding  $\boxtimes$ Other (specify) ☐ Temporary Turf (Seeding, Class 7) Other (specify) Temporary Mulching  $\Box$ Other (specify) Permanent Seeding Other (specify) Describe how the stabilization practices listed above will be utilized during construction: Temprary erosinon control seeding will be utilized if the project requires a prolonged, but temprary pause in work greater than 14 days. Describe how the stabilization practices listed above will be utilized after construction activities have been completed: Areas that are disturbed by construction that will not be paved will be stabilized with permanent seeding and erosion control blanket. 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: Rock Outlet Protection  $\boxtimes$ Perimeter Erosion Barrier  $\boxtimes$ Temporary Ditch Check  $\times$ Riprap X Storm Drain Inlet Protection П Gabions Sediment Trap П Slope Mattress Temporary Pipe Slope Drain Retaining Walls Temporary Sediment Basin П Slope Walls Temporary Stream Crossing Concrete Revetment Mats  $\boxtimes$ Stabilized Construction Exits Level Spreaders  $\boxtimes$ **Turf Reinforcement Mats**  $\Box$ Other (specify)

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

Permanent Check Dams

Aggregate Ditch

☐ Paved Ditch

Permanent Sediment Basin

П

Other (specify)

Other (specify)

Other (specify)

Other (specify)

Perimeter Erosion Barrier will be installed along the perimeter of the project area to prevent sediment from leaving the site. Temporary Ditch Checks will be placed in the ditches at the beginning of the project and may require adjusting during grading. The checks will remain in place until final stabilization has been achieved in the ditches.

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

Rip Rap will be placed in the channel to minimize further scourinng of the abutments. Turf Reinforcement Mats will be used at the bottom of proposed ditches.

#### D. Treatment Chemicals

Will polymer flocculants or treatment chemicals be utilized on this project:	Yes 🖂	Π,	П		ect:	proiec	this pi	on thi	ed o	utilize	s be	chemicals	r treatment	locculants.	l polymer	Will
--	-------	----	---	--	------	--------	---------	--------	------	---------	------	-----------	-------------	-------------	-----------	------

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

- 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.
  - 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.

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:

The roadside ditches will be vegetated to promote infiltration and filtration of stormwater runoff

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:

In accordance with the currrent Kane County Stormwater Management Ordinance, Kane-DuPage Soil & Water Conservation District, and the US Army Corp of Engineers.

- 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.
  - 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.

Stabilzed construction entrances (if required) shall have sediment build up removed as necessary.

#### 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: <a href="mailto:epa.swnoncomp@illinois.gov">epa.swnoncomp@illinois.gov</a>, 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	C.H. 62	_ Marked Rte.	Dauberman Road
Section	08-0006-02-BR	Project No.	BHOS-0089(130)
County	Kane	Contract No.	61A07
No. ILR1 I certify usessociate In addition project; I be in cor	0 issued by the Illinois Environmental Protection under penalty of law that I understand the terms ed with industrial activity from the construction si on, I have read and understand all of the inform	n Agency.  of the Permit No. ILI  ite identified as part of  nation and requirementance procedures; an	ents stated in SWPPP for the above mentioned id, I have provided all documentation required to
	Print Name		Signature
	Title		Date
	Name of Firm	_	Telephone
	Street Address		City/State/ZIP
Items wl	hich this Contractor/subcontractor will be respon	sible for as required	in Section II.G. of SWPPP:



Section at the above address.

# Illinois Environmental Protection Agency

Bureau of Water

• 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

For Office Use Only

# **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

	Permit No. ILR10				
Company/Owner Name: Kane County Division of Transportation					
Mailing Address: 41W011 Burlington Road	Phone: 630-584-1170				
City: St. Charles State: IL Zip: 60175	Fax: 630-584-5265				
Contact Person: Dave Boesch	E-mail: boeschdavid@co.kane.il.us				
Owner Type (select one) County					
CONTRACTOR INFORMATION	MS4 Community: Yes No				
Contractor Name:					
Mailing Address:					
City: State: Zip:	Fax:				
CONSTRUCTION SITE INFORMATION					
Select One: New Change of information for: ILR10 _					
Project Name: Dauberman Road over Welch Creek	County: Kane				
Street Address: Dauberman Road City: Big Re	ock IL Zip:				
Latitude: 41 46 17 Longitude: 88 31	40 14/15 Big Rock 6E				
(Deg) (Min) (Sec) (Deg) (N	lin) (Sec) Section Township Range				
Approximate Construction Start Date March 1, 2016 Approx	rimate Construction End DateJuly 31, 2016				
Total size of construction site in acres: 1.2	Fee Schedule for Construction Sites:				
If less than 1 acre, is the site part of a larger common plan of develop	oment? Less than 5 acres - \$250				
Yes No 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)	<b>a</b> v				
Location of SWPPP for viewing: Address: Field Office	City:				
SWPPP contact information:	Inspector qualifications:				
Contact Name:					
Phone: Fax:					
Project inspector, if different from above	Inspector qualifications:				
Inspector's Name:					
Phone: Fax:	E-mail:				

IL 532 2104 WPC 623 Rev 5/10

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.

Construction Type Reconstruction				
SIC Code:				
Type a detailed description of the project:				
This project involves the removal of the existing bridge superstructure, repairs to the existing substructure and				
replacement with concrete deck beams, a five (5)-inch wearing surface, F-shaped parapets and rip rap protections to				
reduce scouring. The proposed improvement also includes reconstruction of Dauberman Road in advance of the				
bridge struture.				
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				
Endangered Species				
RECEIVING WATER INFORMATION				
Does your storm water discharge directly to:   Waters of the State or Storm Sewer				
Owner of storm sewer system:				
Name of closest receiving water body to which you discharge: Welch Creek				
Mail completed form to: Illinois Environmental Protection Agency Division of Water Pollution Control Attn: Permit Section Post Office Box 19276 Springfield, Illinois 62794-9276 or call (217) 782-0610 FAX: (217) 782-9891				
Or submit electronically to: epa,constilr10swppp@illinois.gov				
I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the development and implementation of a storm water pollution prevention plan and a monitoring program plan, will be complied with.  Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))				
Owner Signature: Date:				

Title:

Printed Name:



#### DEPARTMENT OF THE ARMY

CHICAGO DISTRICT, CORPS OF ENGINEERS 231 SOUTH LA SALLE STREET CHICAGO, ILLINOIS 60604-1437

April 4, 2014

Technical Services Division Regulatory Branch LRC-2011-648

SUBJECT: Permit Authorization for Scour Protection at Dauberman Road Over Welch Creek, Located North of Highway 30 and South of Wheeler Road, Kane County, Illinois (SW ¼ of Section 14 and SE ¼ of Section 15, T38N R6E)

Carl Schoedel Kane County Division of Transportation 41W011 Burlington Road Saint Charles, Illinois 60175

Dear Mr. Schoedel:

This office has verified that your proposed activity complies with the terms and conditions of Regional Permit 12 (Bridge Scour Protection) and the overall RPP under Category I of the Regional Permit Program.

Following a review of the information you furnished to this office and assuming your project is conducted only as set forth in the information provided, this office has determined that the bridge replacement does not require a Department of the Army (DA) permit to complete the proposed work. Please be aware that any unpermitted discharge into an area within the jurisdiction of this office may result in civil or criminal enforcement under the Clean Water Act, 33 U.S.C. Sec. 1319.

This verification expires three (3) years from the date of this letter and covers only your activity as described in your notification and as shown on the plans titled, "State of Illinois, Department of Transportation, Dauberman Road / Ch 62" dated October 17, 2013 (revised February 18, 2014), prepared by exp U.S. Services, Inc. Caution must be taken to prevent construction materials and activities from impacting waters of the United States beyond the scope of this authorization. If you anticipate changing the design or location of the activity, you should contact this office to determine the need for further authorization.

The activity may be completed without further authorization from this office provided the activity is conducted in compliance with the terms and conditions of the RPP, including conditions of water quality certification issued under Section 401 of the Clean Water Act by the

Illinois Environmental Protection Agency (IEPA). If the design, location, or purpose of the project is changed, you should contact this office to determine the need for further authorization.

The following special conditions are a requirement of your authorization:

- 1. You shall undertake and complete the project as described in the plans titled, , "State of Illinois, Department of Transportation, Dauberman Road / Ch 62" dated October 17, 2013 (revised February 18, 2014), prepared by exp U.S. Services, Inc., including all relevant documentation to the project plans as proposed.
- 2. This authorization is contingent upon implementing and maintaining soil erosion and sediment controls in a serviceable condition throughout the duration of the project. You shall comply with the Kane/DuPage Soil and Water Conservation District's (SWCD) written and verbal recommendations regarding the soil erosion and sediment control (SESC) plan and the installation and maintenance requirements of the SESC practices onsite.
  - a. You shall schedule a preconstruction meeting with the SWCD to discuss the SESC plan and the installation and maintenance requirements of the SESC practices on the site.
  - b. You shall notify the SWCD of any changes or modifications to the approved plan set. Field conditions during project construction may require the implementation of additional SESC measures. If you fail to implement corrective measures, this office may require more frequent site inspections to ensure the installed SESC measures are acceptable.
  - c. Prior to commencement of any in-stream work, you shall submit constructions plans and a detailed narrative to the SWCD that disclose the contractor's preferred method of cofferdam and dewatering method. Work in the waterway shall NOT commence until the SWCD notifies you, in writing, that the plans have been approved.
- 3. You shall provide written notification to this office at least ten (10) days prior to the commencement of work indicating the start date and estimated end date of construction.
- 4. You are responsible for all work authorized herein and for ensuring that all contractors are aware of the terms and conditions of this authorization.
- 5. A copy of this authorization must be present at the project site during all phases of construction.
- 6. You shall notify this office of any proposed modifications to the project, including revisions to any of the plans or documents cited in this authorization. You must receive approval from this office before work affected by the proposed modification is performed.
- 7. You shall notify this office prior to the transfer of this authorization and liabilities

associated with compliance with its terms and conditions. The transferee must sign the authorization in the space provided and forward a copy of the authorization to this office.

The authorization is without force and effect until all other permits or authorizations from local, state, or other Federal agencies are secured. Please note that IEPA has issued Section 401 Water Quality Certification for this RP. These conditions are included in the enclosed fact sheet. If you have any questions regarding Section 401 certification, please contact Mr. Dan Heacock at IEPA's Division of Water Pollution Control, Permit Section #15, by telephone at (217) 782-3362.

Once you have completed the authorized activity, please sign and return the enclosed compliance certification. If you have any questions, please contact Ms. Kimberly Kubiak of my staff by telephone at 312-846-5541, or email at kimberly.j.kubiak@usace.army.mil.

Sincerely,

Keith L. Wozniak Chief, West Section Regulatory Branch

Hem J lynne

Enclosure

Copy Furnished:

Illinois Department of Natural Resources/OWR (Gary Jereb)
Kane County Division of Environmental Management (Ken Anderson)
Kane County Development and Resource Management Department (Paul Schuch)
Kane/DuPage SWCD (Candice Jacobs)
Exp U.S. Services, Inc. (Sandra Homola)



#### PERMIT COMPLIANCE CERTIFICATION

Permit Number:	LRC-2011-648	
Permittee:	Carl Schoedel, Kane Co	ounty Division of Transportation
Date:	April 4, 2014	
accordance with the	terms and conditions of s	ne above-referenced permit has been completed in said permit and if applicable, compensatory wetland the approved mitigation plan. <sup>1</sup>
PERMITTEE	ī	DATE

Upon completion of the activity authorized by this permit and any mitigation required by the permit, this certification must be signed and returned to the following address:

U.S. Army Corps of Engineers Chicago District, Regulatory Branch 231 South LaSalle Street, Suite 1500 Chicago, Illinois 60604-1437

Please note that your permitted activity is subject to compliance inspections by Corps of Engineers representatives. If you fail to comply with this permit, you may be subject to permit suspension, modification, or revocation.

<sup>1</sup> If compensatory mitigation was required as part of your authorization, you are certifying that the mitigation area has been graded and planted in accordance with the approved plan. You are acknowledging that the maintenance and monitoring period will begin after a site inspection by a Corps of Engineers representative or after thirty days of the Corps' receipt of this certification. You agree to comply with all permit terms and conditions, including additional reporting requirements, for the duration of the maintenance and monitoring period.



# GENERAL CONDITIONS APPLICABLE TO THE 2012 REGIONAL PERMIT PROGRAM

The permittee shall comply with the terms and conditions of the Regional Permits and the following general conditions for all activities authorized under the RPP:

1. State 401 Water Quality Certification - Water quality certification under Section 401 of the Clean Water Act may be required from the Illinois Environmental Protection Agency (IEPA). The District may consider water quality, among other factors, in determining whether to exercise discretionary authority and require an Individual Permit. Please note that Section 401 Water Quality Certification is a requirement for projects carried out in accordance with Section 404 of the Clean Water Act. Projects carried out in accordance with Section 10 of the Rivers and Harbors Act of 1899 do not require Section 401 Water Quality Certification

On March 2, 2012, the IEPA granted Section 401 certification, with conditions, for all Regional Permits, except for activities in certain waterways noted under RPs 4 and 8. The following conditions of the certification are hereby made conditions of the RPP:

- 1. The applicant shall not cause:
  - a) a violation of applicable water quality standards of the Illinois Pollution Control Board Title 35, Subtitle C: Water Pollution Rules and Regulations;
  - b) water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - c) interference with water use practices near public recreation areas or water supply intakes;
  - d) a violation of applicable provisions of the Illinois Environmental Protection Act.
- 2. The applicant shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
- 3. Except as allowed under condition 9, any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all State statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by the Illinois EPA. Any backfilling must be done with clean material placed in a manner to prevent violation of applicable water quality standards.
- 4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent soil erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining a NPDES Stormwater Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of (1) one or more acres, total land area. A NPDES Stormwater Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Illinois EPA's Division of Water Pollution Control, Permit Section.
- 5. The applicant shall implement erosion control measures consistent with the Illinois Urban Manual (IEPA/USDA, NRCS; 2011, http://aiswcd.org/IUM/index.html).
- 6. The applicant is advised that the following permits(s) must be obtained from the Illinois EPA: The applicant must obtain permits to construct sanitary sewers, water mains, and related facilities prior to construction.
- 7. Backfill used in the stream-crossing trench shall be predominantly sand or larger size material, with less than 20% passing a #230 U.S. sieve.
- 8. Any channel relocation shall be constructed under dry conditions and stabilized to prevent erosion prior to the diversion of flow.
- 9. Backfill used within trenches passing through surface waters of the State, except wetland areas, shall be clean course aggregate, gravel or other material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material may be used only if:
  - a) particle size analysis is conducted and demonstrates the material to be at least 80% sand or larger size material, using #230 U.S. sieve; or
  - b) excavation and backfilling are done under dry conditions.
- 10. Backfill used within trenches passing through wetland areas shall consist of clean material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material shall be used to the extent practicable, with the upper six (6) to twelve (12) inches backfilled with the topsoil obtained during trench excavation.
- 11. Any applicant proposing activities in a mined area or previously mined area shall provide to the IEPA a written determination regarding the sediment and materials used which are considered "acid-producing material" as defined in 35 II. Adm. Code,

- Subtitle D. If considered "acid-producing material," the applicant shall obtain a permit to construct pursuant to 35 Il. Adm. Code 404.101.
- 12. Asphalt, bituminous material and concrete with protruding material such as reinforcing bar or mesh shall not be 1) used for backfill, 2) placed on shorelines/stream banks, or 3) placed in waters of the State.
- 13. Applicants that use site dewatering techniques in order to perform work in waterways for construction activities approved under Regional Permits 1 (Residential, Commercial and Institutional Developments), 2 (Recreation Projects), 3 (Transportation Projects), 7 (Temporary Construction Activities), 9 (Maintenance) or 12 (Bridge Scour Protection) shall maintain flow in the stream during such construction activity by utilizing dam and pumping, fluming, culverts or other such techniques.
- 14. In addition to any action required of the Regional Permit 13 (Cleanup of Toxic and Hazardous Materials Projects) applicant with respect to the "Notification" General Condition 22, the applicant shall notify the Illinois EPA Bureau of Water, of the specific activity. This notification shall include information concerning the orders and approvals that have been or will be obtained from the Illinois EPA Bureau of Land (BOL) for all cleanup activities under BOL jurisdiction, or for which authorization or approval is sought from BOL for no further remediation. This Regional Permit is not valid for activities that do not require or will not receive authorization or approval from the BOL.
- 2. Threatened and Endangered Species If the District determines that the activity may affect Federally listed species or critical habitat, the District will initiate section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) in accordance with the Endangered Species Act of 1973, as amended (Act). Applicants shall provide additional information that would enable the District to conclude that the proposed action will have no effect on federally listed species.

The application packet shall indicate whether resources (species, their suitable habitats, or critical habitat) listed or designated under the Act, may be present within areas affected (directly or indirectly) by the proposed project. Applicants shall provide a section 7 species list for the action area using the on-line process at the USFWS website. You can access "U.S. Fish and Wildlife Service Endangered Species Program of the Upper Midwest" website at www.fws.gov/midwest/Endangered. Click on the section 7 Technical Assistance green shaded box in the lower right portion of the screen and follow the instructions to completion. Review all documentation pertaining to the species list, provide the rationale for your effects determination for each species, and send the information to this office for review.

If no species, their suitable habitats, or critical habitat are listed, then a "no effect" determination can be made, and section 7 consultation is not warranted. If species or critical habitat appear on the list or suitable habitat is present within the action area, then a biological assessment or biological evaluation will need to be completed to determine if the proposed action will have "no effect" or "may effect" the species or suitable habitat. The District will request initiation of section 7 consultation with the USFWS upon agreement with the applicant on the effect determinations in the biological assessment or biological evaluation. If the issues are not resolved, the analysis of the situation is complicated, or impacts to listed species or critical habitat are found to be greater than minimal, the District will consider reviewing the project under the Individual Permit process.

Projects in Will, DuPage, or Cook Counties that are located in the recharge zones for Hine's emerald dragonfly critical habitat units may be reviewed under the RPP, with careful consideration due to the potential impacts to the species. All projects reviewed that are located within 3.25 miles of a critical habitat unit will be reviewed under Category II of the RPP. Please visit the following website for the locations of the Hine's emerald dragonfly critical habitat units in Illinois. http://www.fws.gov/midwest/endangered/insects/hed/FRHinesFinalRevisedCH.html

3. <u>Historic Properties</u> - In cases where the District determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity may require an Individual Permit. A determination of whether the activity may be authorized under the RPP instead of an Individual Permit will not be made until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the District with the appropriate documentation to demonstrate compliance with those requirements.

Non-Federal permittees must include notification to the District if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the permit application must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing permit submittals, the District will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. Based on the information submitted and these efforts, the District shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the District, the non-Federal applicant shall not begin the activity until notified by the District either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

The District will take into account the effects on such properties in accordance with 33 CFR Part 325, Appendix C, and 36 CFR 800. If all issues pertaining to historic properties have been resolved through the consultation process to the satisfaction of the District, Illinois Historic Preservation Agency (IHPA) and Advisory Council on Historic Preservation, the District may, at its discretion, authorize the activity under the RPP instead of an Individual Permit.

Applicants are encouraged to obtain information on historic properties from the IHPA and the National Register of Historic Places at the earliest stages of project planning. For information, contact:

Illinois Historic Preservation Agency 1 Old State Capitol Plaza Springfield, IL 62701-1507 (217) 782-4836 www.illinoishistory.gov

If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity, you must immediately notify this office of what you have found, and to the maximum extent practicable, stop activities that would adversely affect those remains and artifacts until the required coordination has been completed. We will initiate the Federal, Tribal and State coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. <u>Soil Erosion and Sediment Control</u> - Measures shall be taken to control soil erosion and sedimentation at the project site to ensure that sediment is not transported to waters of the U.S. during construction. Soil erosion and sediment control measures shall be implemented before initiating any clearing, grading, excavating or filling activities. All temporary and permanent soil erosion and sediment control measures shall be maintained throughout the construction period and until the site is stabilized. All exposed soil and other fills, and any work below the ordinary high water mark shall be permanently stabilized at the earliest practicable date.

Applicants are required to prepare a soil erosion and sediment control (SESC) plan including temporary BMPs. The plan shall be designed in accordance with the Illinois Urban Manual, 2011 (http://aiswcd.org/IUM/index.html). Practice standards and specifications for measures outlined in the soil erosion and sediment control plans will follow the latest edition of the "Illinois Urban Manual: A Technical Manual Designed for Urban Ecosystem Protection and Enhancement." Additional Soil Erosion and Sediment Control (SESC) measures not identified in the Illinois Urban Manual may also be utilized upon District approval.

At the District's discretion, an applicant may be required to submit the SESC plan to the local Soil and Water Conservation District (SWCD), or the Lake County Stormwater Management Commission (SMC) for review. When the District requires submission of an SESC plan, the following applies: An activity may not commence until the SESC plan for the project site has been approved; The SWCD/SMC will review the plan and provide a written evaluation of its adequacy; A SESC plan is considered acceptable when the SWCD/SMC has found that it meets technical standards. Once a determination has been made, the authorized work may commence unless the SWCD/SMC has requested that they be notified prior to commencement of the approved plans. The SWCD/SMC may attend pre-construction meetings with the permittee and conduct inspections during construction to determine compliance with the plans. Applicants are encouraged to begin coordinating with the appropriate SWCD/SMC office at the earliest stages of project planning. For information, contact:

Kane-DuPage SWCD 2315 Dean Street, Suite 100 St. Charles, IL 60174 (630) 584-7961 ext.3 www.kanedupageswcd.org

North Cook SWCD 899 Jay Street Elgin, IL 60120 (847) 468-0071 www.northcookswcd.org McHenry-Lake County SWCD 1648 South Eastwood Dr. Woodstock, IL 60098 (815) 338-0099 ext.3 www.mchenryswcd.org

Lake County SMC 500 W. Winchester Rd, Suite 201 Libertyville, IL 60048 (847) 377-7700 www.lakecountyil.gov/stormwater

- 5. Total Maximum Daily Load For projects that include a discharge of pollutant(s) to waters for which there is an approved Total Maximum Daily Load (TMDL) allocation for any parameter, the applicant shall develop plans and BMPs that are consistent with the assumptions and requirements in the approved TMDL. The applicant must incorporate into their plans and BMPs any conditions applicable to their discharges necessary for consistency with the assumptions and requirements of the TMDL within any timeframes established in the TMDL. The applicant must carefully document the justifications for all BMPs and plans, and install, implement and maintain practices and BMPs that are consistent with all relevant TMDL allocations and with all relevant conditions in an implementation plan. Information regarding the TMDL program, including approved TMDL allocations, can be found at the following website: www.epa.state.il.us/water/tmdl/
- 6. <u>Floodplain</u> Discharges of dredged or fill material into waters of the United States within the 100-year floodplain (as defined by the Federal Emergency Management Agency) resulting in permanent above-grade fills shall be avoided and minimized to the maximum extent practicable. When such an above-grade fill would occur, the applicant may need to obtain approval from the Illinois

Department of Natural Resources, Office of Water Resources, (IDNR-OWR) which regulates activities affecting the floodway and the local governing agency (e.g., Village or County) with jurisdiction over activities in the floodplain. Compensatory storage may be required for fill within the floodplain. Applicants are encouraged to obtain information from the IDNR-OWR and the local governing agency with jurisdiction at the earliest stages of project planning. For information on floodway construction, contact:

IDNR/OWR 2050 Stearns Road Bartlett, IL 60103 (847) 608-3100 http://dnr.state.il.us/owr/

For information on floodplain construction, please contact the local government and/or the Federal Emergency Management Agency. Pursuant to 33 CFR 320.4(j), the District will consider the likelihood of the applicant obtaining approval for above-ground permanent fills in floodplains in determining whether to issue authorization under the RPP.

- 7. Navigation No activity may cause more than a minimal adverse effect on navigation. Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- 8. Proper Maintenance Any authorized structure or fill shall be properly maintained, including that necessary to ensure public safety.
- 9. <u>Aquatic Life Movements</u> No activity may substantially disrupt the movement of those species of aquatic life indigenous to the waterbody, including species that normally migrate through the area, unless the activity's primary purpose is to impound water.
- 10. <u>Equipment</u> Soil disturbance and compaction shall be minimized through the use of matting for heavy equipment, low ground pressure equipment, or other measures as approved by the District.
- 11. Wild and Scenic Rivers No activity may occur in a component of the National Wild and Scenic River System or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status. Information on Wild and Scenic Rivers may be obtained from the appropriate land management agency in the area, such as the National Park Service and the U.S. Forest Service.
- 12. <u>Tribal Rights</u> No activity or its operation may impair reserved tribal rights, such as reserved water rights, treaty fishing and hunting rights.
- 13. Water Supply Intakes No discharge of dredged or fill material may occur in the proximity of a public water supply intake except where the discharge is for repair of the public water supply intake structures or adjacent bank stabilization.
- 14. Shellfish Production No discharge of dredged or fill material may occur in areas of concentrated shellfish production.
- 15. <u>Suitable Material</u> No discharge of dredged or fill material may consist of unsuitable material and material discharged shall be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act). Unsuitable material includes trash, debris, car bodies, asphalt, and creosote treated wood.
- 16. Spawning Areas Discharges in spawning areas during spawning seasons shall be avoided to the maximum extent practicable.
- 17. Obstruction of High Flows Discharges shall not permanently restrict or impede the passage of normal or expected high flows. All crossings shall be culverted, bridged or otherwise designed to prevent the restriction of expected high water flows, and shall be designed so as not to impede low water flows or the movement of aquatic organisms.
- 18. <u>Impacts From Impoundments</u> If the discharge creates an impoundment of water, adverse impacts on aquatic resources caused by the accelerated passage of water and/or the restriction of its flow shall be avoided to the maximum extent practicable.
- 19. <u>Waterfowl Breeding Areas</u> Discharges into breeding areas for migratory waterfowl shall be avoided to the maximum extent practicable.
- 20. Removal of Temporary Fills Any temporary fill material shall be removed in its entirety and the affected area returned to its pre-existing condition.
- 21. <u>Mitigation</u> All appropriate and practicable steps must first be taken to avoid and minimize impacts to aquatic resources. For unavoidable impacts, compensatory mitigation is required to replace the loss of wetland, stream, and/or other aquatic resource functions (33 CFR 332). The proposed compensatory mitigation shall utilize a watershed approach and fully consider the ecological needs of the watershed. Where an appropriate watershed plan is available, mitigation site selection should consider recommendations in the plan. The applicant shall describe in detail how the mitigation site was chosen and will be developed, based on the specific

resource need of the impacted watershed. Permit applicants are responsible for proposing an appropriate compensatory mitigation option to offset unavoidable impacts. However, the District is responsible for determining the appropriate form and amount of compensatory mitigation required when evaluating compensatory mitigation options, and determining the type of mitigation that would be environmentally preferable. In making this determination, the District will assess the likelihood for ecological success and sustainability, the location of the compensation site relative to the impact site and their significance within the watershed. Methods of providing compensatory mitigation include aquatic resource restoration, establishment, enhancement, and in certain circumstances, preservation. Compensatory mitigation will be accomplished by establishing a minimum ratio of 1.5 acres of mitigation for every 1.0 acre of impact to waters of the U.S. Furthermore, the District has the discretion to require additional mitigation to ensure that the impacts are no more than minimal. Further information is available at www.lrc.usace.army.mil/Missions/Regulatory/Illinois/Mitigation.aspx

22. Notification - The applicant shall provide written notification (i.e., a complete application) for a proposed activity to be authorized under the RPP prior to commencing a proposed activity. The District's receipt of the complete application is the date when the District receives all required notification information from the applicant (see below). If the District informs the applicant within 60 calendar days that the notification is incomplete (i.e., not a complete application), the applicant shall submit to the District, in writing, the requested information to be considered for review under the Regional Permit Program. A new 60 day review period will commence when the District receives the requested information. Applications that involve unauthorized activities that are completed or partially completed by the applicant are not subject to the 60-day review period.

#### For all activities, notification shall include:

- a. A cover letter providing a detailed narrative of the proposed activity describing all work to be performed, a clear project purpose and need statement, the Regional Permit(s) to be used for the activity, the area (in acres) of waters of the U.S. to be impacted (be sure to specify if the impact is permanent or temporary, and identify which area it affects), and a statement that the terms and conditions of the RPP will be followed.
- b. A completed joint application form for Illinois signed by the applicant or agent. The application form is available at www.lrc.usace.army.mil/Portals/36/docs/regulatory/forms/appform.pdf. If the applicant does not sign the joint application form, notification shall include a signed, written statement from the applicant designating the agent as their representative.
- c. A delineation of waters of the U.S., including wetlands, for the project area, and for areas adjacent to the project site (off-site wetlands shall be identified through the use of reference materials including review of local wetland inventories, soil surveys and the most recent available aerial photography), shall be prepared in accordance with the current U.S. Army Corps of Engineers methodology (www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/reg\_supp.aspx) and generally conducted during the growing season.\* Our wetland delineation standards are available at www.lrc.usace.army.mil/Portals/36/docs/regulatory/pdf/Delineations.pdf. For sites supporting wetlands, the delineation shall include a Floristic Quality Assessment (Swink and Wilhelm. 1994, latest edition, Plants of the Chicago Region). The delineation shall also include information on the occurrence of any high-quality aquatic resources (see Appendix A), and a listing of waterfowl, reptile and amphibian species observed while at the project area. The District reserves the right to exercise judgment when reviewing submitted wetland delineations. Flexibility of the requirements may be determined by the District on a case-by-case basis only.
- d. A street map showing the location of the project area.
- e. Latitude and longitude for the project in decimal degrees format (i.e. 41.88377N, -87.63960W).
- f. Preliminary engineering drawings sized 11" by 17" (full-sized may be requested by the project manager and you may also submit plans in PDF format on a disc) showing all aspects of the proposed activity and the location of waters of the U.S. to be impacted and not impacted. The plans shall include grading contours, proposed and existing structures such as buildings footprints, roadways, road crossings, stormwater management facilities, utilities, construction access areas and details of water conveyance structures. The plans shall also depict buffer areas, outlots or open space designations, best management practices, deed restricted areas and restoration areas, if required under the specific RP.
- g. Submittal of soil erosion and sediment control (SESC) plans that identify all SESC measures to be utilized during construction of the project.
- h. The application packet shall indicate whether resources (species, their suitable habitats, or critical habitat) listed or designated under the Endangered Species Act of 1973, as amended, may be present within areas affected (directly or indirectly) by the proposed project. Applicants shall provide a section 7 species list for the action area using the on-line process at the USFWS website. You can access "U.S. Fish and Wildlife Service Endangered Species Program of the Upper Midwest" website at www.fws.gov/midwest/Endangered. Click on the section 7 Technical Assistance green shaded box in the lower right portion of the screen and follow the instructions to completion. Print all documentation pertaining to the species list, include the rationale for your effects determination for each species, and forward the information to this office for review.

<sup>\*</sup> If a wetland delineation is conducted outside of the growing season, the District will determine on a case-by-case basis whether sufficient evidence is available to make an accurate determination. If the District finds that the delineation lacks sufficient evidence, the application will not be considered complete until the information is provided. This may involve re-delineating the project site during the growing season.

In the event there are no species, their suitable habitats, or critical habitat, then a "no effect" determination can be made and section 7 consultation is not warranted. If species or critical habitat appear on the list, or suitable habitat is present within the action area, then a biological assessment or biological evaluation will need to be completed to determine if the proposed action will have "no effect" or "may effect" on the species or suitable habitat. The District will request initiation of section 7 consultation with the USFWS upon agreement with the applicant on the effect determinations in the biological assessment or biological evaluation. If the issues are not resolved, the analysis of the situation is complicated, or impacts to listed species or critical habitat are found to be greater than minimal, the District will consider reviewing the project under the Individual Permit process.

- i. A determination of the presence or absence of any State threatened or endangered species. Please contact the Illinois Department of Natural Resources (IDNR) to determine if any State threatened and endangered species could be in the project area. You can access the IDNR's Ecological Compliance Assessment Tool (EcoCAT) at the following website: http://dnrecocat.state.il.us/ecopublic/. Once you complete the EcoCAT and consultation process, forward all resulting information to this office for consideration. The report shall also include recommended methods as required by the IDNR for minimizing potential adverse effects of the project.
- j. A statement about the knowledge of the presence or absence of Historic Properties, which includes properties listed, or properties eligible to be listed in the National Register of Historic Places. A letter from the Illinois Historic Preservation Agency (IHPA) can be obtained indicating whether your project is in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. The permittee shall provide all pertinent correspondence with the IHPA documenting compliance. The IHPA has a checklist of documentation required for their review located here: www.illinoishistory.gov/PS/rcdocument.htm.
- k. Where an appropriate watershed plan is available, the applicant shall address in writing how the proposed activity is aligned with the relevant water quality, hydrologic, and aquatic resource protection recommendations in the watershed plan.
- 1. A discussion of measures taken to avoid and/or minimize impacts to aquatic resources on the project site.
- m. A compensatory mitigation plan for all impacts to waters of the U.S. (if compensatory mitigation is required under the specific RP).
- n. A written narrative addressing all items listed under the specific RP.

For Category II activities, the District will provide an Agency Request for Comments (ARC) which describes the proposed activity. The ARC will be sent to the following agencies: United States Fish & Wildlife Service (USFWS), United States Environmental Protection Agency (USEPA), Illinois Department of Natural Resources (IDNR), Illinois Department of Natural Resources/Office of Water Resources (IDNR/OWR), Illinois Environmental Protection Agency (IEPA), Illinois Historic Preservation Agency (IHPA), Illinois Nature Preserves Commission (INPC) and U.S. Coast Guard (Section 10 activities only). Additional entities may also be notified as needed. These agencies have ten (10) calendar days from the date of the ARC to contact the District and either provide comments or request an extension not to exceed fifteen (15) calendar days. The District will fully consider agency comments received within the specified time frame. If the District determines the activity complies with the terms and conditions of the RPP and impacts on aquatic resources are minimal, the District will notify the applicant in writing and include special conditions if deemed necessary. If the District determines that the impacts of the proposed activity are more than minimal, the District will notify the applicant that the project does not qualify for authorization under the RPP and instruct the applicant on the procedures to seek authorization under an Individual Permit.

- 23. <u>Compliance Certification</u> Any permittee who has received authorization under the RPP from the District shall submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded by the District with the authorization letter and will include: a) a statement that the authorized work was done in accordance with the District's authorization, including any general or specific conditions; b) a statement that any required mitigation was completed in accordance with the permit conditions and; c) the signature of the permittee certifying the completion of the work and mitigation.
- 24. <u>Multiple use of Regional Permits</u> In any case where a Regional Permit is combined with any other Regional Permit to cover a single and complete project (except where prohibited under specific Regional Permits), the applicant shall notify the District in accordance with General Condition 22. If multiple Regional Permits are used, the total impact may not exceed the maximum allowed by the Regional Permit with the greatest impact threshold.
- 25. Other Restrictions Authorization under the RPP does not obviate the need to obtain other Federal, State or local permits, approvals, or authorizations required by law nor does it grant any property rights or exclusive privileges, authorize any injury to the property or rights of others or authorize interference with any existing or proposed Federal project.

Approved by:	
//ORIGINAL SIGNED//	February 24, 2012
Frederic A. Drummond, Jr.	Date
Colonel, U.S. Army	
District Commander	

# Kane – DuPage Soil & Water Conservation District

January 16, 2014

Sandra Homola, P.E. Exp. US Services, Inc. 205 North Michigan Avenue, Suite 3500 Chicago, IL 60601

Corps Number: LRC 2011 00 648

KDSWCD File: 13e064.

Final Plan Set Dated: 12/20/2013 KDSWCD Approved: 1/16/2014

Dear Ms. Homola:

I received your revised soil erosion and sedimentation control plan submittal for the Dauberman Road over Welch Creek project located in Big Rock, Illinois. Thank you for incorporating our comments into the plan, it will improve the quality of protection for the natural resources, both on and off site. This letter and a set of stamped plans located at the construction office on site, will serve to certify that the erosion and sediment control plans meet Technical Standards.

I will visit the site several times during the course of construction to assess compliance with the specifications and will be glad to address specific issues that may arise during the course of construction.

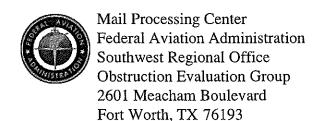
Sincerely,

Candice Jacobs, CPESC Resource Conservationist

Kane-DuPage Soil and Water Conservation District

ECC: Kim Kubiak, USACE





Aeronautical Study No. 2014-AGL-1202-OE Prior Study No. 2011-AGL-2454-OE

Issued Date: 04/14/2014

Paul Lafleur Kane County Department of Transportation 41W011 Burlington Road St. Charles, IL 60175

#### \*\*DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE\*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Crane 045-3107 Location: Big Rock, IL

Latitude: 41-46-16.00N NAD 83

Longitude: 88-31-41.00W

Heights: 705 feet site elevation (SE)

150 feet above ground level (AGL) 855 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is (are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, flag marker - Chapters 3(Marked)&12.

Any height exceeding 150 feet above ground level (855 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 10/14/2015 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. Any changes in coordinates and/or heights will void this determination. Any future construction or alteration, including increase to heights, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as

indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination did not include an evaluation of the permanent structure associated with the use of this temporary structure. If the permanent structure will exceed Title 14 of the Code of Federal Regulations, part 77.9, a separate aeronautical study and FAA determination is required.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (847) 294-8084. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AGL-1202-OE

Signature Control No: 207737628-213801263 (TMP)

Carole Bernacchi Technician

#### STRUCTURE GEOTECHNICAL REPORT

Dauberman Road Bridge over Welch Creek

**Existing SN: 045-3107** 

Section No.: 08-00066-02-BR

IDOT Job: P-91-163-09

Kane County, Illinois

#### STRUCTURAL ENGINEER:

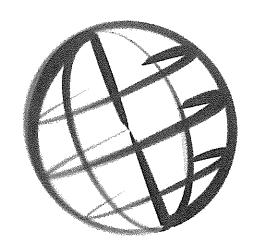
John Ritchie, P.E., S.E.

Teng and Associates, Inc. 205 N. Michigan Avenue Suite 3600 Chicago, Illinois 60601 (312) 616-0000

# Prepared by:

Geo Services, Inc. 805 Amherst Court Suite 204 Naperville, Illinois 60565 (630) 305-9186

> JOB NO. 10038 February, 2011





February 10, 2011

Teng and Associates, Inc. 205 N. Michigan Avenue, Suite 3600 Chicago, Illinois 60601

Attention: Mr. John Ritchie

Job No. 10038

Re: Structural Geotechnical Report - Dauberman Road over Welch Creek

Existing Structure Number 045-3107

Highway 62, Section 08-00066-02-B2, Kane County

IDOT Job No. P-91-163-09

Dear Mr. Ritchie:

The following report presents the geotechnical analysis and recommendations for the Dauberman Road Bridge over Welch Creek Project. A total of three (3) structural soil borings (B-1, B-2 and HA-1) were completed at the site by Geo Services, Inc. (GSI). Copies of these boring logs, along with bridge core information, are included in this report.

If there are any questions with regard to the information submitted in this report, or if we can be of further assistance to you in any way, please do not hesitate to contact us.

Very truly yours,

GEO SERVICES, INC.

Andrew J. Ptak, P.E.

Office Manager

Alex Barlan, P.E.

**Project Engineer** 

enc.

# **TABLE OF CONTENTS**

SECTION 01: INTRODUCTION	2
SECTION 02: GEOLOGY	2
SECTION 03: CLIMATIC CONDITIONS	4
SECTION 04: SUBSURFACE INVESTIGATION PROCEDURES	4
SECTION 05: LAB TESTING PROGRAM	5
SECTION 06: SOIL AND WATER TABLE CONDITIONS	5
SECTION 07: SEISMIC CONSIDERATIONS	6
SECTION 08: SETTLEMENT ANALYSIS	. 7
SECTION 09: RECOMMENDED FOUNDATION TYPES	. 7
SECTION 10: SHELL PILE AND H-PILE RECOMMENDATIONS	. 7
SECTION 11: LATERAL SOIL PROPERTIES	. 8
SECTION 12: GENERAL CONSTRUCTION CONSIDERATIONS	. 9
SECTION 13: GENERAL QUALIFICATIONS	10

#### **APPENDICES:**

APPENDIX A: Site Location Map

APPENDIX B: Boring Location Diagram

APPENDIX C: Soil Boring Logs APPENDIX D: Core Logs

APPENDIX E: IDOT BLR 10220 and TEM Test Results

APPENDIX F: Pile Analyses

#### **SECTION 01: INTRODUCTION**

The following report presents the geotechnical analysis and recommendations for the reconstruction of the Dauberman Road Bridge over Welch Creek in Kane County. A total of three (3) soil borings (B-1, B-2 and HA-1) were completed for the reconstruction of the bridge. Copies of these boring logs, location diagrams and lab data are included in this report. No profiles have been prepared for this report.

The existing bridge structure for the scope of this project is a single-span structure (SN 045-3107) accommodating 1 lane of traffic in each direction for County Highway 62 (CH-62). It is approximately 44 feet long and 42 feet wide. From existing plans, it is not known when the original bridge was constructed; however, the existing bridge was reconstructed in 1975 with a new precast deck beams on two closed abutments. The abutments are supported on untreated timber piles. From existing plans, the footing elevations for the abutments are located around an elevation of 687.6 as shown in Table 1.

Table 1 – Estimated Footing Elevations existing SN 045-3107

Location	Elevation
North Abutment	687.6
South Abutment	687.6

Note: No plans have been provided and for analysis purposes footing are assumed to match existing

It is intended to fully replace the bridge. The proposed bridge is to be situated approximately at station 9+95 and will extend from station 9+73 to 10+17. Footings have been assumed to be approximately around the existing footing elevation of 687.6, and this elevation has been used for analyses. No scour analysis has been performed for the bridge structure, and scour elevation has been assumed at the existing footing elevation. Factored service loading for each abutment has not been determined at this time. As of this report, no new Structure Number has been assigned for this bridge.

# **SECTION 02: GEOLOGY**

According to the physiographic divisions of Illinois, the site area falls into the Till Plains Section of the Central Lowland Province, further divided into the Bloomington Ridged Plain.

According to the 1971 ISGS Circular #460: Summary of the Geology of the Chicago

Area/ISGS Geologic Materials to a Depth of 20' - Kane County, surficial soils in the vicinity of the project site generally consist of thin, discontinuous windblown deposits of Richland Loess overlying soils that belong to the Malden Till Member of the Henry Formation. Malden Till Member soils generally consist of yellowish brown to gray clayey pebbly, sandy silt tills. At the area where the existing stream is located, surficial soils are categorized as belonging to the Cahokia Alluvium underlain by soils belonging to the Mackinaw Member of the Henry Formation soils which are underlain by the above noted Malden Till Member soils. Cahokia Alluvium soils are flood plain and channel deposits of present rivers and streams consisting of silt and sand, some gravel and organics. Mackinaw Member soils generally consist of sand and gravel deposited in valley trains and are typically well sorted and evenly bedded.

The ISGS Circular C542 15 Meter Stack Map confirms that surficial soils in the vicinity of the project site are as noted above and that bedrock is in excess of 50.0' below the ground surface. A review of ISGS well records reviewed on-line confirms bedrock is in excess of 100.0' deep in this area

According to the 1984 ISGS Berg Circular #532: "Potential for Contamination of Shallow Aquifers in Illinois, the project site is located in a transitional area with an AX Zone to the south and a C2 Zone located to the north. AX Zones are defined as areas with variable alluvium deposits which are in excess of 20.0-ft thick and C2 Zones are defined as areas with sand and gravel deposits within 20-ft of the surface that are overlain and underlain by relatively impermeable till, other fine grained material and/or bedrock.

The Wetland Inventory database reviewed on-line at the US Fish & Wildlife Service website indicates that the nearest identified wetland is an approximately 0.36 acre Palustrine System wetland located on the south bank of the Welch Creek approximately 80.0' west of the roadway. This wetland is identified as an Unconsolidated Bottom Class wetland and the water regime is noted to be intermittently exposed. The US Fish & Wildlife Service Big Rock Quadrangle map identifies Welch Creek as a Riverine System-Unconsolidated Bottom Class wetland that is permanently flooded.

The USDA Natural Resources Conservation Service Soil Survey database indicates that surficial soils in the vicinity of the project corridor are generally associated with various silt loams. None of these soils are overly organic (less than 5.0%) and potential frost action is high.

According to readily available ISGS sources, there are no documented coal mining operations in near vicinity to the project site and seismic activity is noted to be very low.

The available geologic information indicates that the subgrade soils within the limits of the project corridor should generally consist of granular soils but can also be interbedded with layers of impermeable clay and silt tills, which generally matches the conditions encountered in the borings performed for this investigation.

#### **SECTION 03: CLIMATIC CONDITIONS**

The climate within the area of this project fall within the temperate humid, continental range and is characterized by cold conditions in the winter and warm conditions in the summer. The winter average daily temperature is 24° F and the average daily minimum temperature is 16° F. The summer average temperature is 71° F and the summer average daily maximum temperature is 83° F. The total annual precipitation for this area is 34.7" with approximately 63% falling between April and September. The average seasonal snowfall for this area is 32.0".

Local Climatological Data, as measured at O'Hare International Airport (ORD), for the three (3) month period prior to and during drilling, including total precipitation, average temperature and snowfall are summarized below:

Temp (°F) Snow (in) ppt (in) **MONTH-Yr** Total Departure Average : Departure Total ! Monthly From Norm From Norm Norm Temp. :8.3 Feb-10 1.64 10.01 26.7 1-0.3 22.5 41.7 4.4 1.8 6.5 March-10 1.55 -1.10 April-10 3.01 -0.6754.6 6.8 Trace 1.6 Borings drilled 4/27/10 & 4/28/10

Table 2 - Climate Conditions

Total precipitation during the three months preceding drilling was slightly below normal and temperatures were higher than normal. Total snowfall during this period was higher than normal due to a particularly heavy snowfall in February. The climatic conditions encountered prior to drilling operations suggest that the soils should be slightly drier than normal moisture levels.

# SECTION 04: SUBSURFACE INVESTIGATION PROCEDURES

The soil boring locations were selected by Geo Services based on the criteria in the IDOT Geotechnical Manual and submitted to and approved by Teng and IDOT. Reference stakes (stations and offsets) were laid out by representatives of Geo Services, Inc. personnel by using right angle and a measuring tape, and are considered approximate. Elevations were approximated from topographic information provided by Teng and are shown on the boring logs. The as-drilled locations for the borings and cores are shown on the Boring Location Diagram found in Appendix B.

The borings were performed during the month of April with a truck mounted drill rig and the borings were advanced by means of continuous flight augers to a depth of 10 to 15 feet installing 4-in diameter casing and continued with rotary drilling techniques to completion. Representative samples from the drill rig were obtained employing split spoon sampling procedures in accordance with AASHTO T-206.

In addition, pavement cores were performed in the month of April, 2010 using a 4-inch diameter diamond bit core barrel and Milwaukee coring machine. The core was extended through the existing pavement through the bridge deck. The cores are intended to be tested for asbestos.

#### **SECTION 05: LAB TESTING PROGRAM**

The laboratory-testing program consisted of performing water content per AASHTO T-265, unconfined compression testing with an IDOT-modified Rimac test device, and a calibrated penetrometer tests on the cohesive samples recovered. Water content tests were performed on non-cohesive samples recovered. These tests were performed upon representative portions of the samples obtained in the field. The results of all testing performed, along with a visual classification of the material are based upon both a textural analysis and the AASHTO Soil Classification System, and are indicated on the boring logs.

Core samples D-1 and D-2 were delivered to TEM, Incorporated (TEM) following chain of custody procedures. TEM was instructed to test the samples for the presence of asbestos using the Polarized Light Microscopy (PLM) Gravimetric Reduction method as specified in Section 1 of Appendix E, Subpart E, 40 CFR part 763. Test results, along with a completed IDOT Form BLR 10220, are included in Appendix E and indicate that no asbestos was detected in the core samples.

# **SECTION 06: SOIL AND WATER TABLE CONDITIONS**

The soil borings were completed in the month of April, 2010. Specific soil conditions are indicated on the boring logs and profiles. Borings B-1 and B-2 were performed near the existing bridge abutments, while HA-1 was bored off the roadway at the bottom of embankment.

Boring B-1 was drilled a few feet off the pavement section, and surficial soils consisted of 1.5 feet of gravel and stone fill overlying 4 feet of stiff clay loam fill. Underlying the surficial soils is 2.5 feet of loose sand fill overlying loose to medium dense silty loam to an elevation of 686. Below the loam stratums, medium dense sand was encountered to an elevation 667 and medium dense to dense sand and gravel was encountered to an elevation of 647. Extending from elevation 647 to the end-of-boring depth of 75 feet,

loose to medium dense sandy loam was encountered to an elevation of 629. Moisture contents for the clay soils were within the range of 20% to 26% with an average of 22%. Non-cohesive soils had moisture contents within the range of 6% to 19% with an average of 15%.

Boring B-2 was located off of the roadway pavement, 14 feet off of centerline. Surficial soils consisted of 5 feet of stiff clay loam overlying medium stiff silty clay to an elevation of 692. Below the surficial soil, approximately 7 feet of loose sand and gravel and silty loam were encountered, overlying medium dense sand to an elevation of 663 and sand and gravel to an elevation of 653. Extending from an elevation of 653 to 643, very dense sand was encountered, transitioning to medium dense silty sand to the end-of-boring depth of 75 feet, at an elevation of 630. Moisture contents for the clay soils were within the range of 23% to 35% with an average of 27%. Non-cohesive soils had moisture contents within the range of 11% to 23% with an average of 17%.

Surficial soil at Boring HA-1 was consisted of 3 feet of topsoil over six feet of medium stiff to soft clay soils. HA-1 was concluded at a depth of 9 feet due to hand auger refusal. Topsoil had a moisture content range of 18% to 27% with an average of 23%, and the clay soils had a moisture content range of 25% to 27% with an average of 25%

Water level readings were obtained in the borings during the drilling operation and these readings are shown on the boring logs. Due to rotary drilling techniques, groundwater levels were not able to be taken below a depth of 10 feet. Groundwater was only encountered in HA-1 and was at an approximate elevation of 691. Elevations for the stream level and stream bed were taken in relation to the bridge deck elevation. Stream level was at an approximate elevation of 693, and streambed was at an approximate elevation of 691 (1975 bridge plans indicate an approximate streambed of 691.7). We estimate the long-term water table to be around the elevation of the streambed level or higher. Fluctuations in the amount of water accumulated and in the hydrostatic water table can be anticipated depending upon variations in precipitation, surface runoff, nearby Welch Creek level and movement through the granular sand stratums.

# SECTION 07: SEISMIC CONSIDERATIONS

For LFRD design, according to the AASHTO LRFD Bridge Design Specification 2010, the project site has a horizontal Response Spectral Acceleration of 0.037 at a period of 1.0 second and 5% critical dampening (S<sub>1</sub>). The site also has a horizontal Response Spectral Acceleration of 0.095 at a period of 0.2 seconds and 5% critical dampening (S<sub>s</sub>). The following table shows recommended seismic design data in accordance to the AASHTO LRFD Bridge Design Specification 2010.

Table 3 – Seismic Design (Approximately 1000-Year Return Period)

Seismic Performance Zone (SPZ)	1
Spectral Acceleration at 1 second (S <sub>D1</sub> )	0.086
Design Spectral Acceleration at 0.2 seconds (S <sub>Ds</sub> )	0.152
Soil Site Class	D

The project site is considered to be in a low seismic area and is considered a nonextreme event. Liquefiable layers are not expected to impact the design of the new bridge.

#### **SECTION 08: SETTLEMENT ANALYSIS**

Proposed grade is proposed to be similar to existing, and no new fill is expected to be placed. No new settlement is expected to occur, and settlement and downdrag are not considered to affect the design of the new bridge.

#### **SECTION 09: RECOMMENDED FOUNDATION TYPES**

Based on the proposed foundation loads and loose to medium dense loam and sand soils encountered at an approximate footing elevation of 687.5, a shallow foundation system would require a wide foundation base. Therefore, we recommend a deep foundation system be used for design. Based on the results of the borings and type of structure and loading, two foundation types may be considered for design; shell piles or H-piles. Straight-shaft drilled caissons are not recommended due to the medium dense soils encountered from the surface extending down to the end-of-boring depth of 75 feet.

We recommend that an economic analysis for each foundation option presented below be considered before choosing a deep foundation system for the design.

# **SECTION 10: SHELL PILE AND H-PILE RECOMMENDATIONS**

Graphical solutions of the Pile Capacities vs. Length as well as summary tables can be found in Appendix F. As shown in the graphical presentations in Appendix F, around a pile length of 30 feet (approximately an elevation of 660), gains in pile capacity per length typically decrease or taper off. In addition, observations of the graphs and tables indicate that H-pile capacities are relatively smaller than the shell pile capacities at any given pile length. Based on this comparison of the pile types versus capacity, we recommend that shell piles be used for support of the bridge. However, based on costs

and availability of pile types, the most economic pile type should be used for design.

As per the IDOT Design Guide AGMU Memo 10.2, dated May 2010, the Washington State DOT (WSDOT) formula has replaced the FHWA Gates Formula as the standard method of construction verification. A modified IDOT static method was used to develop the SGR pile design tables shown in Appendix F. Nominal required bearing was calculated from LRFD skin-friction (with pile type correction factors) and endbearing calculations. A value of 1.04 is used for Bias Factor Ratio ( $I_{\rm G}$ ). A geotechnical resistance factor ( $\Phi_{\rm G}$ ) of 0.55 was used in calculations for the factored resistance available (FRA). Pile lengths were picked with respect to the loadings and geometry of the proposed structures. An automatic hammer was used for drilling operations; a hammer efficiency (ER) of 73% was used in calculations.

In lieu of the hammer selection criteria and use of the WSDOT (modified IDOT static method) formula the Contractor shall conduct a wave equation analysis to establish the driving criteria at all pile foundations which specify a Nominal Required Bearing above 600 kips. The analysis and calculations shall be submitted to the Engineer for approval.

To provide adequate frost protection, we recommend that footing foundations be situated at a minimum depth of 4.0 feet below final grade per the IDOT Bridge Manual. When Steel H-piles are used, the Steel H-piles shall be according to AASHTO M270 Grade 50.

We recommend that a minimum of one test pile be performed at each substructure unit. The piles should be driven until satisfactory driving resistance is developed in accordance with the WSDOT (modified IDOT static method) pile driving formula. In accordance with the IDOT 2009 Bridge Manual, the test piles shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information. The pile size and capacity selected should be based on economic considerations and the loads imposed on the structures.

# SECTION 11: LATERAL SOIL PROPERTIES

On the following page is a tabulation of lateral soil parameters to be used for design of piles and the abutments.

TABLE 6 - SOIL PARAMETERS FOR LATERAL RESISTANCE

Material (Elevation)	Unit Weight (pcf)	Drained Friction Angle (°)	Undrained Cohesion (psf)	Lateral Modulus of Subgrade Reaction (pci)	Strain
Stiff Clay FILL (704 to 699)	125	28	1,000	100	0.010
Medium Stiff CLAY (699 to 689)	125	28	500	70	0.010
Loose to Medium Dense SAND (689 to 663)	125	28	-	60	0.005
Medium Dense to Very Dense SAND and GRAVEL (663 to 645)	125	28	-	125	0.005
Loose to Medium Dense SAND (645 to 630)	125	28	-	60	0.005

Allowances should be made for any surcharge loads adjacent to the retaining structure. The footings are anticipated to be situated on the sandy loam soils. According to the NAVFAQ Design Manual 7.02, for a concrete base on natural loams, sands and gravels or approved granular structural fill, a friction angle of 28 degrees may be used, leading to a coefficient value of 0.53. A value of 0.34 may be used for the coefficient of friction between the concrete base and drained cohesive soils (this assumes a concrete base on the stiff cohesive soils if the footings are to be at a higher then existing footing elevation). Drainage should be provided behind the wall.

# SECTION 12: GENERAL CONSTRUCTION CONSIDERATIONS

It is proposed that the Dauberman Road Bridge be closed during construction and traffic be detoured. If it is required to keep the bridge open to traffic during construction, stage construction at the abutments may be retained by temporary cantilever sheet piling. Support for the cantilevered sheet piling will be provided by the primarily sandy and gravely soils found throughout borings obtained.

Excavation for the bridge abutments are to be within the creek. A temporary cofferdam or sheet pile wall with pump and pit procedures will be needed to keep the site in the dry during construction. Table 6, in the previous section, may be used for design of the temporary structures

During excavation for the proposed improvements, movement of adjacent soils into the

excavation should be prevented. All excavations should be performed in accordance with the latest Occupational Safety and Health Administration (OSHA) requirements. Allowances should be made for any surcharge loads adjacent to the retaining structures.

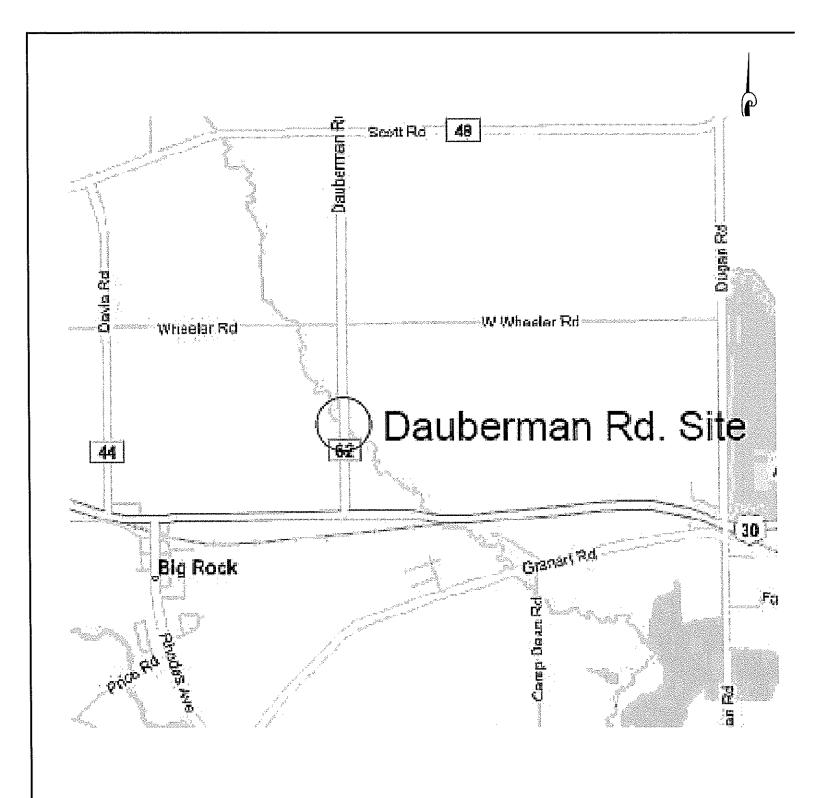
From the IDOT Standard Specifications for Roadway and Bridge Construction, excavation for structures should be in compliance with Section 502, and the construction of the MSE wall base pad should be in compliance with Section 503. MSE walls should be installed according to the specifications of the supplier approved by the engineer. Vertical and horizontal alignment should be in accordance with IDOT Specifications.

#### **SECTION 13: GENERAL QUALIFICATIONS**

The analysis and recommendations presented in this report are based upon the data obtained from our soil borings performed at the indicated locations. This report does not reflect any variations that may occur between borings or across the site. In addition, the soil samples cannot be relied on to accurately reflect the strata variations that usually exist between sampling locations. The nature and extent of such variations may not become evident until construction. If variations appear evident, it will be necessary to reevaluate the recommendations of the report. In addition, it is recommended that Geo Services Inc. be retained to perform construction observation and thereby provide a complete professional geotechnical engineering service through the observational method.

This report has been prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted geotechnical engineering practices. No other warranties, either expressed or implied, are intended or made. In the event that any changes in the nature, design or location of the project as outlined in this report are planned, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and the conclusions of this report modified or verified in writing by the geotechnical engineer. Also note that Geo Services Inc. is not responsible for any claims, damages, or liability associated with any other party's interpretation of this report's subsurface data or reuse of the report's subsurface data or engineering analyses without the express written authorization of Geo Services Inc.

# APPENDIX A SITE LOCATION MAP



SITE LOCATION DIAGRAM

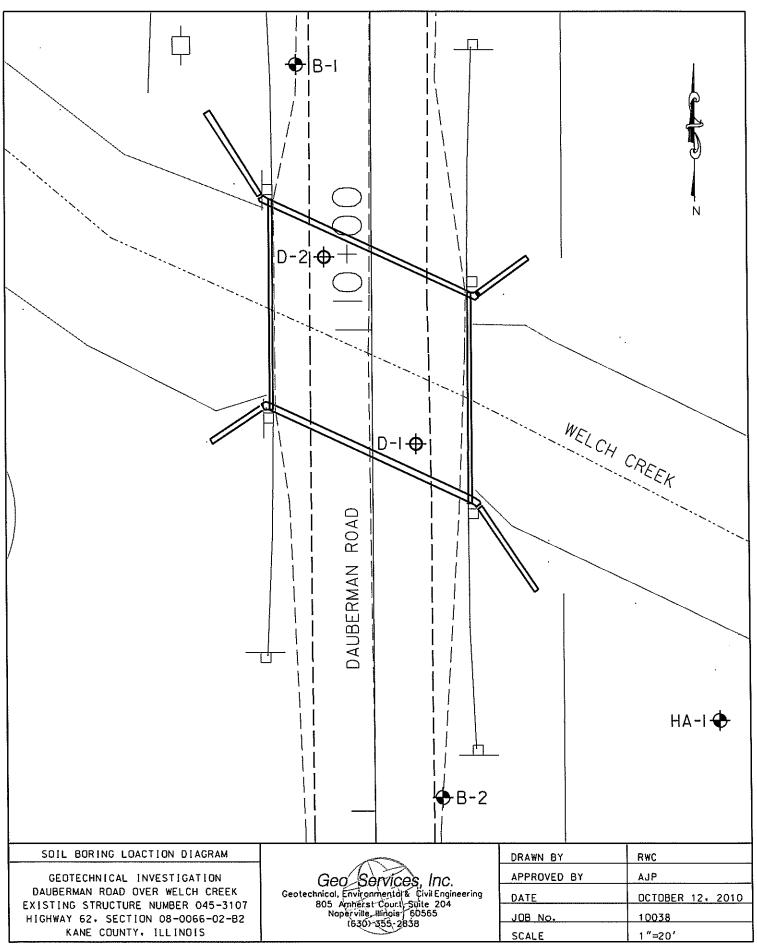
Subsurface Investigation Dauberman Rd./Welch Creek SN: 045-3107 Section 08-00066-02-BR Kane County, Illinois

Geo Services, Inc.

Geotechnical, Environmental & Givil Engineering
805 Amherst Court Soute 204
Naperville, Illinois 60565
(630) 355 2838

DRAWN BY	AUB
APPROVED BY	AJP
DATE	October 15, 2010
GSI JOB No.	10038
SCALE	NS

# APPENDIX B BORING LOCATION DIAGRAM



Geo Services. Inc.

## APPENDIX C SOIL BORING LOGS

Geo Services Inc.

#### SOIL BORING LOG

PAGE 1 of <u>2</u> DATE 4/28/2010

(FID) 355 355 355 355 355 355 355 355 355 35	Geotechnical, Environmental & Civil Engineering 805 Amherst Court State 204					LOGGED B	Y <u>MR</u>			1
ROUTE   Highway 62_Dauberman Rd.   DESCRIPTION   MODIT   Dauberman Road Over Welch   Creek	Napeříville, Illinois 60565 (630) 355 2838					GSI JOB N	o. 100	38		
CCATION   CR-0266-02-82   LOCATION   Big   Rock   Township   TWP. 38 N. RNG. 6   E. Section   15-14	ROUTE Highway 62—Dauberman Rd. D	ESCRIPT	ION	KDOT	–Dau					
DRILLING METHOD   Hollow Stem Auger/Rotory   HAMMER TYPE   QME Automatic							5-14			
STRUCT. No. 0.45-3107   Station 9+95   Station 10+55   Station 10+								omat	ic	_
Stotion   9+95   P   V   N   S   Stream Bed Elev.   699.9   P   V   N   S   S   S   Stream Bed Elev.   699.9   P   V   N   S   S   S   S   S   S   S   S   S			1	<u> </u>			1 1	T	1	$\dashv$
SORING NO.   B-1	Station 9+95				м	· · · · · · · · · · · · · · · · · · ·			-	
Station: 104-55	BORING NO. B-1	P	0		Ť	Groundwater Elevation:	P	0		1
Ground Surface Elev. 704.6 (ft) /6" (tsf) (%) After Hrs. (ft) /6" (tsf) (tsf) (%) After Hrs. (ft) /6" (tsf)	Station: <u>10+55</u>			Qu	- 1	First Encounter $n/a$			Qu	
SRAVEL & STONE (Fill)		(ft)	′/6"\	(tsf)	(%)		(ft)	/6"\	(tsf)	(%)
703.7 1	Glound Surface Elev. 704.0	109		((0))		Aitei	100/	<del>/                                    </del>	(13.7)	
CLAY LOAM—brown—stiff (A—6) Fill    2	GRAVEL & STONE (Fill)		AS	NP	5					
CLAY LOAM—brown—stiff (A-6) Fill	70	3.1					_			
CLAY LOAM—brown—stiff (A-6) Fill    3   97				1 OP	20		—	- I	BP	23
3   97	CLAY LOAM-brown-stiff (A-6) Fill			1.01						
3	OLAT LOAM BIOWN SUIT (A O) TIII	_			2					ı
SAND-brown-loose (A-3) Fili  SAND-brown-loose (A-3) Fili  8					97					
SAND-brown-loose (A-3) Fill		5		1.1B	21	Fine SAND-brown-medium dense (A-	<sup>5)</sup> <u>-25</u>	11	NP	19
SAND-brown-loose (A-3) Fill	69	9.1					-			
SILTY LOAM with Stone— gray & black—loose (Fill)  695.1			8					9		
SILTY LOAM with Stone— gray & black—loose (Fill)  695.1  -10 5 NP 12  -10 5 NP 12  -30 13 NP 19  SILTY LOAM—black— loose to medium dense (A-4)  -10 5 NP 12  -11 -11 -11 -11 -11 -11 -11 -11 -11 -1	SAND-brown-loose (A-3) Fill		5					11		
SILTY LOAM with Stone— gray & black—loose (Fill)  695.1  4  -10 5 NP 12  -10 5 NP 12  -10 -30 13 NP 19  -30 13 NP	60	)	_3_	NP	6		_	13	NP	19
Siltry LOAM-black-   Siltry LOAM-brown-   Siltry LOAM to LOAM-brown-   Siltry LOA		, o. o								
SILTY LOAM-black- loose to medium dense (A-4)  SILTY LOAM-black-  1	arav & black-loose (Fill)	—								
SILTY LOAM-black- loose to medium dense (A-4)  2 3	68		1	NP	12				NP	19
SILTY LOAM to LOAM-brown-   Source   A-4   Source   A-5   A   A   B   B   B   B   B   B   B   B				1,,,	12			·	111	,,,
SILTY LOAM to LOAM-brown-   Source   A-4   Source   A-5   A   A   B   B   B   B   B   B   B   B										
3   0.25P   22	SILTY LOAM-black-		2							
Comparison of the content of the c	loose to medium dense (A-4)		1	0.25P	22					
Comparison of the content of the c										
-15 8 0.25P 26 -35 11 NP 19 689.1		_	1					11		
SILTY LOAM to LOAM-brown- loose (A-4)  6  3  NP  19  686.6  SAND & GRAVEL-gray- medium dense to dense (A-1)  12  13  -40  11  NP  9			6					11		
SILTY LOAM to LOAM-brown- loose (A-4)  6  3 NP 19  686.6  SAND & GRAVEL-gray- medium dense (A-1)  12  13  -20 7 NP 21	c		8	0.25F	26		<u>-35</u>	11	NP	19
SAND & GRAVEL-gray-medium dense (A-3)	De	89.1	1				_			
SAND & GRAVEL-gray-medium dense (A-3)   SAND & GRAVEL-gray-medium dense to dense (A-1)   12   13   13   13   14   15   15   10   10   10   10   10   10	SILTY LOAM to LOAM-brown-		6	ļ						
686.6     SAND & GRAVEL-gray-medium dense (A-3)       5     13       -20     7       NP     21         SAND & GRAVEL-gray-medium dense (A-1)       12       -40     11       NP     9	loose (A-4)		7	,,,	10	66	7.6			
Fine SAND-brown-medium dense (A-3) 6 medium dense to dense (A-1) 12 medium dense to dense (A-1) 13 -40 11 NP 9	6	<u>86.6</u>		NP	19		_			
Fine SAND-brown-medium dense (A-3) 5 13 13 13 13 10 10			]							
-20 7 NP 21 -40 11 NP 9	Fine SAND-brown-medium dense (A-	-3) ——			$\vdash$	meaium dense to dense (A—1)		1		1
The Unconfined Compression Strength (UCS) Egillurg Mode in indicated by (R. Rulge S. Shear R. P. Rengtrameter) ST. Shelly Tube Sample VS=Vane Shear Test		- <u>2</u> (	7	NP			<u>-4</u>	]	NP	9

Geo Services Inc.

#### SOIL BORING LOG

PAGE 2 DATE <u>4/28/2010</u>

805 Amherst Court Suite 204 Naperville Hinois 60565				LOGGED E	3Y <u>MR</u>			—1
(630) 355 2838				GSI JOB	No. <u>10</u>	038		
ROUTE <u>Highway 62—Dauberman Rd.</u>	DESCRIPTI	ON <u>K</u>	DOT-D	auberman Road Over Welch Creek				
SECTION <u>08-0066-02-B2</u>	LOCATION	Big	Rock T	ownship, TWP. 38 N, RNG. 6 E, Section	15-14			_
COUNTY <u>Kane</u>	DRILLING I	метно	D <u>Hol</u>	low Stem Auger/Rotary HAMMER TYPE	CME Au	toma	tic	
STRUCT. NO. <u>045-3107</u> Station <u>9+95</u> BORING NO. <b>B-1</b> Station: <u>10+55</u> Offset: <u>15.5' L</u> Ground Surface Elev. <u>704.6</u>	P T H	L 0 W S	U M C O S I S T Sf) (%	Surface Water Elev. 693.4  Stream Bed Elev. 690.9  Groundwater Elevation:  First Encounter n/a  Upon Completion n/a  After Hrs.	D E P T H	B L O W S (/6")	U C S Qu (tsf)	M ○ - S T (%)
SAND & GRAVEL—gray— medium dense to dense (A—1)		13	NP 10	SANDY LOAM—brown— loose to medium dense (A-2)		5 5	NP NP	15
		12 13 14	NP S	End Of Boring @ -75.0' Hollow Stem Augers To -10.0' Rotary Drilling To Completion CME Automatic Hammer 10.0' Of 4.0"ø Casing Used	29.6 – 7 –	5 7 5 8	NP	18
SANDY LOAM-brown- loose to medium dense (A-2)		8 9		3 Shage R. Parestrometer) ST. Shalby Tubo S	——————————————————————————————————————	50	o Shage	

#### SOIL BORING LOG

PAGE 1 \_ of <u>\_2</u> DATE <u>4/27/2010</u>

Geotechnical, Environmental & Givil Engineering 805 Amherst Court Suite 204 Naperville Illinois 60565						LOGGED BY	MR			_
Naperville; Illinois 1 50555 (630) 355 2838						GSI JOB No.	. 100	38		
ROUTE <u>Highway 62—Dauberman Rd.</u>	DESC	RIPT	ION	KDO	Γ <del>-</del> Da	uberman Road Over Welch Creek				
						wnship, TWP. 38 N, RNG. 6 E, Section 15-	-14			
						ow Stem Auger/Rotary HAMMER TYPE <u>CM</u>		mat	ic	_
	Г	1	14111		HOIL		TT	T	1	$\dashv$
STRUCT. NO. <u>045-3107</u> Station <u>9+95</u>		Þ	В	Ŋ	М	Surface Water Elev. 693.4  Stream Bed Elev. 690.9	D E	В	ŭ	М
BORING NO. B-2		E P	0	C S	0	Groundwater Elevation:	P	ŏ	c s	0
Station: 9+03		T H	W S	Qu	S	First Encounter $n/a$	T     H	w s	Qu	ST
Offset: 14.0' R	. 1	(#1)	/ /c"\	(tsf)	(%)	Upon Completion $n/a$	(ft) (,	/6"\ i	(tef)	(%)
Ground Surface Elev		(11)	(/0 /	(131)	(/0)	After Hrs SILTY LOAM-gray-loose (A-4) 684.		1	(131)	(/0)
SANDY CLAY LOAM—black (Fill) $_{70}$	04.0\	_	AS	_	13	SILTY LOAM-gray-loose (A-4) 684.	<del>)</del>			
			1					5		
	-		2	4 ED	2.		-	8 10	NP	20
CLAY LOAM-brown-stiff (A-6) Apparent Fill			3	1.5P	25			"	INF.	20
Apparent	-	_								
	-		<u>8</u> 5				-	5 10		$\dashv$
	_	<u>-</u> 5		1.25P	23			11	NP	23
6	399.5						4			
	-	····	2		0.4	SAND-brown-medium dense (A-3)	-	8		
	_		1		7	orms brown modulin conce (v. c)		9		
			2	0.9B	28		_	10	NP	20
SILTY CLAY-dark gray-										
medium stiff (A-6) Wet			1_					5		
		_	2		l		70	9		
		<u>–10</u>	2	0.5P	26		<u>-30</u>	9	NP	22
			]							
		_	2	1	85		_	$\dashv$		
	•		3 4	0.6B	35		_			
	692.0	, –								
		_								
Clayey SAND & GRAVEL—gray— loose (A-2)			4	1	-			<u>8</u> 9		<del>                                     </del>
•		15	3	NP	22		<u>-35</u>	12	NP	21
	689.5	5	4	1						
			2							
			_ 2							
SILTY LOAM-gray-loose (A-4)		_	2	NP.	23	-				$\vdash$
, ,										
			6	-		4		6		
		-2	2	NP	18		<del>-</del> 40	7	NP	16
·			<del></del>	1 11	<del></del>		- :=	• • • • • • • • • • • • • • • • • • •		

Geo Services, Inc.

Geotechnical, Environmental & Givil Engineering
805 Amberst Court, State 204

Naperville, Illinois 60565
(630) 3551-2838

#### SOIL BORING LOG

PAGE <u>2</u> of <u>2</u>

DATE <u>4/27/2010</u>

LOGGED BY <u>MR</u>

805 Amperst Court Aspre 204 Noperville, Illinois (60565 (630)-355\ 2838					LOGGE	-D R	MK		
(630)-355}-2838					GSI J	OB No.	1003	8	l
ROUTE <u>Highway 62—Dauberman Rd.</u> I	DESCRIPT	TION .	KD01	Γ <del>-</del> Daι	uberman Road Over Welch Creek				<u> </u>
SECTION <u>08-0066-02-B2</u> I	LOCATION	۱ <u>Bi</u>	g Roc	k To	wnship, TWP. 38 N, RNG. 6 E, Secti	<u>on 15–1</u>	4		l
COUNTY Kane	DRILLING	MET	HOD _	Hollo	w Stem Auger/Rotary HAMMER TYP	E <u>CME</u>	Autor	natic	
STRUCT. NO. <u>045-3107</u> Station <u>9+95</u> BORING NO. <b>B-2</b> Station: <u>9+03</u> Offset: <u>14.0' R</u> Ground Surface Elev. <u>705.0</u>	D E P T H	B L O ≫ S (/6")	U S Qu (tsf)	M O I S T (%)	Upon Completion <u>n/a</u>	<b>▼</b> □	T V		
SAND-brown-medium dense (A-3)					SAND-gray-very dense (A-3)	- 643.0		· verification	
SAND & GRAVEL—gray— medium dense (A—1)		8 8	NP NP	11	SILTY SAND—gray— medium dense (A—2/A—3)	-	-65	5 7 7 NP 6 6 NP	
SAND-gray-very dense (A-3)		25 29 33 28 33 0 35		21	End Of Boring @ -75.0' Hollow Stem Augers To -10.0' Rotary Drilling To Completion CME Automatic Hammer 10.0' Of 4.0"ø Casing Used	630.0		6 8 7 NF	21
The Unconfined Compressive Strength (UCS) Failu	re Mode is	indica		(B-Bu	Ige, S—Shear, P—Penetrometer) ST—Shelby Tu	be Sample	VS=	Vane She	ar Test

#### SOIL BORING LOG

PAGE 1 \_ of <u>\_1</u> DATE 4/27/2010

Geotechnical, Environmental & Givil Engineering			•		•							
Geotechnical, Environmental & Givil Engineering 805 Anherst Court Suite 204 Naperville, Illinois 60565							LO	GGED BY	MK			-
(630) 355 + 2838							GS	JOB No.	100	38		-1
ROUTE <u>Highway 62—Dauberman Rd.</u>	_ DESC	RIPT	ION .	KDOT	-Da	uberman Road Over W	lelch Creek					-
SECTION <u>08-0066-02-B2</u>	_ LOCA	TION	Bio	g Roc	k To	wnship, TWP. 38 N, R	NG. 6 E, Se	ection 15-	-14			
COUNTY Kane	_ DRILL	ING	MET	HOD _	Hand	l Auger	_ HAMMER <sup>-</sup>	TYPE <u>Ma</u>	nual			
STRUCT. NO. <u>045-3107</u> Station <u>9+95</u> BORING NO. <b>HA-1</b> Station: <u>9+19</u> Offset: 72.0' R	<b>-</b>	D E P T H	BLO¥S	DON G	M 0 1 S T	Surface Water Elev. Stream Bed Elev. Groundwater Elevation First Encounter Upon Completion	690.9		D E P T H	B L O ¥ S	U C S Qu	M 0 1 S T
Ground Surface Elev. 697.	<u>7</u> (	(ft)	(/6")	(tsf)	(%)	After Hrs.		Ÿ	(ft)	/6")	tsf)	(%)
TOPSOIL—black	_		AS	_	18_							
11 - 100 appropriate for the	694.7		AS		27				$\dashv$			
SILTY CLAY—dark gray to black—medium stiff (A—6)	******											
	692.7	_ <u>5</u>	AS	0.75P	25				<u>-25</u>	_		
		_							$\dashv$			
SILTY CLAY-gray-soft (A-4) Wet	▽		AS	0.25P	25							
	- 688.7		۸.	<0.25	25					3		
Auger Refusal @ -9.0' End Of Boring Hand Auger	_	-10		KU.231	23							
	•••											
	-											
	-	-15										
	-	******										
	-	_										
	-		-									
		<u>-2</u> (							<u> </u>			

## APPENDIX D CORE LOGS

Geo Services, Inc.

Geotechnical, Environmental & Givil Engineering

805 Amherst Court, Suite 204

Naperville, Illinois 60565

(630) 355-2838

#### PAVEMENT CORE SUMMARY

Page: <u>1 of 1</u>

Project: Geotechnical Investigation for KDOT—Dauberman Road Bridge Over Welch Creek	GSI Job No.: <u>10038</u>
Location:Dauberman Road Over Welch Creek (North of US Rte. 30), Kane County, Illinois	Date: <u>3/16/2010</u>
County: Kane	Cored By: <u>MD</u>
Client: Teng & Associates, Inc.	Checked By: <u>AJP</u>

ounty:			Cored By:	
lient: T	eng & Associat	es, Inc.	_ Checked By:	AJ
ORE NO.	THICKNESS (in.)	MATERIAL DESCRIPTION		
		Station: 9+76 Offset: 9.0' Right		
D-1	3.5 5.0 10.0 4.5	ASPHALT-poorly consolidated & porous, fine to medium coarse aggregate.  CONCRETE—well consolidated, 1/8" wire mesh @ -2.0", 1/2" rebar @ -2.5".  VOID  CONCRETE—no recovery		
		Station: 10+15 Offset: 10.0' Left		
D-2	3.0 19.5	ASPHALT—poorly consolidated ⊕ base, fine to medium coarse aggregate. CONCRETE—well consolidated, two 3/8" rebars ⊕ -2.0", 1/2" rebar ⊕ -2.75".		
	1			
	ļ			
	i	1		

Geo Services Inc.
Geotechnical, Environmental & Givil Engineering
805 Amherst Court, Suste 204
Noperville, Illinois 60565
(630) 355-2838

### PAVEMENT CORE PHOTO LOG

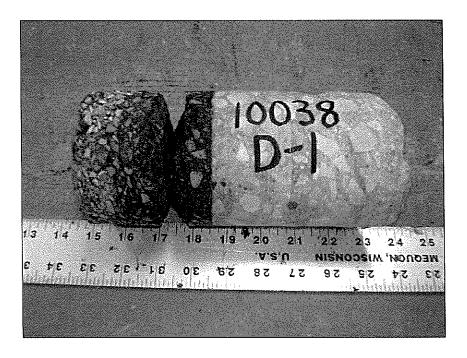
Page: 1 of 1

Project: Geotechnical Investigation for KDOT—Dauberman Road Bridge Over Welch Creek GSI Job No.: 10038

Location:Dauberman Road Over Welch Creek (North of US Rte. 30), Kane County, Illinois Date: 3/16/2010

County: Kane Cored By: MD

Client: Teng & Associates, Inc. Checked By: AJP



Core No.: D-1 Core Location: Station: 9+76 Offset: 9.0' Right



Core No.: D-2 Core Location: Station: 10+15 Offset: 10.0' Left

## APPENDIX E IDOT BLR 10220 AND TEM TEST RESULTS



#### Asbestos Determination Certification for Local Highway Bridges

#### Structure Identification

Structure Nun	nber(s) (000-0000): SN 045-3107
Dauberman	Road (CH-62 over Welch Creek
KDOT Bridge	9
Kane County	y, Illinois
Asbestos De	termination
1. 🗌	The identified structure(s) were included in the 5/10/02 list that the USEPA exempted from the asbestos notification requirements in its letter of October 19, 2001.
2. 🗌	The identified structure(s) were unconfirmed for asbestos involvement as of 5/10/02 but have subsequently been determined, on the basis of information available from the local highway authority, not to involve asbestos in a bituminous bridge deck wearing surface or waterproofing membrane.
3. 🛚	The identified structure(s) were unconfirmed for asbestos involvement as of 5/10/02 but have subsequently been determined, through testing, not to contain asbestos in a bituminous bridge deck wearing surface or waterproofing membrane. The test results were obtained in conformance with the approved "Sampling and Testing Procedures for Asbestos in Bituminous Bridge Deck Wearing Surface or Waterproofing Membrane" (Attachment 2 to BDE Procedure Memorandum 26-02). Attach result of testing procedures from approved testing facility.
4. 🗌	The identified structure(s) have been determined to involve asbestos in a bituminous bridge deck wearing surface and/or waterproofing membrane. The local highway authority will ensure compliance with the asbestos notification requirements for work on these structures that could disturb the asbestos-containing materials. The local highway authority also will ensure that the special provision for "Asbestos Waterproofing Membrane and Asbestos Bituminous Concrete Surface Removal" is included in any contract for demolition of these structures or for other work involving removal of the existing bituminous bridge deck wearing surface and/or waterproofing membrane. Attach result of testing procedures from approved testing facility.
5. 🗌	The identified structure(s) had been determined to involve asbestos in a bituminous bridge deck wearing surface and/or waterproofing membrane. Removal operations have been completed for all asbestos bituminous concrete surface and asbestos waterproofing membrane on the identified structures in accordance with USEPA requirements.
Certification	1
Name: Ale	x Barlan Position Title: Project Engineer
Office Addre	ess: 1235 East Davis Street, Arlington Heights, Illinois
E-mail Addre	ess: alex@geoservicesinc,net Telephone Number: (847) 253-3845
	Co.2.06248/ License No. of Registered Professional Engineer
/ /	10/15/10

Page 1 of 1 Printed on 10/15/2010 3:31:07 PM

Signature

BLR 10220 (Rev. 7/05)

Date

# BULK ASBESTOS SAMPLE EVALUATION - ASPHALT SAMPLES POLARIZED LIGHT MICROSCOPY (PLM) TECHNIQUE

# GRAVIMETRIC REDUCTION

**NVLAP LAB ID 101130-0** 

Binder	ent	Percent	Туре	Percent	Type			ĪĐ.	Description
Filler Comments	ïS	Non-Asbestos Fibers	Non-A	Asbestos Fibers	Asbe	ACM	COLOR	TEM	Client Sample ID
Non-Fibrous Materials			us Materials	Fibrous M			nation	Sample Information	
	3/23/2010	ılyzed:	Date Analyzed:						
rsma	Lori Boersma	by:	Analyzed by:			60005-	Illinois	Arlington Hts. Illinois	
	43120	oject:	TEM Project:				is Street	1235 East Davis Street	Address:
		ecation:	Project Location:					Drew Ptak	Contact
	10038	Client Project Ref:	Client Pr				Inc.	Geo Services, Inc.	Company Name:

- Company of the latest and the late							
	91.7	Acid Soluble	Amosite				2" Asphalt
1.47	6.83	Organic Mtl.	Chrysotile	N/D	205281 Gray	2052	10038 - D-2
	89.1	Acid Soluble	Amosite				2" Asphalt
1.45	9.45	Organic Mtl.	Chrysotile	N/D	205280 Gray	2057	;0038 - D-1

sample. This report applies only to samples tested. Samples were analyzed following the procedures contained in the EPA Method 600/R-93/116, July 1993, including the use of gravimetric reduction to enhance the ability to aobserve asbesos fibers in the

SLM: The optical resolution of polarized light microscopy limits the size of fibers that are visible. In samples where very small fibers may be present, the asbestos fibers may be smaller than the resolution limit of a polarized light microscope. In those cases, the result of the PLM analysis is not conclusive where the sample is reported as non-asbestos. Samples that are expected to contain small fibers (such as floor tile samples) and that are reported as non-asbestos by PLM should be further anlayzed by transmission electron microscopy.

Key: ACM = Asbestos Containing Material as defined in USEPA NESHAP Regulation; TR = Trace; N/D = None Detected

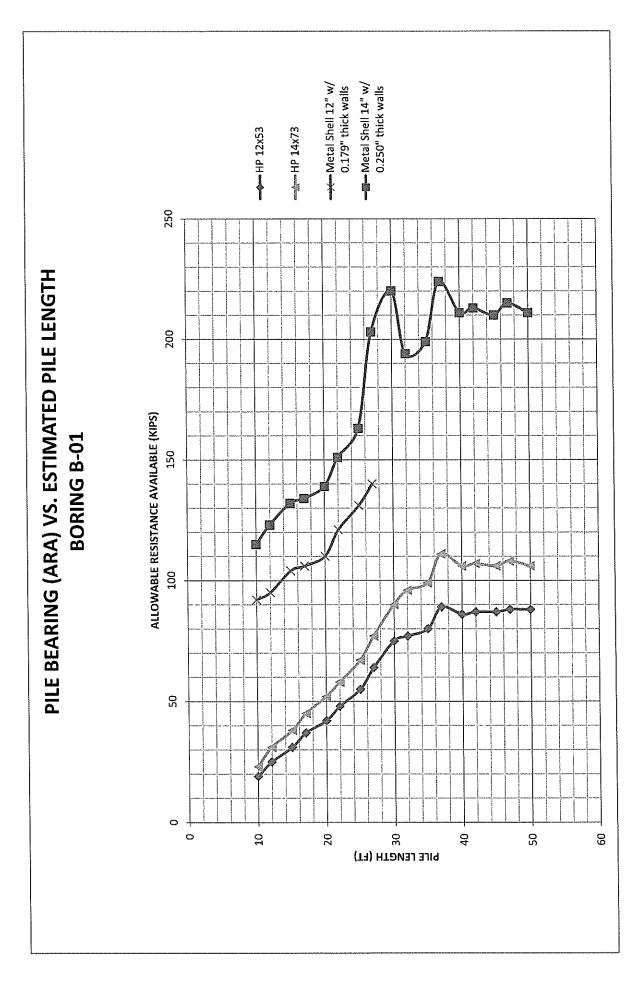
Page I of I

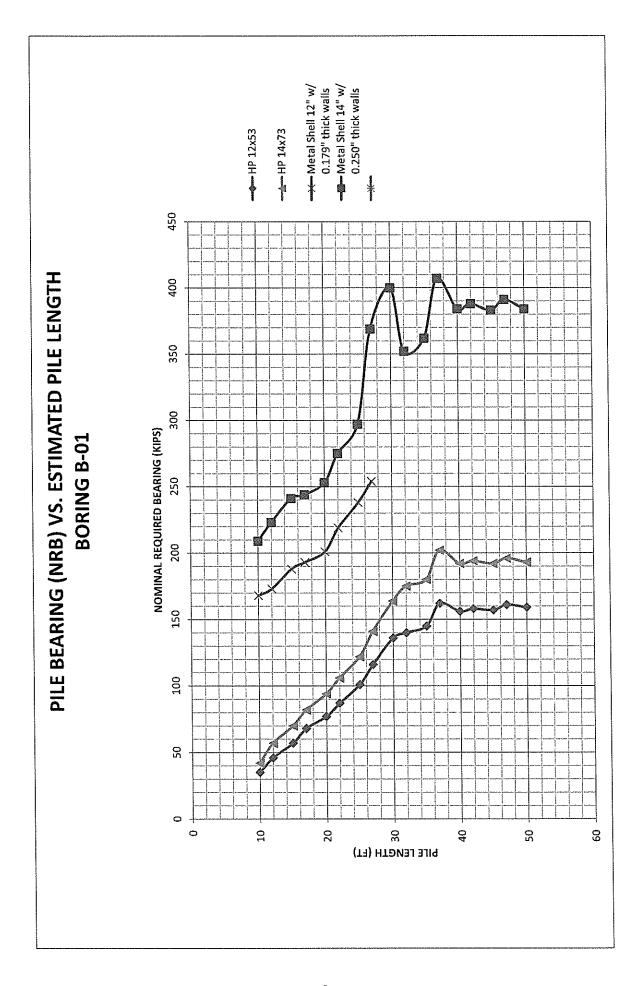
Signature of Analyst

## APPENDIX F PILE ANALYSIS

		Boring B-1 (	ing B-1 (Elevation 689 at Pile Length = 0) North Abutment	at Pile Leng	th = 0) North	Abutment		
	HP 1	HP 12x53	HP 14x73	4x73	Metal Shell 12" w/ thick walls	2" w/ 0.179" walls	Metal Shell 12" w/ 0.179" Metal Shell 14" w/ thick walls thick walls	thick walls
Estimated Pile	Allowable	Nominal	Allowable	Nominal	Allowable	Nominal	Allowable	Nominal
Length (ft.)	,	Requred	Resistance	Requred	Resistance	Requred	Resistance	Requred
	Available, ARA (Kips)	Bearing, NRB (Kips)	Available, ARA (Kips)	Bearing, NRB (Kips)	Available, ARA (Kips)	Bearing, NRB (Kips)	Avallable, ARA (Kips)	Bearing, NRB (Kips)
10	19	35	23	42	92	168	115	209
12	25	46	31	57	95	173	123	223
15	31	57	38	70	104	188	132	241
17	37	89	45	82	106	193	134	244
20	42	77	52	94	110	201	139	253
22	48	87	58	106	121	219	151	275
25	55	101	29	122	131	238	163	297
27	64	116	77	141	140	254(1)	203	369
30	75	136	90	164			220	400
32	77	140	96	175			194	352
35	80	145	66	180			199	362
37	88	162	111	202			224	407
40	86	156	106	192			211	384
42	87	158	107	194			213	388
45	87	157	106	192			210	383
47	88	161	108	196			215	391
50	88	159	106	193			211	384

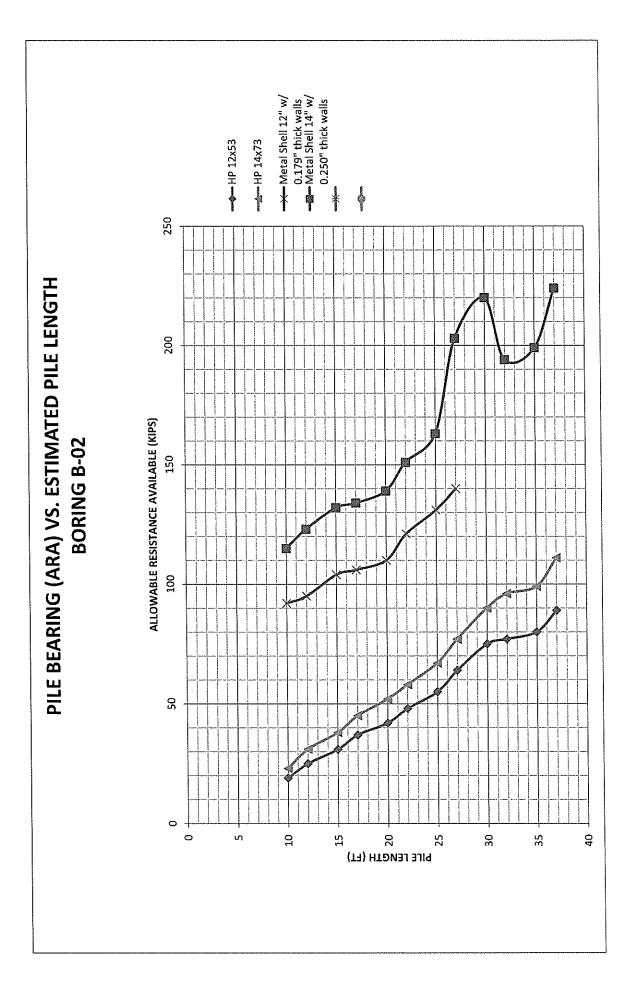
Notes: (1)Equals Max Available NRB based on Pile Driving Stresses

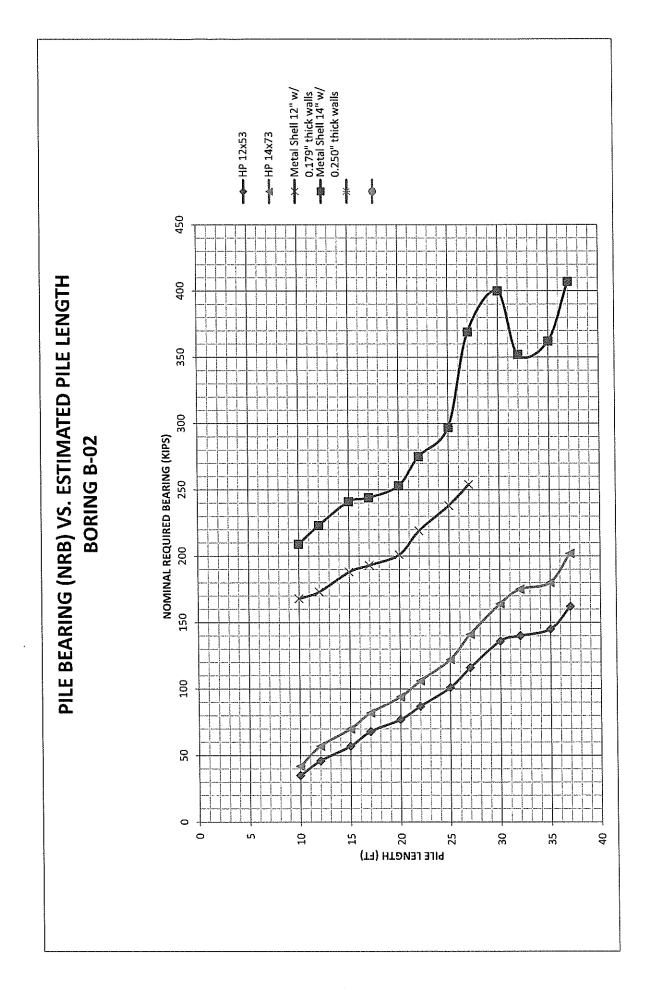




		Boring B-2 (	Elevation 689	at Pile Leng	ing B-2 (Elevation 689 at Pile Length = 0) South Abutment	Abutment		
	HP 1.	HP 12x53	HP 14x73	Łx73	Metal Shell 1 thick	hell 12" w/ 0.179" thick walls	Metal Shell 12" w/ 0.179" Metal Shell 14" w/ thick walls	'' w/ 0.250" walls
Estimated Pile	Allowable	Nominal	Allowable	Nominal	Allowable	Nominal	Allowable	Nominal
Length (ft.)	Resistance Available.	Kequred Bearing,	Kesistance Available,	Kequreu Bearing,	Resistance Available,	Bearing,	Available,	Bearing,
	ARA (Kips)	NRB (Kips)	ARA (Kips)	NRB (Kips)	ARA (Kips)	NRB (Kips)	ARA (Kips)	NRB (Kips)
10	19	35	23	42	92	168	115	209
12	25	46	31	57	95	173	123	223
15	31	57	38	70	104	188	132	241
17	37	89	45	82	106	193	134	244
20	42	77	52	94	110	201	139	253
22	48	87	58	106	121	219	151	275
25	55	101	29	122	131	238	163	297
27	64	116	77	141	140	254(1)	203	369
30	75	136	90	164			220	400
32	77	140	96	175			194	352
35	80	145	66	180			199	362
37	68	162	111	202			224	407
40	94	171	117	213			227	413
42	85	155	104	189			207	376
45	85	155	103	188			206	374
47	57	158	105	192			210	381
20	68	162	107	195			214	388

Note: (1) Max Available NRB due to end of boring





### 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:		
Kane County		
The entities listed above and their officers, employees, and agents shall be indemnified and		

held harmless in accordance with Article 107.26.

#### CONCRETE GUTTER, CURB, MEDIAN, AND PAVED DITCH (BDE)

Effective: April 1, 2014 Revised: August 1, 2014

Add the following to Article 606.02 of the Standard Specifications:

"(i) Polyurethane Joint Sealant .......1050.04"

Revise the fifth paragraph of Article 606.07 of the Standard Specifications to read:

"Transverse contraction and longitudinal construction joints shall be sealed according to Article 420.12, except transverse joints in concrete curb and gutter shall be sealed with polysulfide or polyurethane joint sealant."

Add the following to Section 1050 of the Standard Specifications:

"1050.04 Polyurethane Joint Sealant. The joint sealant shall be a polyurethane sealant, Type S, Grade NS, Class 25 or better, Use T ( $T_1$  or  $T_2$ ), according to ASTM C 920."

80334

#### 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 <sup>1/</sup>	600-749	2002
	750 and up	2006
June 1, 2011 <sup>2/</sup>	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006
June 1, 2012 <sup>2/</sup>	50-99	2004
	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006

<sup>1/</sup> Effective dates apply to Contractor 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 (<a href="http://www.epa.gov/cleandiesel/verification/verif-list.htm">http://www.epa.gov/cleandiesel/verification/verif-list.htm</a>), 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

<sup>2/</sup> Effective dates apply to Contractor and subcontractor diesel powered off-road equipment assigned to the contract.

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.

#### **CONTRACT CLAIMS (BDE)**

Effective: April 1, 2014

Revise the first paragraph of Article 109.09(a) of the Standard Specifications to read:

"(a) Submission of Claim. All claims filed by the Contractor shall be in writing and in sufficient detail to enable the Department to ascertain the basis and amount of the claim. As a minimum, the following information must accompany each claim submitted."

Revise Article 109.09(e) of the Standard Specifications to read:

"(e) Procedure. The Department provides two administrative levels for claims review.

Level | Engineer of Construction

Level II Chief Engineer/Director of Highways or Designee

- (1) Level I. All claims shall first be submitted at Level I. Two copies each of the claim and supporting documentation shall be submitted simultaneously to the District and the Engineer of Construction. The Engineer of Construction, in consultation with the District, will consider all information submitted with the claim and render a decision on the claim within 90 days after receipt by the Engineer of Construction. Claims not conforming to this Article will be returned without consideration. The Engineer of Construction may schedule a claim presentation meeting if in the Engineer of Construction's judgment such a meeting would aid in resolution of the claim, otherwise a decision will be made based on the claim documentation submitted. If a Level I decision is not rendered within 90 days of receipt of the claim, or if the Contractor disputes the decision, an appeal to Level II may be made by the Contractor.
- (2) Level II. An appeal to Level II shall be made in writing to the Engineer of Construction within 45 days after the date of the Level I decision. Review of the claim at Level II shall be conducted as a full evaluation of the claim. A claim presentation meeting may be scheduled if the Chief Engineer/Director of Highways determines that such a meeting would aid in resolution of the claim, otherwise a decision will be made based on the claim documentation submitted. A Level II final decision will be rendered within 90 days of receipt of the written request for appeal.

Full compliance by the Contractor with the provisions specified in this Article is a contractual condition precedent to the Contractor's right to seek relief in the Court of Claims. The Director's written decision shall be the final administrative action of the Department. Unless the Contractor files a claim for adjudication by the Court of Claims within 60 days after the date of the written decision, the failure to file shall constitute a release and waiver of the claim."

80335

#### **DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)**

Effective: September 1, 2000 Revised: January 2, 2015

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

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

<u>CONTRACTOR ASSURANCE</u>. The Contractor makes the following assurance and agrees to include the assurance in each subcontract 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 \_\_\_\_\_9.00% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

- (a) The bidder documents that enough DBE participation has been obtained to meet the goal or,
- (b) The bidder documents that a good faith effort has been made to meet the goal, even though the effort did not succeed in obtaining enough DBE participation to meet the goal.

DBE LOCATOR REFERENCES. Bidders shall consult the IL UCP DBE Directory as a reference source for DBE-certified companies. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217) 785-4611, or by visiting the Department's website at www.dot.il.gov.

<u>BIDDING PROCEDURES</u>. Compliance with this Special Provision is a material bidding requirement. The failure of the bidder to comply will render the bid not responsive.

- (a) The bidder shall submit a Disadvantaged Business Utilization Plan on Department forms SBE 2025 and 2026 with the bid.
- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of plan approval or disapproval under the procedures of this Special Provision.

- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. For bidding purposes, submission of the completed SBE 2025 forms, signed by the DBEs and faxed to the bidder will be acceptable as long as the original is available and provided upon request. All elements of information indicated on the said form shall be provided, including but not limited to the following:
  - (1) The names and addresses of DBE firms that will participate in the contract;
  - (2) A description, including pay item numbers, of the work each DBE will perform;
  - (3) The dollar amount of the participation of each DBE firm participating. The dollar amount of participation for identified work shall specifically state the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
  - (4) DBE Participation Commitment Statements, form SBE 2025, signed by the bidder and each participating DBE firm documenting the commitment to use the DBE subcontractors whose participation is submitted to meet the contract goal;
  - (5) If the bidder is a joint venture comprised of DBE companies and non-DBE companies, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s); and,
  - (6) If the contract goal is not met, evidence of good faith efforts; the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor is selected over a DBE for work on the contract.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan submitted by the apparent successful bidder is approved. All information submitted by the bidder must be complete, accurate and adequately document that enough DBE participation has been obtained or document that good faith efforts of the bidder, in the event enough DBE participation has not been obtained, before the Department will commit to the performance of the contract by the bidder. The Utilization Plan will be approved by the Department if the Utilization Plan documents sufficient commercially useful DBE work performance to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A. The Utilization Plan will not be approved by the Department if the Utilization Plan does not document sufficient DBE participation to meet the contract goal unless the apparent successful bidder documented in the Utilization Plan that it made a good faith effort to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere *pro forma* efforts, in other words, efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.
  - (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
  - (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.
  - (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
  - (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
    - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith

efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable. In accordance with Section 6 of the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.

- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
- (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines that the apparent successful bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that the bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification shall include a statement of reasons for the determination.
- (c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after the receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217) 785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The determination shall become final if a request is not made and delivered. A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in

order to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for consideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

CALCULATING DBE PARTICIPATION. The Utilization Plan values represent work anticipated to be performed and paid for upon satisfactory completion. The Department is only able to count toward the achievement of the overall goal and the contract goal the value of payments made for the work actually performed by DBE companies. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR Part 26.55(c) on questions of commercially useful functions as it affects the work. Specific counting guidelines are provided in 49 CFR Part 26.55, the provisions of which govern over the summary contained herein.

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:
  - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.

- (2) The DBE may also lease trucks from a non-DBE firm, including from an owneroperator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.
- (e) DBE as a material supplier:
  - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
  - (2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.
  - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

CONTRACT COMPLIANCE. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Utilization Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal. All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the Participation Statement.

- (a) <u>NO AMENDMENT</u>. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be 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) <u>CHANGES TO WORK</u>. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, than a new Request for Approval of Subcontractor shall not be

- required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.
- (c) <u>SUBCONTRACT</u>. 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) <u>ALTERNATIVE WORK METHODS</u>. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractorinitiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
  - (1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
  - (2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
  - (3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.
- (e) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a). Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE listed in the Utilization Plan.

As stated above, the Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of

Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor, with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

For purposes of this paragraph, good cause includes the following circumstances:

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the prime Contractor's reasonable, nondiscriminatory bond requirements;
- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1,200 or applicable state law.
- (6) You have determined that the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides to you written notice of its withdrawal;
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the prime Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the prime

Contractor can self-perform the work for which the DBE contractor was engaged or so that the prime Contractor can substitute another DBE or non-DBE contractor after contract award.

When a DBE is terminated, or fails to complete its work on the Contract for any reason the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal. The good faith efforts shall be documented by the Contractor. If the Department requests documentation under this provision, the Contractor shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of the Contractor. The Department shall provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.

- (f) PAYMENT RECORDS. The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.
- (g) <u>ENFORCEMENT</u>. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (h) <u>RECONSIDERATION</u>. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor my request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance

to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

## **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."

<u>STATE CONTRACTS</u>. 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:

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."

## FRICTION AGGREGATE (BDE)

Effective: January 1, 2011 Revised: November 1, 2014

Revise Article 1004.01(a)(4) of the Standard Specifications to read:

- "(4) Crushed Stone. Crushed stone shall be the angular fragments resulting from crushing undisturbed, consolidated deposits of rock by mechanical means. Crushed stone shall be divided into the following, when specified.
  - a. Carbonate Crushed Stone. Carbonate crushed stone shall be either dolomite or limestone. Dolomite shall contain 11.0 percent or more magnesium oxide (MgO). Limestone shall contain less than 11.0 percent magnesium oxide (MgO).
  - b. Crystalline Crushed Stone. Crystalline crushed stone shall be either metamorphic or igneous stone, including but is not limited to, quartzite, granite, rhyolite and diabase."

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

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

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

Use	Mixture	Aggregates Allowed
Class A	Seal or Cover	Allowed Alone or in Combination 5/:
		Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF)
***		Crushed Steel Slag Crushed Concrete

Use	Mixture	Aggregates Allowed	
HMA Low ESAL	Stabilized Subbase or Shoulders	Allowed Alone or in Cor Gravel Crushed Gravel Carbonate Crushed Sto Crystalline Crushed Sto Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>1/</sup> Crushed Concrete	ne
HMA High ESAL Low ESAL	Binder IL-19.0 or IL-19.0L SMA Binder	Allowed Alone or in Cor Crushed Gravel Carbonate Crushed Sto Crystalline Crushed Sto Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete <sup>3/</sup>	ne <sup>2/</sup>
HMA High ESAL Low ESAL	C Surface and Leveling Binder IL-9.5 or IL-9.5L SMA Ndesign 50 Surface	Allowed Alone or in Con Crushed Gravel Carbonate Crushed Sto Crystalline Crushed Sto Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>4/</sup> Crushed Concrete <sup>3/</sup>	one <sup>2/</sup>
HMA High ESAL	D Surface and Leveling Binder IL-9.5 SMA Ndesign 50 Surface	Allowed Alone or in Concrushed Gravel Carbonate Crushed Stot Limestone) <sup>2/</sup> Crystalline Crushed Stot Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>4/</sup> Crushed Concrete <sup>3/</sup> Other Combinations Al	one (other than
	***	Up to 25% Limestone	Dolomite

Use	Mixture	Aggregates Allowed	
		50% Limestone	Any Mixture D aggregate other than Dolomite
		75% Limestone	Crushed Slag (ACBF) or Crushed Sandstone
HMA	E Surface	Allowed Alone or in Co	ombination <sup>5/</sup> :
High ESAL	IL-9.5 SMA Ndesign 80 Surface	Crushed Gravel Crystalline Crushed St Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete <sup>3/</sup> No Limestone.	one
\$   		Other Combinations A	llowed:
		Up to	With
		50% Dolomite <sup>2/</sup>	Any Mixture E aggregate
		75% Dolomite <sup>2/</sup>	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone
		75% Crushed Gravel or Crushed Concrete <sup>3/</sup>	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag
HMA	F Surface	Allowed Alone or in C	ombination <sup>5/</sup> :
High ESAL	IL-9.5 SMA Ndesign 80 Surface	Crystalline Crushed S Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.	
		Other Combinations A	\llowed:

Use	Mixture	Aggregates Allowed	
		Up to	With
1		50% Crushed Gravel, Crushed Concrete <sup>3/</sup> , or Dolomite <sup>2/</sup>	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone

- 1/ Crushed steel slag allowed in shoulder surface only.
- 2/ Carbonate crushed stone shall not be used in SMA Ndesign 80. In SMA Ndesign 50, carbonate crushed stone shall not be blended with any of the other aggregates allowed alone in Ndesign 50 SMA binder or Ndesign 50 SMA surface.
- 3/ Crushed concrete will not be permitted in SMA mixes.
- 4/ Crushed steel slag shall not be used as leveling binder.
- 5/ When combinations of aggregates are used, the blend percent measurements shall be by volume."

80265

### HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)

Effective: January 1, 2010 Revised: April 1, 2012

<u>Description</u>. This work shall consist of testing the density of longitudinal joints as part of the quality control/quality assurance (QC/QA) of hot-mix asphalt (HMA). Work shall be according to Section 1030 of the Standard Specifications except as follows.

Quality Control/Quality Assurance (QC/QA). Delete the second and third sentence of the third paragraph of Article 1030.05(d)(3) of the Standard Specifications.

Add the following paragraphs to the end of Article 1030.05(d)(3) of the Standard Specifications:

"Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 4 in. (100 mm), from each pavement edge. (i.e. for a 5 in. (125 mm) lift the near edge of the density gauge or core barrel shall be within 5 in. (125 mm) from the edge of pavement.) Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.

- a. Confined Edge. Each confined edge density shall be represented by a oneminute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.
- b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced ten feet apart longitudinally along the unconfined pavement edge and centered at the random density test location."

Revise the Density Control Limits table in Article 1030.05(d)(4) of the Standard Specifications to read:

"Mixture Composition	Parameter	Individual Test (includes confined edges)	Unconfined Edge Joint Density Minimum
IL-4.75	Ndesign = 50	93.0 – 97.4%	91.0%
IL-9.5, IL-12.5	Ndesign ≥ 90	92.0 – 96.0%	90.0%
IL-9.5,IL-9.5L, IL-12.5	Ndesign < 90	92.5 – 97.4%	90.0%
IL-19.0, IL-25.0	Ndesign ≥ 90	93.0 – 96.0%	90.0%
IL-19.0, IL-19.0L, IL-25.0	Ndesign < 90	93.0 – 97.4%	90.0%

SMA	Ndesign = 50 & 80	93.5 – 97.4%	91.0%
All Other	Ndesign = 30	93.0 - 97.4%	90.0%"

### **HOT MIX ASPHALT – PRIME COAT (BDE)**

Effective: November 1, 2014

Revise Note 1 of Article 406.02 of the Standard Specifications to read:

"Note 1. The bituminous material used for prime coat shall be one of the types listed in the following table.

When emulsified asphalts are used, any dilution with water shall be performed by the emulsion producer. The emulsified asphalt shall be thoroughly agitated within 24 hours of application and show no separation of water and emulsion.

Application	Bituminous Material Types
Prime Coat on Brick, Concrete, or HMA Bases	SS-1, SS-1h, SS-1hP, SS-1vh, RS-1, RS-2, CSS-1, CSS-1h, CSS-1hp, CRS-1, CRS-2, HFE-90, RC-70
Prime Coat on Aggregate Bases	MC-30, PEP"

Add the following to Article 406.03 of the Standard Specifications.

"(i)	Vacuum Sweeper	1101.19
(i)	Spray Paver	1102.06"

Revise Article 406.05(b) of the Standard Specifications to read:

- "(b) Prime Coat. The bituminous material shall be prepared according to Article 403.05 and applied according to Article 403.10. The use of RC-70 shall be limited to air temperatures less than 60 °F (15 °C).
  - (1) Brick, Concrete or HMA Bases. The base shall be cleaned of all dust, debris and any substance that will prevent the prime coat from adhering to the base. Cleaning shall be accomplished by sweeping to remove all large particles and air blasting to remove dust. As an alternative to air blasting, a vacuum sweeper may be used to accomplish the dust removal. The base shall be free of standing water at the time of application. The prime coat shall be applied uniformly and at a rate that will provide a residual asphalt rate on the prepared surface as specified in the following table.

Type of Surface to be Primed	Residual Asphalt Rate
	lb/sq ft (kg/sq m)
Milled HMA, Aged Non-Milled HMA, Milled Concrete,	0.05 (0.244)
Non-Milled Concrete & Tined Concrete	
Fog Coat between HMA Lifts, IL-4.75 & Brick	0.025 (0.122)

The bituminous material for the prime coat shall be placed one lane at a time. If a spray paver is not used, the primed lane shall remain closed until the prime coat is

fully cured and does not pickup under traffic. When placing prime coat through an intersection where it is not possible to keep the lane closed, the prime coat may be covered immediately following its application with fine aggregate mechanically spread at a uniform rate of 2 to 4 lb/sq yd (1 to 2 kg/sq m).

(2) Aggregate Bases. The prime coat shall be applied uniformly and at a rate that will provide a residual asphalt rate on the prepared surface of 0.25 lb/sq ft ± 0.01 (1.21 kg/sq m ±0.05).

The prime coat shall be permitted to cure until the penetration has been approved by the Engineer, but at no time shall the curing period be less than 24 hours for MC-30 or four hours for PEP. Pools of prime occurring in the depressions shall be broomed or squeegeed over the surrounding surface the same day the prime coat is applied.

The base shall be primed 1/2 width at a time. The prime coat on the second half/width shall not be applied until the prime coat on the first half/width has cured so that it will not pickup under traffic.

The residual asphalt rate will be verified a minimum of once per type of surface to be primed as specified herein for which at least 2000 tons (1800 metric tons) of HMA will be placed. The test will be according to the "Determination of Residual Asphalt in Prime and Tack Coat Materials" test procedure.

Prime coat shall be fully cured prior to placement of HMA to prevent pickup by haul trucks or paving equipment. If pickup occurs, paving shall cease in order to provide additional cure time, and all areas where the pickup occurred shall be repaired.

If after five days, loss of prime coat is evident prior to covering with HMA, additional prime coat shall be placed as determined by the Engineer at no additional cost to the Department."

Revise the last sentence of the first paragraph of Article 406.13(b) of the Standard Specifications to read:

"Water added to emulsified asphalt, as allowed in Article 406.02, will not be included in the quantities measured for payment."

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

"Aggregate for covering prime coat will not be measured for payment."

Revise the first paragraph of Article 406.14 of the Standard Specifications to read:

"406.14 Basis of Payment. Prime Coat will be paid for at the contract unit price per pound (kilogram) of residual asphalt applied for BITUMINOUS MATERIALS (PRIME COAT), or POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)."

Revise Article 407.02 of the Standard Specifications to read:

"407.02 Materials. Materials shall be according to Article 406.02, except as follows.

Item Article/Section
(a) Packaged Rapid Hardening Mortar or Concrete ......1018"

Revise Article 407.06(b) of the Standard Specifications to read:

"(b) A bituminous prime coat shall be applied between each lift of HMA according to Article 406.05(b)."

Delete the second paragraph of Article 407.12 of the Standard Specifications.

Revise the first paragraph of Article 408.04 of the Standard Specifications to read:

"408.04 Method of Measurement. Bituminous priming material will be measured for payment according to Article 406.13."

Revise the first paragraph of Article 408.05 of the Standard Specifications to read:

"408.05 Basis of Payment. This work will be paid for at the contract unit price per pound (kilogram) of residual asphalt applied for BITUMINOUS MATERIALS (PRIME COAT) or POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT) and at the contract unit price per ton (metric ton) for INCIDENTAL HOT-MIX ASPHALT SURFACING."

Revise Article 1032.02 of the Standard Specifications to read:

"1032.02 Measurement. Asphalt binders, emulsified asphalts, rapid curing liquid asphalt, medium curing liquid asphalts, slow curing liquid asphalts, asphalt fillers, and road oils will be measured by weight.

A weight ticket for each truck load shall be furnished to the inspector. The truck shall be weighed at a location approved by the Engineer. The ticket shall show the weight of the empty truck (the truck being weighed each time before it is loaded), the weight of the loaded truck, and the net weight of the bituminous material.

When an emulsion or cutback is used for prime coat, the percentage of asphalt residue of the actual certified product shall be shown on the producer's bill of lading or attached certificate of analysis. If the producer adds extra water to an emulsion at the request of the purchaser, the amount of water shall also be shown on the bill of lading.

Payment will not be made for bituminous materials in excess of 105 percent of the amount specified by the Engineer."

Add the following to the table in Article 1032.04 of the Standard Specifications.

"SS-1vh	160-180	70-80
RS-1, CRS-1	75-130	25-55"

Add the following to Article 1032.06 of the Standard Specifications.

"(g) Non Tracking Emulsified Asphalt SS-1vh shall be according to the following.

Requirements for SS-1vh				
Test		SPEC	AASHTO Test Method	
Saybolt Viscosity @ 25C,	SFS	20-200	T 72	
Storage Stability, 24hr.,	%	1 max.	T 59	
Residue by Evaporation,	%	50 min.	T 59	
Sieve Test,	%	0.3 max.	T 59	
Tests on Residue from Evaporation				
Penetration @25°C, 100g., 5 s	sec., dmm	20 max.	T 49	
Softening Point,	°C	65 min.	T 53	
Solubility,	%	97.5 min.	T 44	
Orig. DSR @ 82°C,	kPa	1.00 min.	T 315"	

Revise the last table in Article 1032.06(f)(2)d. of the Standard Specifications to read:

	,
"Grade	Use
SS-1, SS-1h, RS-1, RS-2, CSS-1, CRS-1, CRS-2, CSS-1h, HFE-90, SS-1hP, CSS-1hP, SS-1vh	Prime or fog seal
PEP	Bituminous surface treatment prime
RS-2, HFE-90, HFE-150, HFE- 300, CRSP, HFP, CRS-2, HFRS-2	Bituminous surface treatment
CSS-1h Latex Modified	Microsurfacing"

Add the following to Article 1101 of the Standard Specifications.

"1101.19 Vacuum Sweeper. The vacuum sweeper shall have a minimum sweeping path of 52 in. (1.3 m) and a minimum blower rating of 20,000 cu ft per minute (566 cu m per minute)."

Add the following to Article 1102 of the Standard Specifications:

"1102.06 Spray Paver. The spreading and finishing machine shall be capable of spraying a rapid setting emulsion tack coat, paving a layer of HMA, and providing a smooth HMA mat in one pass. The HMA shall be spread over the tack coat in less than five seconds after the

application of the tack coat during normal paving speeds. No wheel or other part of the paving machine shall come into contact with the tack coat before the HMA is applied. In addition to meeting the requirements of Article 1102.03, the spray paver shall also meet the requirements of Article 1102.05 for the tank, heating system, pump, thermometer, tachometer or synchronizer, and calibration. The spray bar shall be equipped with properly sized and spaced nozzles to apply a uniform application of tack coat at the specified rate for the full width of the mat being placed."

# LRFD PIPE CULVERT BURIAL TABLES (BDE)

Effective: November 1, 2013 | Revised: April 1, 2015

Revise Article 542.02 of the Standard Specifications to read as follows:

"Item	Article/Section
(a) Galvanized Corrugated Steel Pipe	1006.01
(b) Galvanized Corrugated Steel Pipe Arch	1006.01
(c) Bituminous Coated Corrugated Steel Pipe	
(d) Bituminous Coated Corrugated Steel Pipe Arch	1006.01
(e) Reserved	
(f) Aluminized Steel Type 2 Corrugated Pipe	1006.01
(g) Aluminized Steel Type 2 Corrugated Pipe Arch	1006.01
(h) Precoated Galvanized Corrugated Steel Pipe	
(i) Precoated Galvanized Corrugated Steel Pipe Arch	1006.01
(j) Corrugated Aluminum Alloy Pipe	
(k) Corrugated Aluminum Alloy Pipe Arch	
(I) Extra Strength Clay Pipe	1040.02
(m) Concrete Sewer, Storm Drain, and Culvert Pipe	1042
(n) Reinforced Concrete Culvert, Storm Drain, and Sewe	er Pipe1042
(o) Reinforced Concrete Elliptical Culvert, Storm Drain,	and Sewer Pipe1042
(p) Reinforced Concrete Arch Culvert, Storm Drain, and	Sewer Pipe1042
(q) Polyvinyl Chloride (PVC) Pipe	
(r) Corrugated Polyvinyl Chloride (PVC) Pipe with a Sm	ooth Interior1040.03
(s) Corrugated Polypropylene (CPP) pipe with smooth li	
(t) Corrugated Polyethylene (PE) Pipe with a Smooth Ir	nterior1040.04
(u) Polyethylene (PE) Pipe with a Smooth Interior	1040.04
(v) Rubber Gaskets and Preformed Flexible Joint Seala	
(w) Mastic Joint Sealer for Pipe	
(x) External Sealing Band	
(y) Fine Aggregate (Note 1)	
(z) Coarse Aggregate (Note 2)	
(aa) Packaged Rapid Hardening Mortar or Concrete	
(bb) Nonshrink Grout	1024.02
(cc) Reinforcement Bars and Welded Wire Fabric	
(dd) Handling Hole Plugs	1042.16

Note 1. The fine aggregate shall be moist.

Note 2. The coarse aggregate shall be wet."

Revise the table for permitted materials in Article 542.03 of the Standard Specifications as follows:

"Class	Materials
"Class	
Α .	Rigid Pipes:
	Extra Strength Clay Pipe
	Concrete Sewer Storm Drain and Culvert Pipe, Class 3 Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Culvert, Storm Brain, and Sewer Pipe  Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Empirical Culvert, Storm Drain, and Sewer Pipe
С	Rigid Pipes:
	Extra Strength Clay Pipe
	Concrete Sewer Storm Drain and Culvert Pipe, Class 3
	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
	Flexible Pipes:
	Aluminized Steel Type 2 Corrugated Pipe
	Aluminized Steel Type 2 Corrugated Pipe Arch
	Precoated Galvanized Corrugated Steel Pipe
	Precoated Galvanized Corrugated Steel Pipe Arch
	Corrugated Aluminum Alloy Pipe
	Corrugated Aluminum Alloy Pipe Arch Polyvinyl Chloride (PVC) Pipe
	Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior
	Polyethylene (PE) Pipe with a Smooth Interior
	Corrugated Polypropylene (CPP) Pipe with Smooth Interior
D	Rigid Pipes:
	Extra Strength Clay Pipe
İ	Concrete Sewer Storm Drain and Culvert Pipe, Class 3
	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
	Flexible Pipes:
	Galvanized Corrugated Steel Pipe
	Galvanized Corrugated Steel Pipe Arch
	Bituminous Coated Corrugated Steel Pipe
1	Bituminous Coated Corrugated Steel Pipe Arch
	Aluminized Steel Type 2 Corrugated Pipe
	Aluminized Steel Type 2 Corrugated Pipe Arch Precoated Galvanized Corrugated Steel Pipe
	Precoated Galvanized Corrugated Steel Pipe Arch
	Corrugated Aluminum Alloy Pipe
	Corrugated Aluminum Alloy Pipe Arch
	Polyvinyl Chloride (PVC) Pipe
	Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior
	Corrugated Polyethylene (PE) Pipe with a Smooth Interior
	Polyethylene (PE) Pipe with a Smooth Interior"
	Corrugated Polypropylene (CPP) Pipe with Smooth Interior

Revise Articles 542.03(b) and (c) of the Standard Specifications to read:

- "(b) Extra strength clay pipe will only be permitted for pipe culverts Type 1, for 10 in., 12 in., 42 in. and 48 in. (250 mm, 300 mm, 1050 mm and 1200 mm), Types 2, up to and including 48 in. (1200 mm), Type 3, up to and including 18 in. (450 mm), Type 4 up to and including 10 in. (250 mm), for all pipe classes.
- (c) Concrete sewer, storm drain, and culvert pipe Class 3 will only be permitted for pipe culverts Type 1, up to and including 10 in (250 mm), Type 2, up to and including 30 in. (750 mm), Type 3, up to and including 15 in. (375 mm); Type 4, up to and including 10 in. (250 mm), for all pipe classes."

Replace the pipe tables in Article 542.03 of the Standard Specifications with the following:

						-			_														
108	102	96	90	84	78	72	66	60	54	48	42	36	30	24	21	18	15	12	<u>,</u>	Diameter	Nominal		
=	= :	=		=	=	=	_	=	=	_	=	=	V	=	=	N N	<	N	3' and less 1' min cover		Fill Height:	Type 1	
=	=			-	=			=	=					=	=	-	=	=	not exceeding 10'	Greater than 3'	Fill Height:	Туре 2	for the Resp
1360		=	=		=	=		=	=			==			=		=	≡	not exceeding 15'	Greater than 10'	Fill Height:	Туре 3	"Table IA: Classe ective Diameters of
1710	1700	1690	1680	<b> </b>	~	₹ ₹	<u> </u>	: <	<	I	. <	: <	V	: <	: <		: <	. <	not exceeding 20'	Greater than 15'	Fill Height:	Type 4	Table IA: Classes of Reinforced Concrete Pipe ive Diameters of Pipe and Fill Heights over the
2060	2050	2040	2030	2020	2020	<u> </u>		<	₹ ₹		₹ ₹	₹ ₹		₹ ₹	₹ ₹			₹ ₹	not exceeding 25'	Greater than 20'	Fill Height:	Type 5	"Table IA: Classes of Reinforced Concrete Pipe for the Respective Diameters of Pipe and Fill Heights over the Top of the Pi
2410	2410	2400	2390	2380	2370	2070		< <	< <		< <	< <	<	< <	< <	V	< <	< <	not exceeding 30'	Creater than 25	Fill Height:	Type 6	þe
2//0	2760	2/50	2/50	2/40	2740	2720	<	< <	< <		< <	< <	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	< <	< <		< <	< <	not exceeding 35'	Greater than 30'	Fill Height:	Type 7	

Notes:
A number indicates the D-Load for the diameter and depth of fill and that a special design is required.
Design assumptions; Water filled pipe, Type 2 bedding and Class C Walls

Table IA: Classes of Reinforced Concrete Pipe for the Respective Diameters of Pipe and Fill Heights over the Top of the Pipe

		for the Ro	espective Diameters of	for the Respective Diameters of Pipe and Fill Heights over the Top of the Pipe (Metric)	er me Top of me ripe		
	Type 1	Type 2	Туре 3	Type 4	Type 5	Туре 6	Type 7
Nominal Diameter	Fill Height:	Fill Height:	Fill Height:	Fill Height:	Fill Height	Fill Height:	Fill Height:
mm	1 m and less 0.3 m	Greater than 1 m not	Greater than 3 m not exceeding 4.5 m	Greater than 3 m not Greater than 4.5 m not Greater than 6 m not Greater than 6 m exceeding 7.5 m	Greater than 6 m not exceeding 7.5 m	Greater than 7.5 m not Greater than 9 m not exceeding 9 m exceeding 10.5 m	Greater than 9 m not exceeding 10.5 m
300	<b>V</b>	=	=	V	<	<	<
375	₹	=	=	<	: ⋜	: <	< <
450	IV			IV			· · · · · · · · · · · · · · · · · · ·
525			=	₹ <	: <	< <	< <
600	=		=	: <	₹ ⋜	< <	< <
750	IV		=	<u> </u>	IV		< V
900		=	=	₹ ₹	. <	< <	< <
1050	=	=	=	< <	₹ ⋜	< <	< <
1200				V	Z   Z		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
1350	=	=	: ≡	< <	₹ ⋜	< <	< <
1500	= =	= =	≡ ≡	< <	< 3	< <	< <
1000				V	<	<	<
1950	-	= ;	=	∨	100	110	130
2100	=			N. IV	100	110	130
2250	=	=	=	80	100	110	130
2400	=	=	=	80	100	110	130
2550	=	=	=	80	100	120	130
2700	=	=	70	80	100	120	130

Notes:

A number indicates the D-Load for the diameter and depth of fill and that a special design is required.

Design assumptions; Water filled pipe, Type 2 bedding and Class C Walls

	138 28	132	126	120	114	108	102	96	90	22	78	72	35	60	72	48	42	36 36	జ	24	21	&	귱	12	No	omín	al Dia	ametei	
										0.168	0.168	0,138	(0.138)		- 1	0.109	0.079	(0.109E)	(0.109E)	(0.079)	(0.079)	(0.079)	0.064	0.064	2 2/3" ×	1. n	ယ္	=	
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0.138Z	0.138Z	0.138Z	0.109Z	0.109Z	0.109Z	0.109Z	(0,138)	(0.138)	(0.138)			0.109	0.109	(0.109)	(0.109)									3"x1"	1' min. cover	3' and less	FIII Height	Type 1
	0.138Z	0.138Z	0.138Z	0.1092 (0.1382)	0.109Z (0.138Z)	0.109Z (0.138Z)	0.109Z	(0.138)			(0.138)	(0.138)	0.109		- 1	0.109									5"×1"	₩.	<b>~</b>	•••	
										0.168			0.109	0.109	(0.109)	(0.109)	0.064	0.064	0.064	0.064	0.064	0,064	0,064	0.064	2 2/3" x 1/2"	not	စ္ခ		
	0.138	0.138	0.138	0.109	0.109	0.109	(0.109)	(0.109)	(0.109)	(0.109)	(0.109)	(0.109)	0.079			0.079									3"x1"	not exceeding 10'	Greater than 3'	Fill Height:	Type 2
	0.138	0.138	0.138	0.109	0.109	0.109	0.109	0.109	0.109				(0.109)	(0,109)	0.079	0.079									5"x1"	g 10'	ည	<del>11</del>	
										0.168	0.168				0.109	(0.109)	(0.079)	(0.079)	0.064	0.064	0.064	0.064	0.064	0.064	2 2/3" × 1/2"	not	ଜୁ	_	
2	0.138	0.138	0.138	(0.138)	0.109	0.109	0,109	0,109	0.109	0.109	0.109	(0.109)	(0,109)	(0.109)	_	0.079									3"x1"	not exceeding 15	Greater than 10'	Fill Height	Туре 3
2 2	0.138	0.138	0.138	(0.138)	(0.138)	(0.138)	(0.138)	0.109	0.109	0.109	0.109				0,109	(0.109)									5"x1"	g 15'	10'	<del>T1</del>	
										0.168	0.168	0.138	0.109	0.109	0,109	0,109	(0.079)	(0.079)	(0.079)	0.064	0.064	0.064	0.064	0.064	2 2/3" x 1/2"	not	Gr		
0 168	(0.168)	(0.168)	0.138	(0.138)	(0.138)	(0.138)	(0.138)	(0.138)	(0.138)	0.109	0.109	0,109	0.109	(0.109)	(0.109)	(0.109)									3"×1"	not exceeding 20	Greater than 15'	Fill Height:	Type 4
0 168	(0,168)	(0.168)	(0.168)	0.138	0.138	0.138	(0.138)	(0.138) (0.138)	(0.138) (0.138)	(0.138)	(0.138)	0.109	0,109	0.109	0.109	0.109									5"×1"	ig 20'	ก 15	<del>ii</del>	
										0.168	0.168	0.138	(0.138)	(0.138)	(0.138)	(0.138)	(0.109)	(0.109)	(0.079)	(0.079)	(0.079)	0.064	0.064	0.064	2 2/3" × 1/2"	3	o		
E0 188E	(0.168E)	0.168	(0.168)	(0.168)	(0.168)	0.138	(0.138)	(0.138)	(0.138)	(0.138)	(0.138)	(0.138)	0.109	0.109	0.109	(0.109)									3"x1"	not exceeding 25	Greater than 20'	Fill Height	Type 5
HO 168F HO 168F	H0.168E	0.168	(0.168)	(0.168)	(0.168)	(0,168)	0.138	0.138	0.138	0.138	(0.138)	(0.138)	(0.138)	0.109	0.109	0.109						-			5"x1"	ıg 25	n 20'	ñ	3
										H0.168E	H0.168E	(0.168E)	(0.138E)	(0.138E)	(0.138E)	(0.138E)	(0.109E)	0.109	(0.109)	(0.079)	(0.079)	(0.079)	0.064	0.064	2 2/3" × 1/2"	ПO	ര		
1881 CH	H0.168E	H0.138E	H0.138E	H0.138E	(0,168E)	(0.168E)	(0.168E)	(0.168E)	0.138E	$\overline{}$			0.138		0.109	0.109									3"x1"	not exceeding 30	Greater than 25	Fill Height	Type 6
HO.168E HO.168E	H0.168E H0.168E	H0.138E H0.168E	H0.138E H0.168E	H0.138E H0.168E	0.168E			(0.168E)	(0.168E)		_		0.138	(0.138)	(0.138)	0.109	,								5"x1"	9 30	25	r.	
	111	. ,,,	,,,,							H0.168E			0.138E			(U.138E)	(0.709E)	(0.138E)	0 109	(0.109)	(0.079)	(0.079)	(0.079)	0.064	2 2/3 × 1/2"	no.	ရ		
HO.168E	H0,168E	H0.168E	H0.168E	HU. Took	H0.138E	MU. 130E	70.100	(0.1000)	(0.168E)				(0.138E)			_						www			3"x1"	exceedini	Greater than 30'	Fill Height:	Type 7
		H0.168E	H0.168E					1 (v. 100E)		(U.168E)			<del>-</del>			(0.130)	3		1						5"×1"	goo	30	r	

Notes:

\* Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for diameters up to 42" according to Article 1006.01, 1 1/2" x 1/4" corrugations shall be used for diameters less than 12".

Thicknesses are based on longitudinal riveted seam fabrication, values in "\" can be reduced by one gage thickness if helical seam fabrication is utilized.

A thickness preceded by "\" indicates only helical seam fabrication is allowed.

Elongation according to Article 542.04(e)

Z 1-6" Minimum fill

Type A	TABLE IB: THICKNESS OF CORRUGATED STEEL PIPE FOR 68 mm x 13 mm, 75 mm x 25 mm AI (Metric)	THE PARTY CONTRACTOR OF THE PA
Tyne 5	TEEL PIPE nm x 13 mm, 75 mm x 25 mn	
Type 6	m AND 125 mm x 25 mm CORRUGATIONS	
Туре 7	)RRUGATIONS	

3600	3450	3300	3150	3000	2850	2700	2550	2400	2250	2100	1950	1800	1650	1500	1350	1200	1050	900	750	600	525	450	375	300	N	omir	nal Di mm '		ter	Ī
										4.27	4.27	3.51	(3.51)	2.77	2.77	2.77	2.01	(2.77E)	(2.77E)	(2.01)	(2.01)	(2.01)	1.63	1.63	mm	68 x 13	0.3			
4.27Z	3.51Z	3.51Z	3.51Z	2.77Z	2.77Z	2.77Z	2.772	(3.51)	(3.51)	(3.51)	2.77	2.77	2.77	2.77	(2.77)	(2,77)									mm	75 x 25	1 m and less 0.3 m min, cover	Height:	ype 1	
4.27Z	3.51Z	3.51Z	3.51Z	(3.51Z)	(3.51Z)	(3.51Z)	2,772	(3,51)	(3.51)	(3.51)	(3.51)	(3.51)	2.77	2.77	2.77	2.77									mm	75 x 25 125 x 25	ss over	n		
				•						4.27	4.27	3.51	2.77	2.77	(2.77)	(2.77)	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	mm	68 x 13	not or			
4.27	3.51	3.51	3.51	2.77	2.77	2.77	(2.77)	(2.77)	(2.77)	(2.77)	(2.77)	(2.77)	2.01	2.01	2.01	2.01									mm	75 x 25	Greater than 1 m not exceeding 3 m	unifiatu III.	Type Z	1
4.27	3.51	3.51	3.51	2.77	2.77	2.77	2.77	2.77	2.77	2.77	2.77	(2.77)	(2.77)	(2.77)	2.01	2.01			-						mm	75 x 25 125 x 25	73 m	r		
										4.27	4.27	3.51	2.77	2.77	2.77	(2.77)	(2.01)	(2.01)	1.63	1.63	1.63	1.63	1.63	1.63	mm	68 x 13	not e	_		
4.27	3.51	3.51	3.51	(3.51)	2.77	2.77	2.77	2.77	2.77	2.77	2.77	(2.77)	(2.77)	(2.77)	(2.77)	2.01									mm	68 x 13 75 x 25 125 x 25	Greater than 3 m not exceeding 4.5 m	i ili i jelgin.	- ype o	1
4.27	3.51	3.51	3.51	(3.51)	(3.51)	(3.51)	(3.51)	2.77	2.77	2.77	2.77	2.77	2.77	2.77	2.77	(2.77)									mm		3 m 4.5 m		•	
										4.27	4.27	3.51	2.77	2.77	2.77	2.77	(2.01)	(2.01)	(2.01)	1.63	1.63	1.63	1.63	1.63	mm	68 x 13	Grea not e			
4.27	(4.27)	(4.27)	3.51	(3.51)	(3.51)	(3.51)	(3.51)	(3.51)	(3.51)	2.77	2.77	2.77	2.77	(2.77)	(2.77)	(2.77)									mm	75 x 25	Greater than 4.5 m not exceeding 6 m	q	Fill Height	Time 4
4.27	(4.27)	(4.27)	(4.27)	3.51	3.51	3.51	(3.51)	(3.51)	(3.51)	(3.51)	(3.51)	2.77	2.77	2.77	2.77	2.77									mm	25	6 m			
										4.27	4.27	3.51	(3.51)	(3.51)	(3.51)	(3.51)	(2.77)	(2.77)	12.01	(2.01)	(2.01)	1.63	1.63	1.63	mm	ω	not ex	١ .	n	
H 4.27E H 4	(4.27E)		(4.27)	(4.27)	(4.27)	3.51	(3.51)	(3.51)	(3.51)	(3.51)	(3.51)	(3.51)	2.77	2.77	2.77	(2.77)	<u> </u>								mm	Çī	Greater than 5 m not exceeding 7.5 m	:	Fill Height	Type 5
H 4.27E	H 4.27E	4.27	(4.27)	(4.27)	(4.27)	(4.27)	3.51	3.51	3.51	3.51	_	51	(3.51)	2.77	2.77	2.77										Ŭ	5 m 7.5 m	,		
										H 4.27E	H 4,27E (3,51E)	(4.27E) (3.51E)	(3.51E)			(3.51E)	(2,7,7)	2.//	,	(2.01)	(2.01)	(2.01)	1.63	1.63		68 x 13 75 x 25 125 x 25	not e	>	-	
H 4.27E  H 4.27E	H 4.27E H 4.27E	H 3.51E H 4.27E	H 3.51E H 4.27E	H 3.51E H 4.27E	(4.27E)	1				(3.51E)	(3.51E)	(3.51E)	3.51	(3.51)	2.77	7.77	1									75 x 25	not exceeding 9 m		Fill Height:	Type 6
H 4.2/E	H 4.27E	H 4.27E	H 4.27E	H 4.27E	4.27E	(4.27E)	(4.27E)	(4.2/੮)	(4.27E)				1	(3.51)		_										125 x 25		1		
										H 4.2/E (4.2/E)	H 4.2/E 3.51E	(4.27E) (3.51E)	3.5 iE			(3.515)	(2,7,0)	(3.510)	3 545)	277	(2.01)	(2.01)	(A.C.)	1.63		68 x 13   75 x 25   125 x 25	not exc	?	_	
H 4.2/E	H 4.2/E	H 4.27E H 4.27E	H 4.2/E H 4.2/E	H 4.2/E H 4.2/E	H 3.51E H 4.27E	H 3.51E		(4.2/17)	(4.27E)				+			2.1.1	ን የ									75 x 25 1	not exceeding 10.5 m	than I	Fill Height:	Type 7
		H 4.2/E	H 4.2/E	H 4.2/E	H 4.2/E	H 4.2/E	H 4.2/E	(4.2/E)	(4.27E)	(4.2/E)	(4.2/п)	3.511	0,01	3 5 4 6	3.51	2 (0.01)	) n 1									125 x 25	0.5 m	ں } 		

<sup>\*</sup> Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for diameters up to 1050 mm according to Article 1006.01, 38 mm x 6.5 mm corrugations shall be used for diameters less than 300 mm.

Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized. A thickness preceded by an "H" indicates only helical seam fabrication is allowed.

E Elongation according to Article 542.04(e)

Z 450 mm Minimum Fill

200	114	801	102	96	90	84	78	72	66	60	54	<b>4</b> 8	42	36	30	24	21	₩	ҕ	12	Мог	nin	al Dia in.	amet	ter	
								0.164E	0.164⋿	0.135⋿	0.105E	0.105E	0.105E	(0.135E)	H 0.075E	(0.105€)	H 0.060E	(0.075)	(0.075)	(0.075)	2 2/3"x1/2"	1' min, cover	3' and less	Fill Height:	Type 1	FOR 1
0.1642	0.164Z	0.135Z	0.135Z	(0.135)	(0.135)	(0.135)	(0.135)	(0.105)	(0.105)	(0,105)	(0.105)	(0.075)	(0.075)	H 0.060E	H 0.060						3"x1"	соуег	less	ight:	1	HE RESPE
								0.164	0.164	0.135	0.105	0.105	0.105	0.075	0.075	0.060	0.060	0.060	0.060	0.060	2 2/3"x1/2"	not exceeding 10	Greater than 3'	Fill Height:	Type 2	CTIVE DIAM
0.164	0.164	0.135	0.135	0.105	0.105	0.105	0.075	0.060	0.060	0.060	0.060	0.060	0.060	H 0.060	H 0.060						3"x1"	ding 10.	han 3'	ight:	2	ETER OF P
								0.164	0.164	0.135	0.105	0.105	0.105	(0.105)	0.075	0.060	0.060	0.060	0.060	0.060	2 2/3"x1/2"	Tot exceeding 10	Greater than 10'	Fill Height:	Type 3	IPE AND FIL
0.164	0.164	0.135	0.135	0.105	0.105	0.105	(0.105)	(0.075)	(0.075)	(0.075)	0.060	0.060	0.060	H 0.060	H 0.060						3"X1"	ci Buin	nan 10'	ight:	3	THEIGHT
								0.164	0.164	0.135	0.105	0.105	0.105	(0.105)	(0.105)	(0.075)	0.060	0,060	0.060	0.060	2 2/3"x1/2"	oz Bunaanya 10ti	Greater than 15'	Fill Height:	Type 4	S OVER THE
0.164	0.164	0.135	0.135	(0.135)	(0.135)	(0.135)	(0.105)	(0.105)	(0.105)	(0.105)	(0.075)	(0.075)	0.060	H 0.060	H 0.060						3"x1"	THE CO	ian 15	ght:	4	TOP OF 1
								0.164	0.164	0.135	0.105	0.105	0.105	(0.135)	(0.105)	(0.105)	(0.075)	0.060	0.000	0.060	2 2/3"×1/2"	101 0000	Greater than 20'	Fill Height:	Туре 5	OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 2 2
0.164	0.164	(0.164)	(0.164)	(0.135)	(0.135)	(0.135)	(0.135)	(0.135)	(0.135)	(0.105)	(0.105)	(0.105)	(0.075)	H 0.060	H 0.060						3"x1"	9.20	han 20'	ight:	5	₹ 2 2/3"×1/2
								H 0.164E	0.164E	0.135E	0.105E	0.105E	0.105E	H 0.075E	H 0.0/5E	(0.105)	H 0.060	(0.070)	0,000	0.060	2 2/3"x1/2"		Greater than 25'	Fill Height:	Туре 6	FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 2 2/3"x1/2" AND 3"x1" CORRUGATIONS
H 0.164E	H 0.164E	(0.164E)	(0.164E)	(0.164上)	(0.164E)	(0.104E)	(0.130E)	(0.135E)	(U.135E)	(0.135E)	(0.105E)	(0.105E)	0.105	H 0.060	H 0.060	: : : : : : : :					3"x1"		than 25'	∍ight:	e o	CORRUGA
								H 0.164E	+			1.			-	(0.100E)	M 0.060E	1 0.000	H 0.060	0.060	2 2/3"x1/2"		Greater than 30' not exceeding 35'	Fill Height:	Type 7	i i
	H 0.164E	H 0, 164E	H 0.133E	0.1300	(U. 164E)	0.104	(0.1041)	(0.164E)	(0, 100E)	(0.1355)	(0.135E)	(0.135E)	(0.105E)	H 0.060E	H 0.000						3"X1"	) 	han 30' ding 35'	ight:	7	

Notes:

Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized. A thickness preceded by an "H" indicates only helical seam fabrication is allowed.

E Elongation according to Article 542.04(e), the elongation requirement for Type 1 fill heights may be eliminated for fills above 1-6"

Z 1"-6" Minimum fill

	T							$\neg$									······									
3000	2850	2700	2550	2400	2250	2100	1950	1800	1650	1500	1350	1200	1050	900	750	600	525	450	375	300	N	omi	nal D mm	iamet I	ег	
								4.17E	4.17E	3.43E	2.67E	2.67E	2.67E	(3.43E)	H 1.91E	(2.67E)	H 1.52E	(1.91)	(1.91)	(1.91)	mm	68 x 13	1 m and less 0.3 m min, cover	Fill Height:	Type 1	
4.172	4.17Z	3.43Z	3.43Z	(3.43)	(3.43)	(3.43)	(3.43)	(2.67)	(2.67)	(2.67)	(2.67)	(1,91)	(1,91)	H 1.52E	H 1.52						mm	75 x 25	nd less in. cover	eight:	e 1	
								4.17	4.17	3.43	2.67	2.67	2.67	1.91	1.91	1.52	1.52	1.52	1.52	1.52	mm	68 x 13	Greater than 1 m not exceeding 3 m	Fill Height:	Type 2	FOR THE
4,17	4 17	3.43	3.43	2.67	2.67	2.67	1.91	1.52	1.52	1.52	1.52	1.52	1.52	H 1.52	H 1.52						mm	75 x 25	than 1 m eding 3 m	eight:	e 2	TABLE RESPECT FC
		1						4.17	4.17	3.43	2.67	2.67	2.67	(2.67)	1.91	1.52	1,52	1.52	1.52	1.52	mm	68 x 13	Greater than 3 m not exceeding 4.5 m	Fill Height:	Type 3	IC: THICK IVE DIAME IR 68 mm ×
4.17	4.17	3.43	3.43	2.67	2.67	2.67	(2.67)	(1.91)	(1.91)	(1.91)	1.52	1.52	1.52	H 1.52	H 1.52						mm	75 x 25	han 3 m ling 4.5 m	eight:	e 3	TER OF PI
								4.17	4,17	3.43	2.67	2.67	2.67	(2.67)	(2.67)	(1.91)	1.52	1.52	1.52	1.52	mm	68 x 13	not exceeding 6 m	Fill Height	Type 4	PE AND FI D 75 mm × (Metric)
4.17	4.17	3.43	3.43	(3.43)	(3.43)	(3.43)	(2.67)	(2.67)	(2.67)	(2.67)	(1.91)	(1.91)	1.52	H 1.52	H 1.52			- Aller			mm	75 x 25	ian 4.5 m iding 6 m	eight:	ē 4	TED ALUN LL HEIGHT 25 mm CC
		1						4.17	4.17	3.43	2.67	2.67	2.67	(3.43)	(2.67)	(2.67)	(1.91)	1.52	1.52	1.52	mm	68 x 13	not exceeding 7.5 i	Fill Height	Type 5	TABLE IC: THICKNESS OF CORRUGATED ALUMINUM ALLOY PIPE FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 68 mm × 13 mm AND 75 mm × 25 mm CORRUGATIONS (Metric)
4.17	4.17	(4.17)	(4.17)	(3.43)	(3.43)	(3.43)	(3.43)	(3.43)	(3.43)	(2.67)	(2.67)	(2.67)	(1.91)	H 1.52	H 1.52						mm	75 x 25	nan 6 m ding 7.5 m	eight:	e 5	HE TOP OF
								H 4.17E	4.17E					H 1.91E	H 1.91E	(2.67)	H 1.52	(1.91)	1.52	1.52	mm	68 x 13	not exceeding 9 m	FIII Heigh	Type 6	THE PIPE
H 4.17E	H 4.17E	(4.17E)	(4.17E)	(4.17E)	(4.17E)	(4.17E)	(3.43E)	(3.43E)	(3.43E)	(3.43E)	(2.67E)	(2.6/E)	2,67	H 1.52	H 1.52						mm	75 x 25	g 9 m	agnt:	6	
								H 4.17E	H 4,17E	(4.1/E)	(3.43E)	2.6/E	2.6/E	H 1.91E	H 1.91E	(2.6/E)	H 1.52E	H 1.52	(1.91)	1.52		68 x 13	not exceeding 10.5 m	Contact than (	Type 7	
	H 4.17E	H 4.17E	H 3.43E	H 3.43E	(4.17E)	(4.1/E)	(4.17년)	(4.17E)	(3.43E)	(3.43E)	(3.43E)	(3.43E)	(Z.5/E)	H 1.52E	70.1	3						75 x 25	ng 10.5 m	ight.	37	

Notes:

Notes:

Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized. A thickness preceded by an "H" indicates only helical seam fabrication is allowed.

A thickness preceded by an "H" indicates only helical seam fabrication is allowed.

E Elongation according to Article 542.04(e), the elongation requirement for Type 1 fill heights may be eliminated for fills above 450 mm.

Z 450 mm Minimum fill

114		108	102	96	90	84	78	72	66	6	<u>5</u>	48	42	36	30	24	21	5	15		Ec		alent F Size in		d		
								83	77	$\dashv$	64	57	49	42	35	28	24	21	17		Span (in.)*				Corr	,	
								57	52	47	<del>2</del> 3	<u>38</u>	జ	29	24	20	18	15	13	1	(in.)	- 1	Pipe Arch 2 2/3" x 1/2"	Aluminum	Corrugated	.	
143	137	128	117	112	103	95	87	8	73	66	60	53									Span (in.)		3" x 1"	Aluminum	Corrugated	2	
91	87	83	79	75	71	67	63	59	55	51	6	4								_	(ji Kise		7 A	inum gr &	gated		₩.
142	137	128	117	112	103	95	87	81	73	66	60	53									(in.)	,	٦. ٢	Steel Pipe Arch	Corrugated		able IIA:
9	87	83	79	75	71	67	63	59	55	57	46	4									() R	!	- 1	<u> </u>	ated		THICK OR THE
1.6°	1'-6"	1'-6"	ને: 6ા	1'-6"	1'-6"	1*-6"	1'-6"	1'-6"	1'-6"	1'-6"	1-6	1-6°	1'-6"	1'-6"	1'-6"	1'-6"	1'-6"	9			Aluminum	2		Min. Cover			(NESS FO
								0.168			0.109	0.109	0.109	(0.079)	(0.079)	(0.079)	0.064	0.064	0.064	2/12	2 2/3" ×						Table IIA: THICKNESS FOR CORRUGATED STEEL PIPE ARCHES AND CORRUGATED ALUMINUM ALLOY PIPE ARCHES FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE
0.168	0,138	0.138	0.109	0.109	0.109	0.109	0.109	(0.109)	(0.109)	(0.109)	(0.109)	(0.109)									3"X1"	Steel	ယ္	_	n		SATED IVALEN
0.168	0.138	0.138	(0.138)	(0.138)	0.109	0.109	0.109	0.109	0.109	0.109	0.109	(0.109)									5" × 1"		and less		Haiah	Type 1	STEEL T ROUN
										0.164	0.164	0.135	0.105	0.105	(0.105)	(0.105)	(0.075)	0.060	0.060	1/2	2 2/3" x	ΑL	co	Ŧ			PIPE AF
			0.164	0.164	0,135	0.105	0.105	0.105	0.075	(0.075)	(0.075)	0.060			<u> </u>						3"x1"	Aluminum					CHES A
								0.168	0.168	0.138	0.109	0.109	(0.109)	0,064	0.064	0.064	0.064	0.064	0.064	112	2 2/3" ×		Gre				ND CORR
0.168	0.138	0.138	0.109	0.109	(0,109)	(0.109)	(0.109)	0.079	0.079	0.079	0.079	0.079									3"x1"	Steel	ater than		, 		UGATEI HEIGH
0.168	0.138	0.138	0,109	0,109	0.109	0.109	0.109	(0.109)	(0.109)	(0.109)	0.079	0.079								1	5" × 1"		Greater than 3' not exceeding 10'	Ġ	Fill Height	Type 2	TS OVER
								Ī		0.164	0.164	0.135	0.105	0.705	0.075	0.075	0.060	0.050	0.000	;	2 2/3" ×	Alumir	ceeding	·			NUM AL
			0.164	0.164	0.135	0.105	0.105	0.105	0.075	0.060	0.060	0.060					╁			+	x 3"x1"	ninum	10				DP OF
						<u> </u>		0.168		0.138	0.109		(0.109)	0.064	(0.0/9)	0.064	0.064	0.004	0.004		2 2/3" )		ଦ୍ର				PE ARCI
0.168	0.138	0.138	0.109	0.109	0.109	0.109	0.109	(0,109)		(0.109	(0,109	0.079									3"x1" 2 2/3" x 3"x1"	Steel	eater tha				HES
0.168		0.138			0.109				(0.109) 0.109	(0.109) 0.109	(0.109) 0.109	0.079 (0.109)	:	$\parallel$			l				5" × 1"		3n 10' no	<u>.</u>	Fill Height:	Type 3	
			<u>ت</u>	<u> </u>				<del> </del>		0.164	0.164			9.100	(0.105)	0.075	0.060		0.000	0.080	1/2" ×	Alur	Greater than 10' not exceeding 15'	•	<u>, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,</u>	3	
			0.164	0.164	0.135	0.105	0.105	0.705	0.075	(0.075)	(0.0/5)										3"X1"	Aluminum	ng 15'	ì			

0.168 0.168

Notes:

\* Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for steel spans up to 42" according to Article 1006.01.

\* Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for steel spans up to 42" according to Article 1006.01.

\* Thicknesses are based on longitudinal riveled seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized. The Type 1 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 3 tons per square foot. The Type 2 and 3 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 2 tons per square foot. This minimum bearing capacity will be determined by the Engineer in the field.

3000	2850	2700	2550	2400	2250	2100	1950				1350			900	750	600	525	450	375			(m	m)	d Size		
									1950	- 1		1440	1240	1060	870	710	610	530	430	(mm)*		THILL CF X 90	Pipe Arch	Corrugated Steel		
									1320		1100	970	840	740	630	510	460	380	330		D N		호	ated		
		3240	2970	2840	2600	2400	2200		1850	- 1	1520	1340									S S S	1 C2 x C7	Pipe Arch	Corrugated Steel	)	
		2120	2020	1920	1820	1720	1620	1500	1400		1170	1050									Zisa A			el el	:	-
			2970	2840	2600	2400	2200	2050	1850		1520	1340									Span		Pipe Arch 125 x 25 mm	Corrugated Steel		7.
2320	2220	2120	2020	1920	1820	1720	1620	1500	1400	1300	1170	1050									Zi Ge		5 mm	ated el		S I
0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0,5 m	0.5 m	0.5 m	0.5 m	ד	Steel &		Cover	Min.		FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE (Metric)
								4.27	4.27	3.51	2.77	2.77	2.77	(2.01)	(2.01)	(2.01)	1.63	1.63	1.63	68 x 13 mm						TIVE EC
4.27	3.51	3.51	2.77	2.77	2.77	2.77	2.77	(2.77)	(2.77)	(2.77)	(2.77)	(2.77)								75 x 25	Steel					QUIVAL
	3.51	3.51	(3.51)	(3.51)	2.77	2.77	2.77	) 2.77	) 2.77	) 2.77	) 2.77	) (2.77)					-			5 125 x 25	_		1 m and less	Fill Height:	Type 1	ENT R
7	_		=	3	7	7	7	7	7				~	2	2	<u>ري</u>	-3	-					d less	≱ight:	e 1	DUND (
										4.17	4.17	3.43	2.67	2.67	(2.67)	(2.67)	(1.91)	1.52	1.52	68 x 13 7	Aluminum					SIZE OF P (Metric)
			4.17	4.17	3.43	2.67	2.67	2.67	1.91	(1.91)	(1.91)	1.52								75 x 25 mm	ā					ic)
								4.27	4.27	3.51	2.77	2.77	(2.77)	1.63	1.63	1.63	1.63	1.63	1.63	68 x 13			Gre			NO FIL
4.27	3.51	3.51	2.77	2.77	(2.77)	(2.77)	(2.77)	2.01	2.01	2.01	2.01	2.01								75 x 25			Greater than 1 m not exceeding 3 m			T HEIG
4.27	3.51	3.51	2.77	2.77	2.77			(2.77)	(2.77)	(2.77)	2.01	2.01					+			5 125 x 25			າ 1 m ກເ	Fill Height:	Type 2	HTS O
		T					_			7) 4.17	4.17		2.67	2.6/	9.1	1.91	1.52	1.0%	1.52	mm 25 68 X 13	3		t excee	ght	2	ER TH
			4.	4.	ļ.	, K	, N	2			+			=	1 =		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Ä	- N	] 3	Aluminum		ding 3 r			E 102
_			4.17	4.17	3.43	2.6/	2.67	+-			1.52									WILL 00 C7 X C/	<u> </u>		<u> </u>			
					_			4.27			2.77	2.77	(2.77)	0,5	(2.01)	2 53	1.03	6 6	3 .63	mm mm			Greate			П
4.27	3.5 <u>1</u>	3.51	2 7	2.77	2.11	2.1.1	2.77	(2.77)	(2.73)	(2.77)	(2.77)	2.01	! !									!	er than 3	_		
4.27	3.51	3.51	(3.51)	(3.51)	1.1.1	7	2.77	2.//	7.17	2.77	2.77	(2.//)	<u> </u>							mm C2 X C2			Greater than 3 m not exceeding 4.5 m	Height:	Type 3	
				, <del>, , , , , , , , , , , , , , , , , , </del>						4.17	4.17	3.43	2,6/	2.07	3 67	(29.0)	1.02	л . Э .	3	mm mm	Alun	2	seeding .			
				4.17		) !: }	2.67	2.07	, i	(1.91)	(1.8.1)	1.02	3							mm	Aluminum		4.5 m			

Notes:

\* Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for steel spans up to 1060 mm according to Article 1006.01.

\* Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for steel spans up to 1060 mm according to Article 1006.01.

\* Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized. The Type 1 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 290 kN per square meter. The Type 2 and 3 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 192 kN per square meter. This minimum bearing capacity will be determined by the Engineer in the field.

Equivalent Size	Table IIB FOR TH Reinf Cond Elliptic	ble IIB: CLASSE OR THE RESPE Reinforced Concrete Elliptical pipe	S OF REINFORG	REINFORCED CE EQUIVALENT Reinforced Concrete Chains (in )	Table IIB: CLASSES OF REINFORCED CONCRETE ELLIPTICALL AND REINFORCED CONCRETE ARCH PIPE FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE Reinforced Concrete Concre	PTICALL AND FIL PIPE AND FIL Type 1 Fill Heigh	AND REINFOR AND FILL HEIGH  Type 1  Type 1  Fill Height:	Type 2 Fill Height: Greater than 3' not	CRETE ARCHE TOP O	F PIPE Type 3 Fill Height: Greater than 10' not	eight:
Round Size (in.)	(ir	(in.)	Arch pipe (in.)	pe (in.)		3' an	3' and less	exceedi	ing 10'	exceeding 15'	ng 15'
	Span	Rise	Span	Rise	RCCP HE & A	詽	Arch	HE	Arch	퓲	Arch
15	23	14	18	1	1' -0"	HE-III	A-III	HE-11	A-III	HE-IV	A
<del>3</del> 7	23	4	22	13 1/2	1' -0"	HE-=	A-III	HE-I	A-III	HE-IV	A-K
21	30	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	26	15 1/2	1'-0"	H-H-	A-III	HE-II	<b>≥</b> =	TH-I	≺
24	30	19	28 1/2	18	1' -0"	HE-III	A-	HE-III	A-111	HE-IV	A-1
27	34	22	36 1/4	22 1/2	1' -0"	HE-III	A-III	HE-III	<u>}</u>	 	<u> </u>
30 !	ဆွ	24	36 1/4	22 1/2	1'-0"	HF-III	A-III	HE-III	<u> </u>	HE-IV	<u> </u>
36 3	<del>4</del> 5	29	43 3/4	26 5/8	1' -0"	HE-II	A-II	HE-III	A-III	HE-IV	A-IV
42	53	34	51 1/8	31 5/16	1' -0"	 	A-II	HE-III	<b>}-</b> ≣	HE-IV	A-IV
48	60	ა 8	58 1/2	36	1; -0 <u>"</u>	HT-	A-11	HE-	A-II	1460	1450
л. И	S (	43	65	40	1, 0,	HH-	A-II	HE-III	A-III	1460	1460
80	76	48	73	45	1'-0"	HE	A-II	HE-III	<b>A-</b> ≡	1460	1470
n (	3 6	ул Э	88	54	- <u>-</u> -0	HĒ	A-II	# =	}-≡	1470	1480
72	9	58	88	54	↑· -0"	HE-I	A-II	HE-III	A-III	1470	1480

Notes:

A number indicates the D-Load for the diameter and depth of fill and that a special design is required. Design assumptions; Water filled pipe, AASHTO Type 2 installation per AASHTO LRFD Table 12.10.2.1-1

1800	1676	1500	1350	1200	1050	900	750	686	600	525	450	375		Equivalent Round Size (mm)		
2311	2108	1930	1727	1524	1346	1143	965	864	762	762	584	584	Span	Rein Cor Elliptical		4
1473	1346	1219	1092	965	864	737	610	559	483	483	356	356	Rise	Reinforced Concrete Elliptical pipe (mm)		able IIB: CL/ FOR THE RI
2235	2235	1854	1651	1486	1299	1111	921	921	724	660	559	457	Span	Reinforced Concrete Arch pipe (mm)		ASSES OF R
1372	1372	1143	1016	914	795	676	572	572	457	394	343	279	Rise	orced rete (mm)		EQUIVALE
0.3 m	0.3 m	0,3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	RCCP HE & A	Minimum Cover		Table IIB: CLASSES OF REINFORCED CONCRETE ELLIPTICALL AND REINFORCED CONCRETE ARCH PIPE FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE (Metric)
HE-I	퓼	퓬	품	표	HE-I	Hr	HE-III	干量	市ニ	計	声	声	HE	Fill H	Tyr	.IPTICALL ANI )F PIPE AND I
A-II	A-II	A-II	A-II	<u>+</u>	<b>&gt;</b> -	A-II	<u>}</u>	₽	A-III	==	A-III	<u>}</u> ≡	Arch	Fill Height: 1 m and less	Type 1	REINFORC
HE-E	In =	# #	<b>∃E-</b> ≡	##-	卅	HE-II	HE-	# =	HE-III	# ==	I I	一	Ħ	Fill Heig Greater than exceeding	Туре	ED CONCRET
A-III	A-II	<u>}</u>	A-III	₽ ₩	· -	A-III	A-III	·	A-III	· A	? A	<u> </u>	Arch	eight: an 1 m not ng 3 m	e 2	TE ARCH PII
6	l 2	7 6	70	, è	HE-IV	HE-IV		HE-IV	TE-IV	; i ; <		= = = = = = = = = = = = = = = = = = =	ŦĦ	Fill h Greater th exceedi	Туј	] "㎡
1 /0	7 2	7 0	3 0	7 6	7-K	A-1V	·	) A-	A-1V	> }	<u> </u>	> <del>-</del> -<	Arch	Fill Height: Greater than 3 m not exceeding 4.5 m	Type 3	

Notes:

A number indicates the D-Load for the diameter and depth of fill and that a special design is required.

A number indicates the D-Load for the diameter and depth of fill and that a special design is required.

Design assumptions; Water filled pipe, AASHTO Type 2 installation per AASHTO LRFD Table 12.10.2.1-1

48	42	36	30	24	21	18	15	12	10		(in.)	Nominal				
×	×	×	×	×	×	×	×	×	X		PVC					
N N	Ä	×	×	×	×	×	×	×	×		срус	Fill Height: 3' and less, with 1' min				
×	×	X	×	×	×	×	AN	×	×		絽	ght: 3' and with 1' min	Type 1			
×	×	×	×	×	₹	×	×	×	×		CPE	ind less				
×	NA A	×	×	×	Ϋ́	×	×	×	×		СРР				FOR A	
×	×	×	×	×	×	×	×	×	×		PVC				GIVEN	
NA	Ä	×	×	×	×	×	×	×	×		CPVC	Fill Height			TABLE IIIA: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE	
×	×	×	×	×	X	×	N N	×	×		PE	not exceeding 10'	Type 2		LE IIIA: METER	
NA	Z A	×	×	×	Z.	×	×	×	×		CPE	er than	45		PLAST AND FIL	
¥.	NA	×	×	×	N.A	×	×	×	×		CPP	يد ا	<b>-</b>		TT HEIGI	
×	×	×	: <b>&gt;</b>	: ×	×	×	×	×	×	:	PVC				TABLE IIIA: PLASTIC PIPE PERMITTED	
NA	Š	×	: >	· ×	×	: ×	×	×	×	;	CPVC	not e			TED THE TO	
×	×	×	: >	× ₹	Z A	×	Z	×	· ×	Š	PE	not exceeding 15'	1 yes	1	OP OF TH	
NA A	Ş	Z Z	3	2 2	Z Z	Z	- <del>-</del> -	Z.	; ×	<	CPE	115'			E PIPE	
NA	. <u>Z</u>	Ş	; >	< <del>Z</del>	Z	; >	· ×	: >	ζ }	5	СРР	7				
×	< ×	< >	< >	< >	< >	< >	< ×	{ >	< >	<	PVC					
Z	Z Z	>	< >	< >	< >	< >	< >	{ >	< >	<	CPVC	not exceeding 20'	יייייייייייייייייייייייייייייייייייייי	Tyr		
>	< <i>&gt;</i>	< >	< >	< >	< 3	<u>;</u> >	< ₹	<b>;</b>   >	< >	<	PE	eding 21	oator th	vpe 4		
3	5 3	2 3	5 :	5 3	2 5	3 3	<u></u> >	<   5	5 5	ND	СРР	ب و ر	7			

NA ×

1200	1000	900	750	600	525	450	375	300	250		(mm)	Diameter			
×	×	×	×	×	×	×	×	×	×		PVC		_		
Ζ	Z Z	×	×	×	×	×	×	×	×		CPVC	with 0	Fill Heig		
×	×	×	×	×	×	×	×	×	×		PE	with 0.3 m min. cover	ht: 1 m	Type 1	
×	×	×	×	×	NA A	×	×	×	×		CPE	n. cover	Height: 1 m and less,		1
×	AN	×	×	×	N.	×	×	×	Z		СРР		Ş,		FOR A
×	×	×	×	×	×	×	×	×	>		PVC		П		GIVEN
NA	×	×	×	×	×	×	×	×	>		CPVC	not e	Fill Height: Greater than 1 m,		TABLE IIIA: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PI (Metric)
×	×	×	×	×	K	×	N N	×	· >	{	ro m	Ilor exceeding 3111	Greate	Type 2	TABLE IIIA: PLASTIC PIPE PERMITTED DIAMETER AND FILL HEIGHT OVER TH (Metric)
NA	Z P	×	×		S	×	×	×	: >	1	CPE	ار ااا د	rthan 1 i		PLAST AND FIL (Me
Z	¥	×	×	×	Z		×	×	5	2	СРР		j,		STIC PIPE FILL HEIG! (Metric)
×	×	×	×	×	×	: ×	: ×	×	: >	<	PVC		77		PERMIT IT OVER
××	¥	×	· >	· ×	×	· >	×	: >	: >	×	CPVC	10,0	Fill Height: Greater than		TED ? THE TO
×	×	×	: >	< <del>Z</del>	Z Z	; >	ζ Ζ	;  >	< >	×	P	70000	eight: Greater than	Type 3	OP OF TI
X	N	NA	2	Z Z	Z	2 2	2 2	3	; ;	×	CPE		r than 3 m		HE PIPE
X	Ş	Ä	: >	< ₹	3	; >	< >	{ >	< :	N A	CPP		,3		
×		< <b>&gt;</b>	< >	< >	< >	< >	< >	<b>\</b>	< :	×	PVC				
NA A	Z Z	>	< >	< >	< >	< >	< >	<b>,</b>	< :	×	CPVC		m. not exceeding 6 m		1
×	· >	< >	< >	 < >	< 5	ζ;	٠ ٠ <del>§</del>	<u> </u>	<	×	PE	_	eeding 6	Type 4	•
NA	2 2	3	<u> </u>	Z 3	2 2	Z ;	₹ >	\ 	2	N	CPP		m +.5	25 4 5	

Notes:

PVC Polyvinyl Chloride (PVC) pipe with a smooth interior
CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior
PE Polyethylene (PE) pipe with a smooth interior
CPE Corrugated Polyethylene (PE) pipe with a smooth interior
CPP Corrugated Polypropylene (CPP) pipe with a smooth interior
X This material may be used for the given pipe diameter and fill height
NA Not Available

42 48	36	30	24	21	18	15	12	10		(111.)	(in )	Nominal				
××	×	×	×	×	×	×	×	×		PVC	K	Fill Height:				
N N	×	×	×	×	×	×	×	×		CPVC		Greater than	 Type 5			
												Fill Height: Greater than 20', not exceeding 25'	ח	FOR A GIVEN PIPE D	-4	
××	< >	< >	××	<b>&gt;</b>	×	×	×	×		PVC		Fill Height: G		AMETER AND	TABLE IIIB: PLASTIC PIPE PERMITTED	
¥ 5	2>	<>	< ×	: >	<×	×	×	×		CPVC		reater than 25',	Type 6	FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE	STIC PIPE PER	
												Fill Height: Greater than 25', not exceeding 30'			RMITTED	
N S	NA	×	× >	\ \ \ \	×>	< >	<\>	<×	\(\)	CPVC		Fill Height: Grea		THE PIPE		
												Fill Height: Greater than 30', not exceeding 35'	Type 7			

Notes:
PVC Polyvinyl Chloride (PVC) pipe with a smooth interior
CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior
X This material may be used for the given pipe diameter and fill height
NA Not Available

1200	100	900	750	60	525	450	375	300	250		(mm)	Diameter	Nominal		
			_			_	٠.	_	_			7			
×	×	×	×	×	×	×	×	×	×		PVC		Fill Height: G		
NA	NA	×	×	×	×	×	×	×	×		CPVC		reater than 6 m.	Туре 5	
													Fill Height: Greater than 6 m, not exceeding 7.5 m	5	FOR A GIVEN PIP
×	×	×	×	·×	×	 : ×	×	×	·×		PVC		Fill Height: Gr		TABLE IIIB: PLASTIC PIPE PERMITTED E DIAMETER AND FILL HEIGHT OVER THI (metric)
NA	NA	X	×	×	×	××	:×	< <b>&gt;</b>	< ×	\\	CPVC		eater than 7.5	Туре б	ASTIC PIPE F D FILL HEIGH (metric)
													Fill Height: Greater than 7.5 m, not exceeding 9 m		TABLE IIIB: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE (metric)
NA	×	>	< >	< >	< >	< >	< >		~ >	<	CPVC		Fill Height: G	,	THE PIPE
													Height: Greater than 9 m, not exceeding 10.5 m	Type 7	

Notes:
PVC Polyvinyl Chloride (PVC) pipe with a smooth interior
CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior
PE Polyethylene (PE) pipe with a smooth interior
X This material may be used for the given pipe diameter and fill height
NA Not Available"

Revise the first sentence of the first paragraph of Article 542.04(c) of the Standard Specifications to read:

"Compacted aggregate, at least 4 in. (100 mm) in depth below the pipe culvert, shall be placed the entire width of the trench and for the length of the pipe culvert, except compacted impervious material shall be used for the outer 3 ft (1 m) at each end of the pipe culvert."

Revise the seventh paragraph of Article 542.04(d) of the Standard Specifications to read:

"PVC, PE and CPP pipes shall be joined according to the manufacturer's specifications."

Replace the third sentence of the first paragraph of Article 542.04(h) of the Standard Specifications with the following:

"The total cover required for various construction loadings shall be the responsibility of the Contractor."

Delete "Table IV: Wheel Loads and Total Cover" in Article 542.04(h) of the Standard Specifications.

Revise the first and second paragraphs of Article 542.04(i) of the Standard Specifications to read:

"(i) Deflection Testing for Pipe Culverts. All PE, PVC and CPP pipe culverts shall be tested for deflection not less than 30 days after the pipe is installed and the backfill compacted. The testing shall be performed in the presence of the Engineer.

For PVC, PE, and CPP pipe culverts with diameters 24 in. (600 mm) or smaller, a mandrel drag shall be used for deflection testing. For PVC, PE, and CPP pipe culverts with diameters over 24 in. (600 mm), deflection measurements other than by a mandrel shall be used."

Revise Articles 542.04(i)(1) and (2) of the Standard Specifications to read:

- "(1) For all PVC pipe: as defined using ASTM D 3034 methodology.
- (2) For all PE and CPP pipe: the average inside diameter based on the minimum and maximum tolerances specified in the corresponding ASTM or AASHTO material specifications."

Revise the second sentence of the second paragraph of Article 542.07 of the Standard Specifications to read:

"When a prefabricated end section is used, it shall be of the same material as the pipe culvert, except for polyethylene (PE), polyvinylchloride (PVC), and polypropylene (PP) pipes which shall have metal end sections."

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

"1040.03 Polyvinyl Chloride (PVC) Pipe. Acceptance testing of PVC pipe and fittings shall be accomplished during the same construction season in which they are installed. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties. The pipe shall meet the following additional requirements."

Delete Articles 1040.03(e) and (f) of the Standard Specifications.

Revise Articles 1040.04(c) and (d) of the Standard Specifications to read:

- "(c) PE Profile Wall Pipe for Insertion Lining. The pipe shall be according to ASTM F 894. When used for insertion lining of pipe culverts, the pipe liner shall have a minimum pipe stiffness of 46 psi (317 kPa) at five percent deflection for nominal inside diameters of 42 in. (1050 mm) or less. For nominal inside diameters of greater than 42 in. (1050 mm), the pipe liner shall have a minimum pipe stiffness of 32.5 psi (225 kPa) at five percent deflection. All sizes shall have wall construction that presents essentially smooth internal and external surfaces.
- (d) PE Pipe with a Smooth Interior. The pipe shall be according to ASTM F 714 (DR 32.5) with a minimum cell classification of PE 335434 as defined in ASTM D 3350. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties and the resin used to manufacture the pipe meets or exceeds the minimum cell classification requirements."

Add the following to Section 1040 of the Standard Specifications:

"1040.08 Polypropylene (PP) Pipe. Storage and handling shall be according to the manufacturer's recommendations, except in no case shall the pipe be exposed to direct sunlight for more than six months. Acceptance testing of the pipe shall be accomplished during the same construction season in which it is installed. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties. The pipe shall meet the following additional requirements.

- (a) Corrugated PP Pipe with a Smooth Interior. The pipe shall be according to AAHSTO M 330 (nominal size 12 to 60 in. (300 to 1500 mm)). The pipe shall be Type S or D.
- (b) Perforated Corrugated PP Pipe with A Smooth Interior. The pipe shall be according to AASHTO M 330 (nominal size 12 to 60 in. (300 to 1500 mm)). The pipe shall be

Type SP. In addition, the top centerline of the pipe shall be marked so that it is readily visible from the top of the trench before backfilling, and the upper ends of the slot perforations shall be a minimum of ten degrees below the horizontal."

# PORTLAND CEMENT CONCRETE BRIDGE DECK CURING (BDE)

Effective: April 1, 2015

Replace the table in Article 1020.13 of the Supplemental Specifications with the following:

"INDEX TABLE OF CURING	AND PROTECTION OF CO	NCRETE CO	NSTRUCTION
TYPE OF CONSTRUCTION	CURING METHODS	CURING PERIOD DAYS	LOW AIR TEMPERATURE PROTECTION METHODS
Cast-in-Place Concrete 11/			
Pavement Shoulder	1020.13(a)(1)(2)(3)(4)(5) 3/5/	3	1020.13(c)
Base Course Base Course Widening	1020.13(a)(1)(2)(3)(4)(5) <sup>2/</sup>	3	1020.13(c)
Driveway Median Barrier Curb Gutter Curb & Gutter Sidewalk Slope Wall Paved Ditch	1020.13(a)(1)(2)(3)(4)(5) <sup>4/ 5/</sup>	3	1020.13(c) <sup>16/</sup>
Catch Basin Manhole Inlet Valve Vault	1020.13(a)(1)(2)(3)(4)(5) <sup>4/</sup>	3	1020.13(c)
Pavement Patching	1020.13(a)(1)(2)(3)(4)(5) <sup>2/</sup>	3 <sup>12/</sup>	1020.13(c)
Bridge Deck Patching	1020.13(a)(3)(5)	3 or 7 <sup>12/</sup>	1020.13(c)
Railroad Crossing	1020.13(a)(3)(5)	1	1020.13(c)
Piles and Drilled Shafts	1020.13(a)(3)(5)	7	1020.13(d)(1)(2)(3)
Foundations & Footings Seal Coat	1020.13(a)(1)(2)(3)(4)(5) 4/6/	7	1020.13(d)(1)(2)(3)
Substructure	1020.13(a)(1)(2)(3)(4)(5) 1/7/	7	1020.13(d)(1)(2)(3)
Superstructure (except deck)	1020.13(a)(1)(2)(3)(5) 8/	7	1020.13(d)(1)(2)
Deck Bridge Approach Slab	1020.13(a)(5)(6) <sup>19/</sup>	7	1020.13(d)(1)(2) <sup>17/</sup>
Retaining Walls	1020.13(a)(1)(2)(3)(4)(5) 1/7/	7	1020.13(d)(1)(2)
Pump Houses	1020.13(a)(1)(2)(3)(4)(5) 1/	7	1020.13(d)(1)(2)
Culverts	1020.13(a)(1)(2)(3)(4)(5) 4/6/	7	1020.13(d)(1)(2) 18/
Other Incidental Concrete	1020.13(a)(1)(2)(3)(5)	3	1020.13(c)

Precast Concrete 11/			
Bridge Slabs Piles and Pile Caps Other Structural Members	1020.13(a)(3)(5) 9/ 10/	As Required <sup>13/</sup>	9/
All Other Precast Items	1020.13(a)(3)(4)(5) <sup>2/9/10/</sup>	As Required <sup>14/</sup>	9/
Precast, Prestressed Concrete	e <sup>11/</sup>		
All Items	1020.13(a)(3)(5) <sup>9/ 10/</sup>	Until Strand Tensioning is Released <sup>15/</sup>	9/"

Add the following footnote to the end of the Index Table of Curing and Protection of Concrete Construction in Article 1020.13 of the Supplemental Specifications:

"19/ The cellulose polyethylene blanket method shall not be used on latex modified concrete."

Add the following to Article 1020.13(a) of the Standard Specifications.

"(6) Cellulose Polyethylene Blanket Method. The cellulose polyethylene blanket shall consist of a white polyethylene sheeting with cellulose fiber backing. After the surface of concrete has been textured or finished, it shall be covered immediately with a cellulose polyethylene blanket. The blankets shall be installed with the white perforated polyethylene side facing up. Adjoining blankets shall overlap a minimum of 4 in. (100 mm). On pours wider than 20 ft (6 m), a foot bridge shall be used to place the blankets and to spray water on the blankets immediately after placement on the concrete surface. The blankets shall be placed in a manner which will not create indentations greater than 1/4 in. (6 mm) in the concrete surface. Any air bubbles trapped during placement shall be removed without tearing the blanket. The blankets shall then be immediately flooded with a gentle spray of water to ensure complete saturation of the cellulose. The overlaps and outside edges of the cellulose polyethylene blankets, as well as tears in the blanket, shall be weighted down to prevent displacement as needed with care taken not to indent the concrete surface. Soaker hoses shall be placed along the length of the bridge so 100 percent of the deck surface is continuously saturated for the duration of the cure. Damaged cellulose polyethylene blankets shall be repaired or replaced at the direction of the Engineer."

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. Cellulose polyethylene blankets 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."

# 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."

# REINFORCEMENT BARS (BDE)

Effective: November 1, 2013

Revise the first and second paragraphs of Article 508.05 of the Standard Specifications to read:

"508.05 Placing and Securing. All reinforcement bars shall be placed and tied securely at the locations and in the configuration shown on the plans prior to the placement of concrete. Manual welding of reinforcement may only be permitted or precast concrete products as indicated in the current Bureau of Materials and Physical Research Policy Memorandum "Quality Control / Quality Assurance Program for Precast Concrete Products", and for precast prestressed concrete products as indicated in the Department's current "Manual for Fabrication of Precast Prestressed Concrete Products". Reinforcement bars shall not be placed by sticking or floating into place or immediately after placement of the concrete.

Bars shall be tied at all intersections, except where the center to center dimension is less than 1 ft (300 mm) in each direction, in which case alternate intersections shall be tied. Molded plastic clips may be used in lieu of wire to secure bar intersections, but shall not be permitted in horizontal bar mats subject to construction foot traffic or to secure longitudinal bar laps. Plastic clips shall adequately secure the reinforcement bars, and shall permit the concrete to flow through and fully encase the reinforcement. Plastic clips may be recycled plastic, and shall meet the approval of the Engineer. The number of ties as specified shall be doubled for lap splices at the stage construction line of concrete bridge decks when traffic is allowed on the first completed stage during the pouring of the second stage."

Revise the fifth paragraph of Article 508.05 of the Standard Specifications to read:

"Supports for reinforcement in bridge decks shall be metal. For all other concrete construction the supports shall be metal or plastic. Metal bar supports shall be made of cold-drawn wire, or other approved material and shall be either epoxy coated, galvanized or plastic tipped. When the reinforcement bars are epoxy coated, the metal supports shall be epoxy coated. Plastic supports may be recycled plastic. Supports shall be provided in sufficient number and spaced to provide the required clearances. Supports shall adequately support the reinforcement bars, and shall permit the concrete to flow through and fully encase the reinforcement. The legs of supports shall be spaced to allow an opening that is a minimum 1.33 times the nominal maximum aggregate size used in the concrete. Nominal maximum aggregate size is defined as the largest sieve which retains any of the aggregate sample particles. All supports shall meet the approval of the Engineer."

Revise the first sentence of the eighth paragraph of Article 508.05 of the Standard Specifications to read:

"Epoxy coated reinforcement bars shall be tied with plastic coated wire, epoxy coated wire, or molded plastic clips where allowed."

Add the following sentence to the end of the first paragraph of Article 508.06(c) of the Standard Specifications:

"In addition, the total slip of the bars within the splice sleeve of the connector after loading in tension to 30 ksi (207 MPa) and relaxing to 3 ksi (20.7 MPa) shall not exceed 0.01 in. (254 microns)."

Revise Article 1042.03(d) of the Standard Specifications to read:

"(d) Reinforcement and Accessories: The concrete cover over all reinforcement shall be within ±1/4 in. (±6 mm) of the specified cover.

Welded wire fabric shall be accurately bent and tied in place.

Miscellaneous accessories to be cast into the concrete or for forming holes and recesses shall be carefully located and rigidly held in place by bolts, clamps, or other effective means. If paper tubes are used for vertical dowel holes, or other vertical holes which require grouting, they shall be removed before transportation to the construction site."

# STEEL COST ADJUSTMENT (BDE) (RETURN FORM WITH BID)

Effective: April 2, 2004 Revised: April 1, 2009

<u>Description</u>. Steel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in steel prices when optioned by the Contractor. The bidder shall indicate 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 indicate contract number, company name, and sign and date the form shall make this contract exempt of steel cost adjustments for all items of steel. Failure to indicate "Yes" for any item of work will make that item of steel exempt from steel cost adjustment.

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

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

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

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

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

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

SCA = Q X D

Where: SCA = steel cost adjustment, in dollars

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

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

 $D = MPI_M - MPI_L$ 

Where: MPI<sub>M</sub> = The Materials Cost Index for steel as published by the Engineering News-

Record for the month the steel is shipped from the mill. The indices will be

converted from dollars per 100 lb to dollars per lb (kg).

MPI<sub>L</sub> = The Materials Cost Index for steel as published by the Engineering News-Record for the month prior to the letting. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

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

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

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

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

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

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

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

# Attachment

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

# Return With Bid

# ILLINOIS DEPARTMENT OF TRANSPORTATION

80127

# OPTION FOR STEEL COST ADJUSTMENT

The bidder shall submit this completed form with his/her bid. Failure to submit the form or properly complete contract number, company name, and sign and date the form shall make this contract exempt of steel cost adjustments for all items of steel. Failure to indicate "Yes" for any item of work will make that item of steel exempt from steel cost adjustment. 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 parallel following items of work?	art of the co	ntract plans for the
Metal Piling	Yes	
Structural Steel	Yes	
Reinforcing Steel	Yes	
Dowel Bars, Tie Bars and Mesh Reinforcement	Yes	
Guardrail	Yes	
Steel Traffic Signal and Light Poles, Towers and Mast Arms	Yes	
Metal Railings (excluding wire fence)	Yes	
Frames and Grates	Yes	
Signature:	Date:	

# TRAFFIC BARRIER TERMINALS TYPE 6 OR 6B (BDE)

Effective: January 1, 2015	
Add the following to the Article 631.02 of the Standard Specifications:	
"(h) Chemical Adhesive	1027.01
80356	

**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 then 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.

# WARM MIX ASPHALT (BDE)

Effective: January 1, 2012 Revised: November 1, 2014

<u>Description</u>. This work shall consist of designing, producing and constructing Warm Mix Asphalt (WMA) in lieu of Hot Mix Asphalt (HMA) at the Contractor's option. Work shall be according to Sections 406, 407, 408, 1030, and 1102 of the Standard Specifications, except as modified herein. In addition, any references to HMA in the Standard Specifications, or the special provisions shall be construed to include WMA.

WMA is an asphalt mixture which can be produced at temperatures lower than allowed for HMA utilizing approved WMA technologies. WMA technologies are defined as the use of additives or processes which allow a reduction in the temperatures at which HMA mixes are produced and placed. WMA is produced by the use of additives, a water foaming process, or combination of both. Additives include minerals, chemicals or organics incorporated into the asphalt binder stream in a dedicated delivery system. The process of foaming injects water into the asphalt binder stream, just prior to incorporation of the asphalt binder with the aggregate.

Approved WMA technologies may also be used in HMA provided all the requirements specified herein, with the exception of temperature, are met. However, asphalt mixtures produced at temperatures in excess of 275 °F (135 °C) will not be considered WMA when determining the grade reduction of the virgin asphalt binder grade.

### Equipment.

Revise the first paragraph of Article 1102.01 of the Standard Specifications to read:

"1102.01 Hot-Mix Asphalt Plant. The hot-mix asphalt (HMA) plant shall be the batch-type, continuous-type, or dryer drum plant. The plants shall be evaluated for prequalification rating and approval to produce HMA according to the current Bureau of Materials and Physical Research Policy Memorandum, "Approval of Hot-Mix Asphalt Plants and Equipment". Once approved, the Contractor shall notify the Bureau of Materials and Physical Research to obtain approval of all plant modifications. The plants shall not be used to produce mixtures concurrently for more than one project or for private work unless permission is granted in writing by the Engineer. The plant units shall be so designed, coordinated and operated that they will function properly and produce HMA having uniform temperatures and compositions within the tolerances specified. The plant units shall meet the following requirements."

Add the following to Article 1102.01(a) of the Standard Specifications.

- "(13) Equipment for Warm Mix Technologies.
  - a. Foaming. Metering equipment for foamed asphalt shall have an accuracy of ± 2 percent of the actual water metered. The foaming control system shall be electronically interfaced with the asphalt binder meter.

b. Additives. Additives shall be introduced into the plant according to the supplier's recommendations and shall be approved by the Engineer. The system for introducing the WMA additive shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes."

# Mix Design Verification.

Add the following to Article 1030.04 of the Standard Specifications.

- "(e) Warm Mix Technologies.
  - (1) Foaming. WMA mix design verification will not be required when foaming technology is used alone (without WMA additives). However, the foaming technology shall only be used on HMA designs previously approved by the Department.
  - (2) Additives. WMA mix designs utilizing additives shall be submitted to the Engineer for mix design verification."

# Construction Requirements.

Revise the second paragraph of Article 406.06(b)(1) of the Standard Specifications to read:

"The HMA shall be delivered at a temperature of 250 to 350 °F (120 to 175 °C). WMA shall be delivered at a minimum temperature of 215 °F (102 °C)."

# Basis of Payment.

This work will be paid at the contract unit price bid for the HMA pay items involved. Anti-strip will not be paid for separately, but shall be considered as included in the cost of the work.

# 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.

#### **CONCRETE WEARING SURFACE**

Effective: June 23, 1994 Revised: February 6, 2013

### Description.

This work consists of placing a concrete wearing surface, to the specified thickness, on precast concrete deck beams. Included in this work is cleaning and preparing the concrete deck beam surface prior to placement of the concrete wearing surface. This work shall be according to the applicable articles of Section 503 and the following.

# Materials.

The concrete wearing surface shall be class BS concrete, except as follows, when Steel Bridge Rail is used in conjunction with concrete wearing surface, the 14 day mix design shall be replaced by a 28 day mix design with a compressive strength of 5000 psi (34,500 kPa) and a design flexural strength of 800 psi (5,500 kPa).

<u>Equipment:</u> The equipment used shall be subject to the approval of the Engineer and shall meet the following requirements:

- (a) Surface Preparation Equipment. Surface preparation equipment shall be according to the applicable portions of Section 1100 and the following:
  - (1) Mechanical Blast Cleaning Equipment. Mechanical blast cleaning may be performed by high-pressure waterblasting or shotblasting. Mechanical blast cleaning equipment shall be capable of removing concrete laitance from the top surface of the deck beams.
    - Mechanical high-pressure waterblasting equipment shall be mounted on a wheeled carriage and shall include multiple nozzles mounted on a rotating assembly, and shall be operated with a 7000 psi (48 MPa) minimum water pressure. The distance between the nozzles and the deck surface shall be kept constant and the wheels shall maintain contact with the deck beam surface during operation.
  - (2) Hand-Held Blast Cleaning Equipment. Blast cleaning using hand-held equipment may be performed by high-pressure waterblasting or abrasive blasting. Hand-held blast cleaning equipment shall have oil traps.
    - Hand-held high-pressure waterblasting equipment that is used in areas inaccessible to mechanical blast cleaning equipment shall have a minimum water pressure of 7000 psi (48 MPa).
  - (3) Vacuum Cleanup Equipment. The equipment shall be equipped with fugitive dust control devices capable of removing wet debris and water all in the same pass. Vacuum equipment shall also be capable of washing the deck with pressurized water prior to the vacuum operation to dislodge all debris and slurry from the deck surface.

(b) Pull-off Test Equipment. Equipment used to perform pull-off testing shall be either approved by the Engineer, or obtained from one of the following approved sources:

James Equipment 007 Bond Tester 800-426-6500 Germann Instruments, Inc. BOND-TEST Pull-off System 847-329-9999

SDS Company DYNA Pull-off Tester 805-238-3229

Pull-off test equipment shall include all miscellaneous equipment and materials to perform the test and clean the equipment, as indicated in the Illinois Test procedure 304 and 305 "Pull-off Test (Surface or Overlay Method)". Prior to the start of testing, the Contractor shall submit to the Engineer a technical data sheet and material safety data sheet for the epoxy used to perform the testing. For solvents used to clean the equipment, a material safety data sheet shall be submitted.

- (c) Concrete Equipment: Equipment for proportioning and mixing the concrete shall be according to Article 1020.03.
- (d) Finishing Equipment. Finishing equipment shall be according to Article 503.03.
- (e) Mechanical Fogging Equipment. Mechanical fogging equipment shall be according to 503.03.

# Surface Preparation.

Prior to placement of the concrete wearing surface, the top surface of the bridge deck beams shall be clean and free of all foreign material and laitance.

Blast cleaning may be performed by either wet sandblasting, high pressure waterblasting, steel shot blasting, shrouded dry sandblasting, dry sandblasting with dust collectors, or other methods approved by the Engineer. Oil traps on blast equipment will be required.

The method used shall be performed so as to conform with air and water pollution regulations of Illinois and also to conform to applicable safety and health regulations. Any method which does not consistently produce satisfactory work and does not conform to the above requirements shall be discontinued and replaced by an acceptable method.

All debris of every type, including dirty water, resulting from the cleaning operation shall be reasonably confined during the performance of the cleaning work and shall be immediately and thoroughly removed from the cleaned surfaces and all other areas where debris may have accumulated.

Prior to placement of the concrete wearing surface, the Engineer will inspect the cleaned surface, all areas still contaminated shall be cleaned again at the Contractor's expense.

After the surface preparation has been completed and before placement of the overlay, the prepared surface will be tested by the Engineer according to the Illinois Test Procedure 304 "Pull-off Test (Surface Method)". The Contractor shall provide the test equipment.

a. Start-up Testing. Prior to the first overlay placement, the Engineer will evaluate the blast cleaning method. The start-up area shall be a minimum of 600 sq. ft. (56 sq. m). After the area has been prepared, six random test locations will be determined by the Engineer, and tested according to the Illinois Test Procedure 304 "Pull-off Test (Surface Method)".

The average of the six tests shall be a minimum of 175 psi (1,207 kPa) and each individual test shall have a minimum strength of 160 psi (1,103 kPa). If the criteria are not met, the Contractor shall adjust the blast cleaning method. Start-up testing will be repeated until satisfactory results are attained.

Once an acceptable surface preparation method is established, it shall be continued for the balance of the work. The Contractor may, with the permission of the Engineer, change the surface preparation method, in which case, additional start-up testing will be required.

b. Lot Testing. After start-up testing has been completed, the following testing frequency will be used. For each structure, each stage will be divided into lots of not more than 4500 sq. ft. (420 sq. m). Three random test locations will be determined by the Engineer for each lot, and tested according to the Illinois Test procedure 304 "Pull-off Test (Surface Method)".

The average of the three tests shall be a minimum of 175 psi (1,207 kPa) and each individual test shall have a minimum strength of 160 psi (1,103 kPa). In the case of a failing individual test or a failing average of three tests, the Engineer will determine the area that requires additional surface preparation by the Contractor. Additional test locations will be determined by the Engineer.

### Wearing Surface Placement.

The concrete wearing surface placement shall be according to Article 503.16 of the Standard Specifications. Dry sandblast cleaned areas to receive the overlay shall be either thoroughly or continuously wetted with water at least one hour before placement of the concrete wearing surface is started. When the surface is pre-wetted any accumulations of water shall be dispersed or removed prior to placement of the concrete wearing surface.

Plans for anchoring support rails and the mixture-placing procedure shall be submitted to the Engineer for approval.

# Curing and Protection.

The concrete shall be continuously wet cured for at least 14 days according to Article 1020.13(a)(5). However, if the minimum specified compressive strength or flexural strength is

obtained prior to 14 days, the cure time may be reduced, but at no time shall the wet cure be less than 7 days. The concrete shall be protected from low air temperatures according to Article1020.13(d)(1)(2), except the protection method shall remain in place for the entire curing period.

### Opening to Traffic.

The concrete wearing surface without Steel Bridge Rail attached may be opened to traffic when test specimens have obtained a minimum compressive strength of 4000 psi (27,500 kPa) or a minimum flexural strength of 675 psi (4650 kPa), but not prior to the completion of the wet cure. When Steel Bridge Rail is utilized, the concrete wearing surface may be opened when test specimens have obtained a minimum compressive strength of 5000 psi (34,500 kPa) or a minimum flexural strength of 800 psi (5500 kPa), but not prior to the completion of the wet cure.

# Method of Measurement.

Concrete wearing surface will be measured for payment in place and the area computed in square yards (square meters).

# Basis of Payment.

This work including cleaning and surface preparation will be paid for at the contract unit price per square yard (square meter) for CONCRETE WEARING SURFACE, of the thickness specified.

#### **CONCRETE DECK BEAMS**

Effective: June 13, 2008 Revised: October 9, 2009

Add the following equipment to Article 504.03.

(c) Mechanical Mixer (Note 1)

1101.19

Note 1: A drill with paddle may be used for mixing small quantities of nonshrink grout. Hand mixing will not be allowed.

Replace the second sentence of the fifth paragraph of Article 504.06(d) with the following.

Dowels at the fixed ends of the deck beams shall be installed, nonshrink grout placed and cured for a minimum of 24 hours. If the bearing area is specified to be grouted it shall be done at the time of dowel placement.

Replace the fourth paragraph of Article 504.06(e) with the following.

A mechanical mixer shall be used to mix the nonshrink grout and the type of mixer and mixing procedures shall be per the manufacturer's recommendations. During placement, the grout shall be worked into the area with a pencil vibrator. The surface shall be troweled to a smooth finish. The nonshrink grout shall be immediately cured with cotton mats according to Article 1020.13 for a minimum of seven days, and field testing will not be required. However, the cure time may be reduced provided the Contractor molds specimens, covers them, and performs cube tests according to ASTM C 1107. The tests shall verify the 6000 psi grout strength has been obtained, but in no case shall the cure time be less than three days.

For Contractor cube tests, each sample shall consist of three test specimens and a minimum of two samples will be required for each day of grouting. Additional samples may be requested by the Engineer. Specimens shall be cured underneath the cotton mats with the beams for a minimum of 48 hours before transport to the laboratory for testing. The laboratory shall be inspected for Hydraulic Cement — Physical Tests by the Cement and Concrete Reference Laboratory (CCRL).

Add the following paragraph to the end of Article 504.06

(f) Construction Inserts. All inserts, including those necessary for the fabrication and construction of the structure or portions thereof shall be cast into the member according to Article 3.5.2 of the Manual for Fabrication of Precast Prestressed Concrete Products.

Replace 1006.06(a) and (b) with the following.

- (a) Transverse Tie Rod Assemblies. Steel for transverse tie rod assemblies (i.e. rods, nuts, washers and coupling nuts) shall be according to ASTM F 1554 Grade 55 (Grade 380). After fabrication, the transverse tie assemblies shall be hot-dipped galvanized according to AASHTO M 232. The small articles may be zinc-coated by the mechanically deposited process according to AASHTO M 298, Class 50. The thickness of the mechanical galvanizing shall not exceed 6 mils (150 μm).
- (b) Dowel Rods. Steel for dowel rods shall be according to ASTM F 1554 Grade 55 (Grade 380) or A706 Grade 60. Dowel rods shall be either epoxy coated according to AASHTO M 284 or galvanized according to AASHTO M 111.

Add the following Article to Section 1101.

1101.19 Mechanical Mixer. The mechanical mixer shall have paddles or blades that are suitable for uniformly mixing the material, and shall have sufficient capacity to allow for a continuous work operation.

### **GRANULAR BACKFILL FOR STRUCTURES**

Effective: April 19, 2012 Revised: October 30, 2012

Revise Section 586 of the Standard Specifications to read:

#### SECTION 586. GRANULAR BACKFILL FOR STRUCTURES

**586.01 Description.** This work shall consist of furnishing, transporting and placing granular backfill for abutment structures.

**586.02 Materials.** Materials shall be according to the following.

ltem	Article/Section
(a) Fine Aggregate	
(b) Coarse Aggregates	1004.05

#### CONSTRUCTION REQUIREMENTS

586.03 General. This work shall be done according to Article 502.10 except as modified below. The backfill volume shall be backfilled, with granular material as specified in Article 586.02, to the required elevation as shown in the contract plans. The backfill volume shall be placed in convenient lifts for the full width to be backfilled. Unless otherwise specified in the contract plans, mechanical compaction will not be required. A deposit of gravel or crushed stone placed behind drain holes shall not be required. All drains not covered by geocomposite wall drains or other devices to prevent loss of backfill material shall be covered by sufficient filter fabric material meeting the requirements of Section 1080 and Section 282 with either 6 or 8 oz/sq yd (200 or 270 g/sq m) material allowed, with free edges overlapping the drain hole by at least 12 in. (300 mm) in all directions.

The granular backfill shall be brought to the finished grade as shown in the contract plans. When concrete is to be cast on top of the granular backfill, the Contractor, subject to approval of the Engineer, may prepare the top surface of the fill to receive the concrete as he/she deems necessary for satisfactory placement at no additional cost to the Department.

**586.04 Method of Measurement.** This work will be measured for payment as follows.

- (a) Contract Quantities. The requirements for the use of contract quantities shall conform to Article 202.07(a).
- (b) Measured Quantities. This work will be measured for payment in place and the volume computed in cubic yards (cubic meters). The volume will be determined by the method of average end areas behind the abutment.

**586.05 Basis of Payment.** This work will be paid for at the contract unit price per cubic yard (cubic meter) for GRANULAR BACKFILL FOR STRUCTURES.

# REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- 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 onthe-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 nonminority group members and women employed in each work classification on the project;
  - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
  - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

# III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$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 singleuser 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.
- (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 Wage and Hour Division Web http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
  - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
  - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

- (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
  - d. Apprentices and Trainees (programs of the U.S. DOT).

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

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for

debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

- **8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- **9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

#### 10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

#### V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

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

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such

contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

#### VI. SUBLETTING OR ASSIGNING THE CONTRACT

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

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
  - (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.
- 5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

#### **VII. SAFETY: ACCIDENT PREVENTION**

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

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

### **VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS**

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

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

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

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

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

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

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

# IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

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

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

# X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

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

# 1. Instructions for Certification – First Tier Participants:

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

as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

\* \* \* \* \*

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

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with

commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

#### 2. Instructions for Certification - Lower Tier Participants:

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

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the

certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

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

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\* \* \* \*

# XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

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

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

# MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision shall be the minimum paid by contractors and subcontractors to laborers and mechanics.